



**UNIVERSITY TECHNOLOGY MARA
FACULTY OF INFORMATION MANAGEMENT**

**INDUSTRIAL TRAINING REPORT
UNIVERSITY MALAYSIA KELANTAN, JELI BRANCH
UNIVERSITY MALAYSIA KELANTAN,
BEG BERKUNCI NO 100,
JELI, 17600,
KELANTAN.**

**SPECIAL PROJECT: TRAINING WORKSHOP (BUILD YOUR
OWN MOBILE APPLICATION USING APPSHEET)**

BY:

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**IM245 – BACHELOR OF INFORMATION SCIENCE (HONS.)
INFORMATION SYSTEM MANAGEMENT**

TRAINING DURATION:

05 FEBRUARY 2017 – 29 JUNE 2017

INDUSTRIAL TRAINING REPORT



**UNIVERSITI
MALAYSIA
KELANTAN**

UNIVERSITY MALAYSIA KELANTAN

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FACULTY OF INFORMATION MANAGEMENT

UNIVERSITY TECHNOLOGY MARA

MACHANG,

KELANTAN

11 JULY 2017

Declaration

I hereby declare that this is my original work. I have not copied from any other Student's work or from other sources. I am also declare that no part of this report has been published or submitted for publication except where due to reference or acknowledgement is made explicitly in text, nor has any part been written for me by another person. I confirm that I have read and understood the UiTM regulations with regards to plagiarism and will be penalized by the university if found guilty.

Signed by

Muhammad Rifaie Bin Mohd Nadzri

2014955015

Abstract

Abstract: *This special project based on the period from 1st February 2017 until 30th June 2017 in Faculty of Agro-Based Industry (FIAT) at Universiti Malaysia Kelantan (UMK). The trainee being placed in FIAT under the supervision of Dr Leony Tham Yew Seng which is senior lecturer in that campus. The trainee is assigned to held a workshop as the special project wchich is Appsheet Workshop fir final year student. Basically, trainee supervisor has being thingking to use a new platform in managing his final year student final project by key in their project data in the mobile apps. Right now, the workflow is still using the manuall way which is student need to key in into the sheed of paper before it being transfer into document so that is such an ineffective way. Other than that, during this practicaltraining program, trainee also joining a few activities that being held by department of library in UMK Jeli Campus which each of them gave a new experience and gained a lot of knowledge. Throughtout the industrial training session, the trainee had improved a lot of skills such as communication skill, problem solving, self learning, teamwork and others. The industrial session program are going well until the end of the day. The staff in Universiti Malaysia Kelantan (UMK) Kampus Jeli gave a very good cooperation with the trainee during the industrial training session.*

Keywords : Workshop, User training, UMK, Appsheet, Industrial training

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In the first place, thank you to Allah for all the blessing throughout the industrial training program. Besides that, I also would like to show my gratitude to my parents because give a support to finish this practical training program for a five month and they never stop to pray for my success. A very big thank to Faculty of Agro-Based Industry (FIAT), Universiti Malaysia Kelantan (UMK) and the industrial supervisor Dr. Leony Tham Yew Seng for guiding me during the five month in this practical training program and giving me a new experience and knowledge through the work start until the end of industrial training program. Not to forget also a big thanks to my UITM supervisor that is Miss Noor Azreen Binti Alimin because always being asked about me and guiding me to finish this practical training program. In addition, thank you to library department of UMK Jeli Campus, because give me a work place for the five month and also thank you for the opportunity that being given to me that help me gained a new knowledge and skills during this practical time.

Last but not least thank you to my faculty supervisor that is Madam Anis Binti.... Because help me during the time before I start the practical training program until the end of this program. Thank you for helping me to find a place to do my practical training program. And the last one is thank to my friend that always stay behind me and always be my support to finish my practical training program.

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Chapter 1: Introduction

1.1 Background Of Organization

The Universiti Malaysia Kelantan (UMK) is a public university in Kelantan, Malaysia. The formation of the university was mooted during the tabling of the Ninth Malaysia Plan and approved by the cabinet of Malaysia on 14 June 2006. The launching ceremony was held at the end of 2006 by Prime Minister, Y.A.B. Tun Abdullah Ahmad Badawi. The first students were enrolled with the commencement of the June 2007 semester. The Prime Minister of Malaysia announced the government's approval to establish a university in Kelantan under the Ninth Malaysia Plan on 31 March 2006.

The Faculty of Agro Industry and Natural Resources was stationed at UMK Taman Bendahara in Pengkalan Chepa until 19 January 2012. The faculty has moved to the new campus in Gemang, Jeli. The campus is located on 270 acres that includes the department of sciences and technology of FASA as well as the administrative office. In April 2012, FASA was dissolved and two new faculties were formed. They are the Faculty of Agro-based Industry and Faculty of Earth Sciences with a total of 900 undergraduates and postgraduates students. There is 74 academic staff of which 41 academic staff are on study leave, 55 non-academic staff and 12 international academic staff.

For the September 2012 intake, students' enrolment is expected to increase to 1500 students for seven undergraduate academic programmes and postgraduate programmes. There is only one building in the campus which is shared with the two

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faculties and the administrative office. The campus has a hall, library and hostels for the students. Due to the fact that there is only one building for the administration and academic purposes, the Faculty of Veterinary Medicine has to remain at UMK Padang Tembak. The faculty will move to UMK Jeli soon. The first batch of FASA of 42 students graduated during the last convocation ceremony in September 2011

Vission and Mission

Mission

To become international campus, centred by excellent human capital emphasizes entrepreneurship

Vission

UMK Jeli Campus ensures:

- Provide a compete and conducive infrastructure in support of entrepreneurship education, research and commercialization that is relevant to the community
- Practice quality management and professional work culture, ready to improve and be of high integrity
- Conduct continuous improvement to achieve the standards of international campus

Objectives

The objective that being used by UMK Jeli Campus is:

- Creating a campus administrative system which is more efficient, effective and viable to ensure excellence
- Providing a conducive campus environment for academic excellence, research and innovation, and be of services to the community
- Strengthening the support system that complement the innovation and creativity in all of the requirements for learning and teaching
- Becoming a campus of reference, relevant for the community and be the pride of UMK

Logo



Picture 1: UMK Logo

The symbolism of Universiti Malaysia Kelantan's (UMK) logo is the emphasis on the letter "U", "M" and "K". The design symbolises the elements and nature of the university's openness and timelessness. On the other hand, the hour glass

shape reflects the unlimited period of time available for the learning process, thus promoting Lifelong Learning. It also symbolizes the elements of a chromosome which is active and dynamic, as well as being a part of nature.

This process is supported by the symbol of two hands in askance of blessing and God's solace while being eternally grateful. The image of the Chromosome represents the active and dynamic nature of interacting in a university environment. The selection of the colour "blue" is for Malaysia, "red" for Kelantan, and "orange" for the ripe areca which refers to heritage.

This logo is supported by UMK's philosophy which focuses on six (6) aspects, namely:

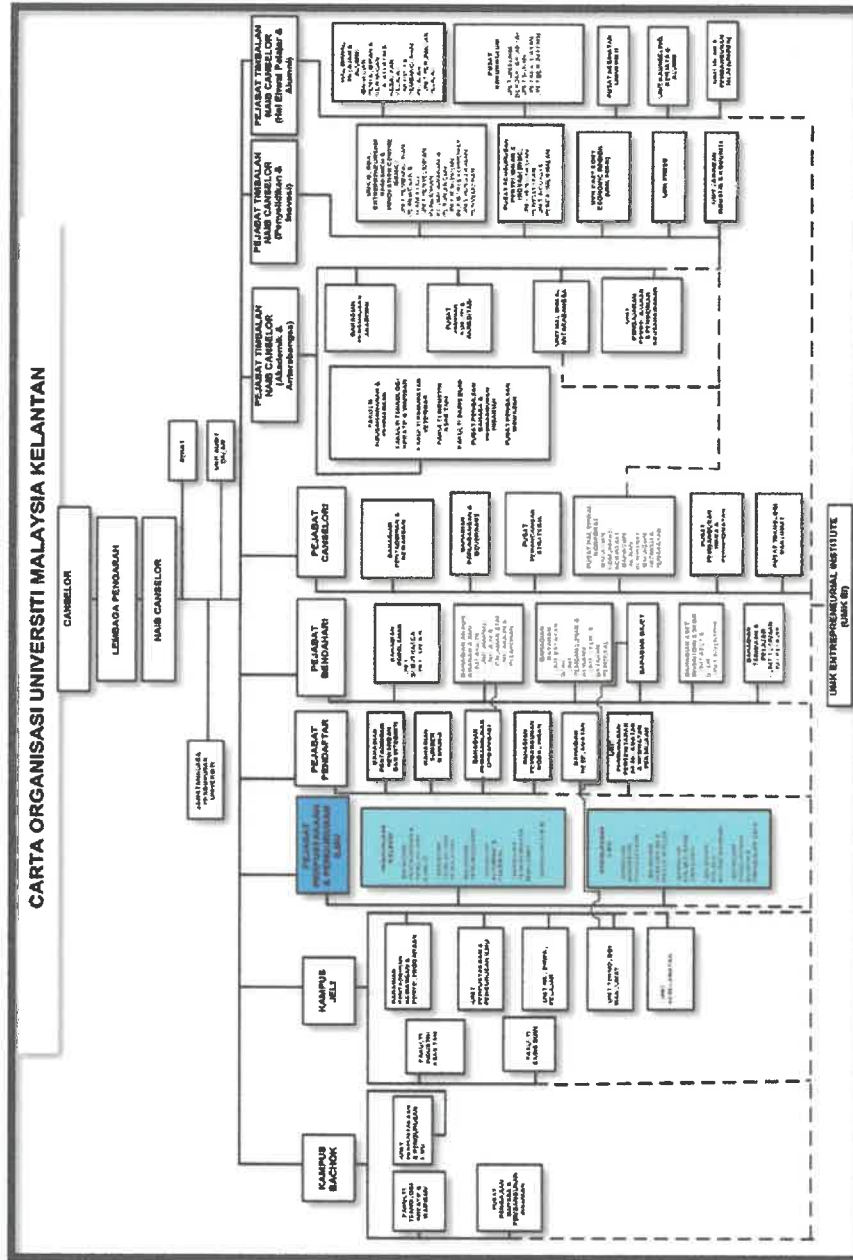
- ✓ Entrepreneurial Education
- ✓ Third language
- ✓ ICT as an enabler.
- ✓ Lifelong learning.
- ✓ Quality human capital.
- ✓ Uniqueness and relevancy.

Location



Picture 2: UMK Jeli Campus location

1.2 Organizational Structure



Picture 3: UMK Organizational Chart

Chapter 2: Organization Information

2.1 Introduction of the Department

The Faculty of Agro-Based Industry (FIAT) was established on 01 April 2012 together with Faculty of Earth Sciences (FSB) after about four years under the Faculty of Agro Industry and Natural Resources (FASA). There are 5 programs offered under FIAT. Among them are applied science and technology (SBP) undergraduate programs with honors, applied science undergraduate programs (animal husbandry technology (SBH)), applied science undergraduate programs (bioindustrial technology; SBT) with honors, undergraduate applied science (Agrotechnology; SBS) with honors and undergraduate applied science (food assurance).

The establishment of this faculty is in line with the university's founding core, where one of the components or the core of the university's establishment is agriculture and entrepreneurship. Farming is a major focus in the State and is now associated with various technological advances and improvements, especially in ensuring that the country has enough food resources for a long period of time. With the motto of "Sustainable Agriculture for Food Security", FIAT intends to produce graduates who are able to assist the State in empowering agriculture and biotechnology development, especially industrial biotechnology and translating them into the process of producing value-added materials. This value-added material is an industrial product that will have commercial value.

Function OF The faculty

STUDENT

Providing opportunities and quality teaching and learning environments capable of creating first-class human capital with high competitiveness based on strong entrepreneurial attributes to meet domestic and foreign job markets.

STAFF

Creating an effective and efficient quality management culture and a dynamic and conducive working environment for the development of staff potentials, while strengthening collaboration with all university students.

SOCIETY

Ensuring the role of the faculty remains relevant in support of lifelong education and awareness as well as the capabilities of communities based on agro-based industries, product development and bio-technology.

Faculty organizational chart



Picture 4 : FIAT Organization Structure

Chapter 3: Industrial Training Activities

3.1 Training activities

Throughout the industrial training program, the trainee has been given a few tasks that can help the trainee to complete this industrial training program. The task assigned to the trainee is in accordance with the needs and requirements of the faculty including the special project which is e-plants apps.

3.1.1 Activity 1 : Create a Simple mobile apps Using Appsheet

Task	Create simple mobile apps using Appsheet
Date	7 February 2017
Hardware	Laptop
Software	Appsheet

Table 1 : Summary activity 1

Appsheet is the first task that being received by the trainee. It takes about 2 weeks for the trainee to understand what is Appsheet and how this software can help the user to create a mobile app. Appsheet is a software that will help the user to create a mobile app without using any coding but the user needs to follow a few steps before the user can create their own mobile app.

Dr. Leony Tham Yew Seng asks the trainee to study and learn what is Appsheet and how this kind of software can help us in our daily life work especially in the world of work. Other

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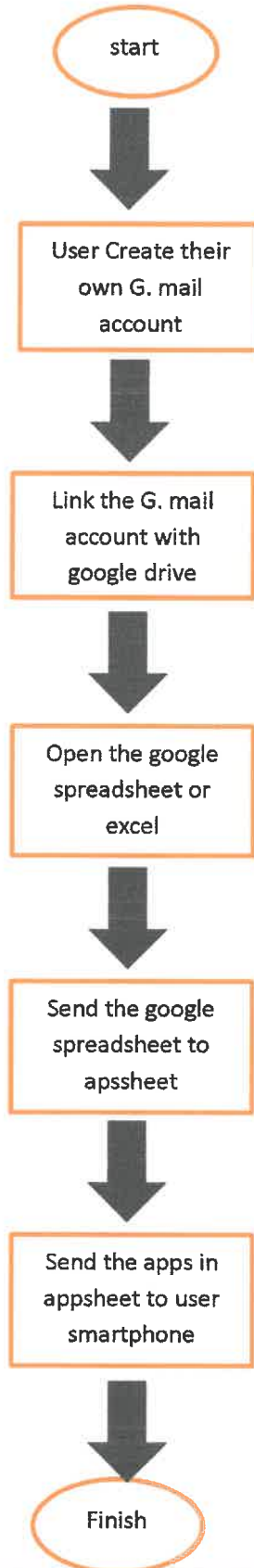
than that, the trainee has being ask to create a simple mobile apps using the appsheet by using the pamphlets that being already give in that software.

Appsheets is software that help user to create a mobile apps by using excel or google spreadsheet as a main platform to create the apps. Excel or the google spreadsheet will be a database that will keep information about the apps in a simple words excel or the google spreadsheet will be a place to user to key in their data. Other than that, to use appsheet the user also need to create or need to have their own gmail account and link it with their own gogle drive. This is one of the easy and simple way for user to have their own mobile apps in thier own phone.

For the first task, the trainee is using the pamphlets that being given by the software to create an apps that call lets-plant. In this apps, trainee create a one simple steps that can help the younger or beginner farmer to plant a banana tree. In that apps trainee include a picture with a little bit information about banana tree that makes the apps look simple and easy to understand by user.

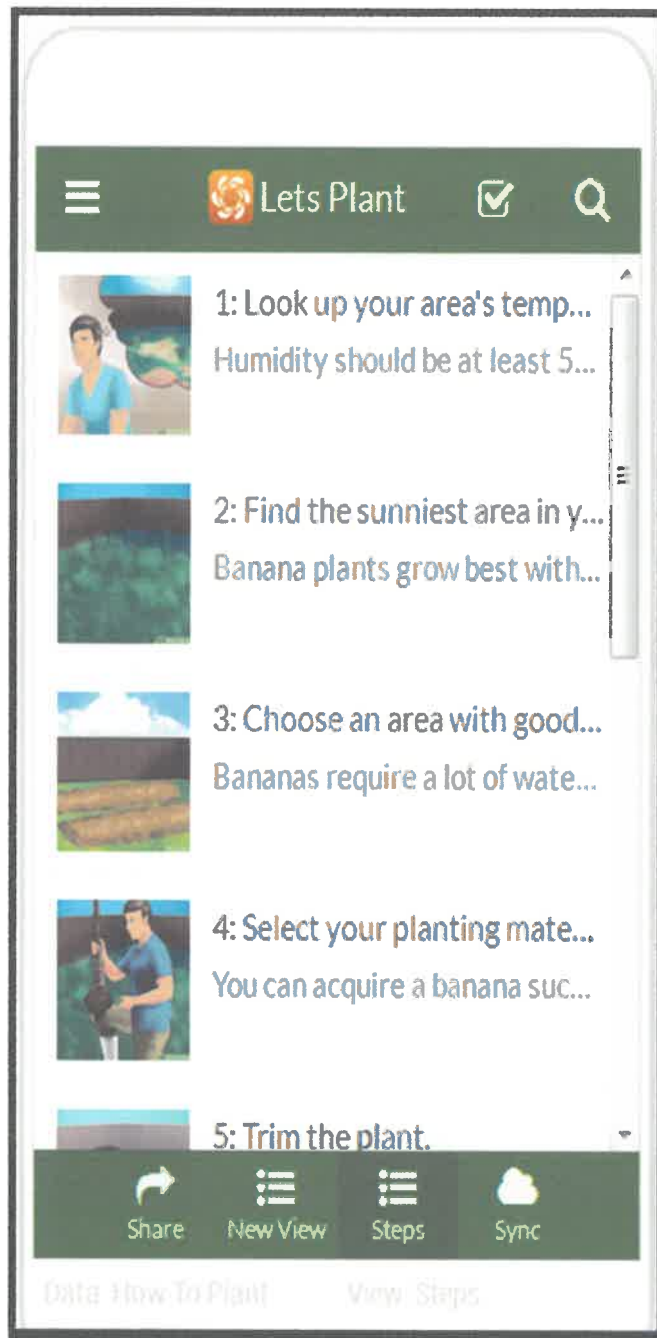
After learning about appsheet about twoo week, trainee finally understand a little bit about the appsheet software and how it function. For trainee its a greate opportunity to learn a new software and a new thing by using this appsheet software because there are a lot function that can be use by user by using this appsheet.

3.1.1.1 Workflow For Using the Appsheet Software



Picture 5 : Appsheet software flowchart

3.1.1.2 Example of the Apps



Picture 6 : Example of first mobile apps

3.1.2 Activity 2 : Shelving and Reshelving books

Because of lack of space work in the FIAT faculty, trainee being place under UMK library. Because of this matter, trainee got an opportunity to learn a little bit about the workflow in the library especially about the shelving and reshelving book. Library of UMK Jeli Campus contain a lot of book that most of them is about the the agriculture that suitable with the cost that provide in UMK Jeli Campus.

Shelving and reshelving is an important activity that need to do by librabry staff every morning before library being open to student. The book in library being divided by using call number that follow the standard of library of congress clasification system. So trainee using this opportunity to learn and to increase a knowledge about this shelving and resheeliving activity.

The classification number or subject is start with letter of A until Z. And every letter has their own classification outline for example:

Letter	Classificattion
A	General Works
B	Philosophy, Psychology, Religion
C	Auxiliary Science Of History
D	World History And History of Europe, Asia, Africa, Australia, New Zealand and etc
E-F	History of America
G	Geography

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H	Social Science
J	Political Science
K	Law
L	Education
M	Music and book n Music
N	Fine Arts
P	Language and Litreature
Q	Science
R	Medicine
S	Agriculture
T	Technology
U	Military Science
V	Naval Science
Z	Bbliography, Library Science, Information Resources (general)

Table 2 : Classification of books in library

Every subject classification that being state then will be divided based on their own specification subject that will make the scale become more large. By having this kind of system, the book in library of UMK Jeli Campus can being organize in the right way and it also can help their student to find and locate the book that their need in easy way. Fuhermore, they also provide a system like OPAC to their student that call SOPAC.

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Picture 7: Library of Congress Classification



Picture 8 : Example of shelving based call number

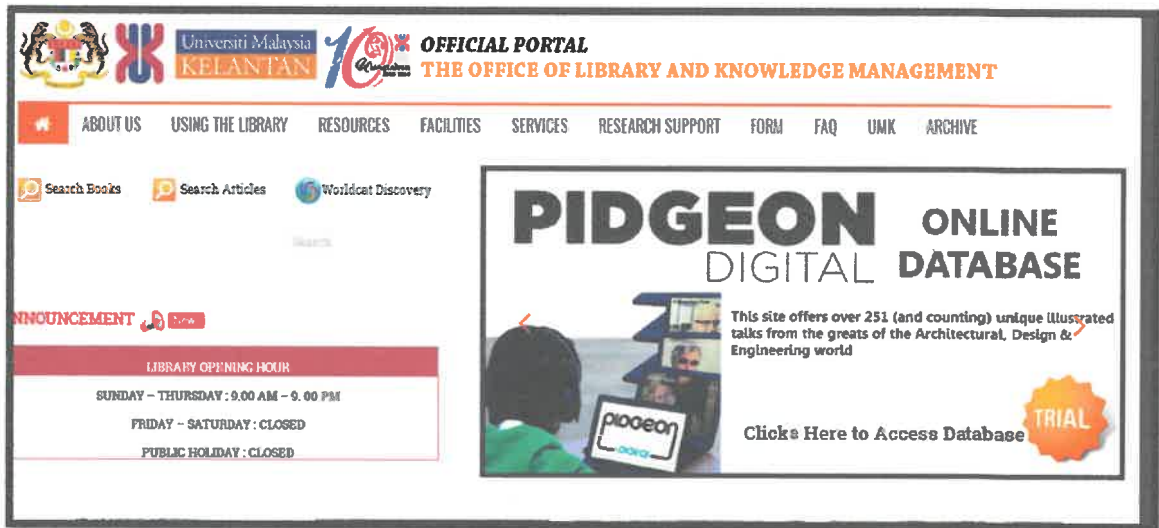
3.1.3 Activity 3: Help Student find FYP report using UMK-IR

UMK-IR is a database that using by UMK library to keep the record of their important document such as fyp report. Every end of year, all faculty in UMK Jeli campus will send their student fyp report to library. But the report that being send to library department already being choose by the faculty, it means the best report will be keep in the library as reference materials to other student. Other than a report in shape of book, the library also keep a reference materials in type of digital way like CD, DVD and also in shape of maps.

Usually, student will come to borrow a final year project report (FYP) in manual way. It means the student need to choose the title of the report in a file that being prepared by the library. By having this matters, it will create a unpleasant situation in front of the counter. So, the staff of the library make a decision to transfer the detail of the fyp report into the UMK-IR system. By using this way, student need to get the call number of the book that they needed in the system before they pass the call number to the staff that on duty at the counter on that time. After that, the staff will find the fyp report and give its to the student. So, it will prevent a congestion in front of the counter.

Trainee got an opportunity to show and teach the student how to use the UMK-IR system to locate their fyp project title. This is the steps that need to follow by the student to locate the fyp project call number:

3.1.3.1 Step to use UMK-IR



Picture 9 : Step 1 (Go to UMK library website)



Picture 10 : Step 2 (Click UMK-IR)

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Search Collection in this Repository

Search any collection in the UMK Repository using a full range of fields. Use this search field for a quick search.

Keywords: all of

Title: all of

Author: all of

Item Type:

<input type="checkbox"/> Journal Article	<input type="checkbox"/> Video Gallery
<input type="checkbox"/> Book Section	<input type="checkbox"/> Audio Gallery
<input type="checkbox"/> Conference or Workshop Item	<input type="checkbox"/> Newspaper
<input type="checkbox"/> Book	<input type="checkbox"/> UMK News
<input type="checkbox"/> UMK Thesis	<input checked="" type="checkbox"/> UMK Project Report
<input type="checkbox"/> Photo Gallery	<input type="checkbox"/> Journal and Bulletin
	<input type="checkbox"/> Kafa News
	<input type="checkbox"/> Inaugural Lecture

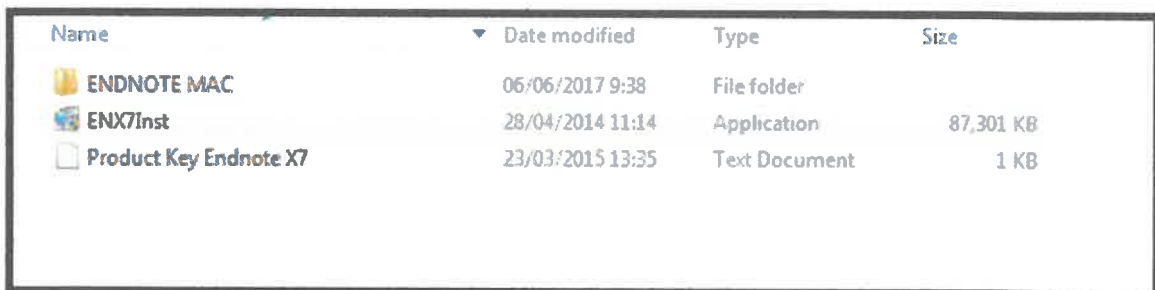
Picture 11 : (Key in the details about the report book and click UMK project Report)




3.1.4 Activity 4: Install Endnote Software for Student

Endnote is a software that being used to all student in UMK Jeli campus. This software will help student to find or locate their plagiarism activity before they submit their assignment or report to their lecturer. This software only can be installed in the library and only the library staff have the installer of this software. So, the student need to bring their laptop to the library and ask for the installer from the libraray staff. But, only the library staff can install this software to the student because this software is using a key that only the library staff can have it. It is because this software is being paid by the UMK itself. So, to avoid anything bad happen only staff from library can install this software to student.

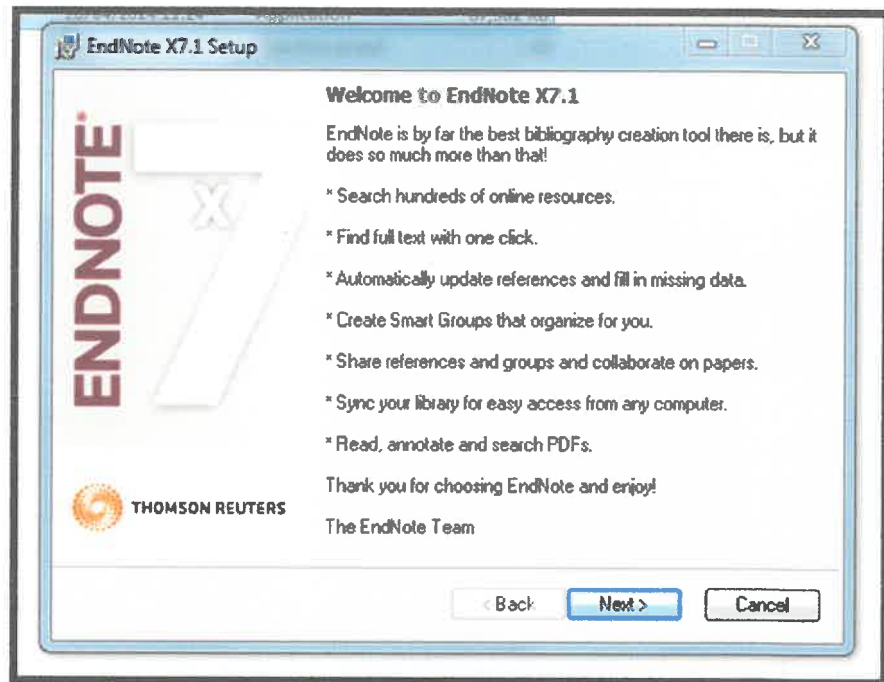
The trainee has being asked to help the staff to install the software to the student laptop that come ask for its. There are a few steps need to follow by staff of library during the installation and after this software being installed, it automatically will appear on the microsoft word.

3.1.4.1 Example of Endnote Installation

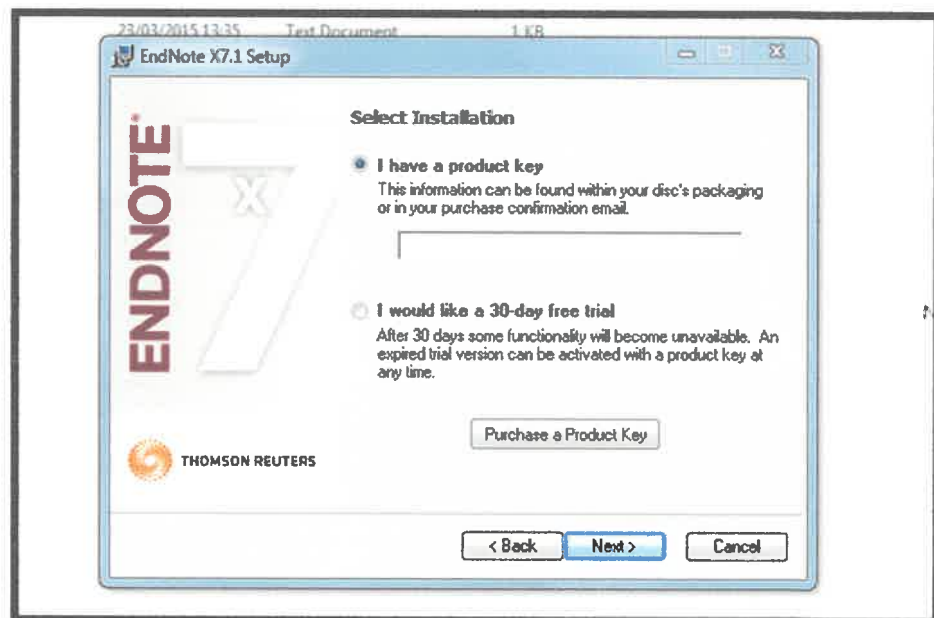


Name	Date modified	Type	Size
 ENDNOTE MAC	06/06/2017 9:38	File folder	
 ENX7Inst	28/04/2014 11:14	Application	87,301 KB
 Product Key Endnote X7	23/03/2015 13:35	Text Document	1 KB

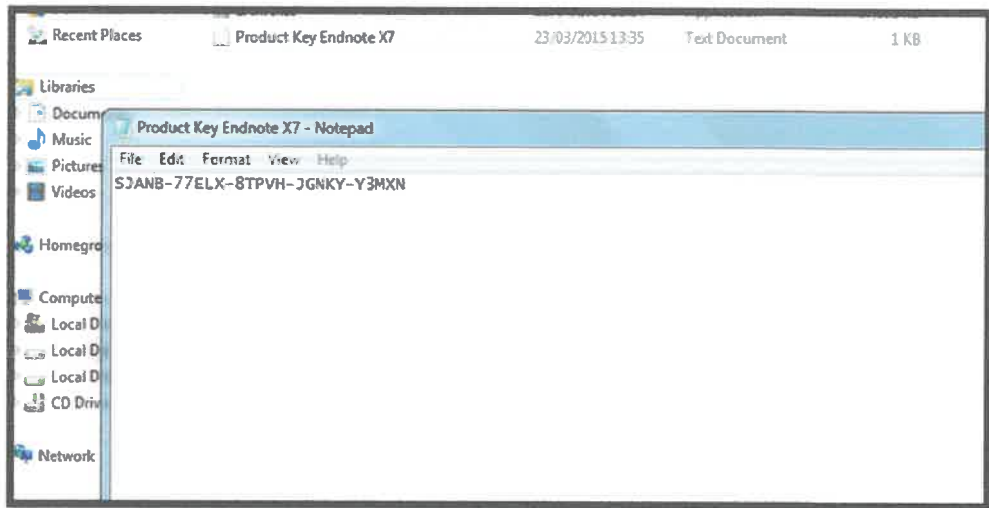
Picture 12 : Step 1



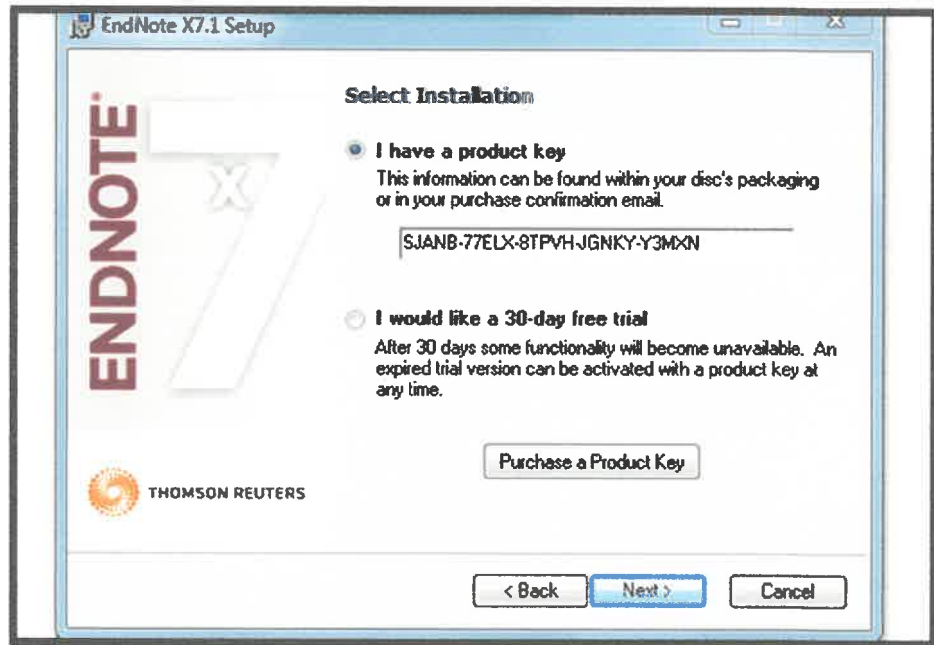
Picture 13 : Step 2



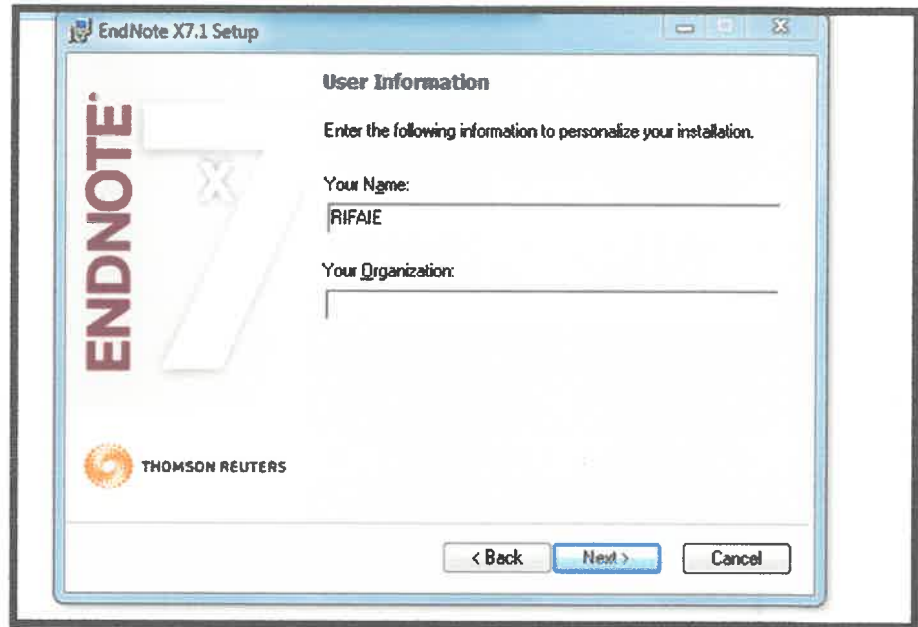
Picture 14 : step 3



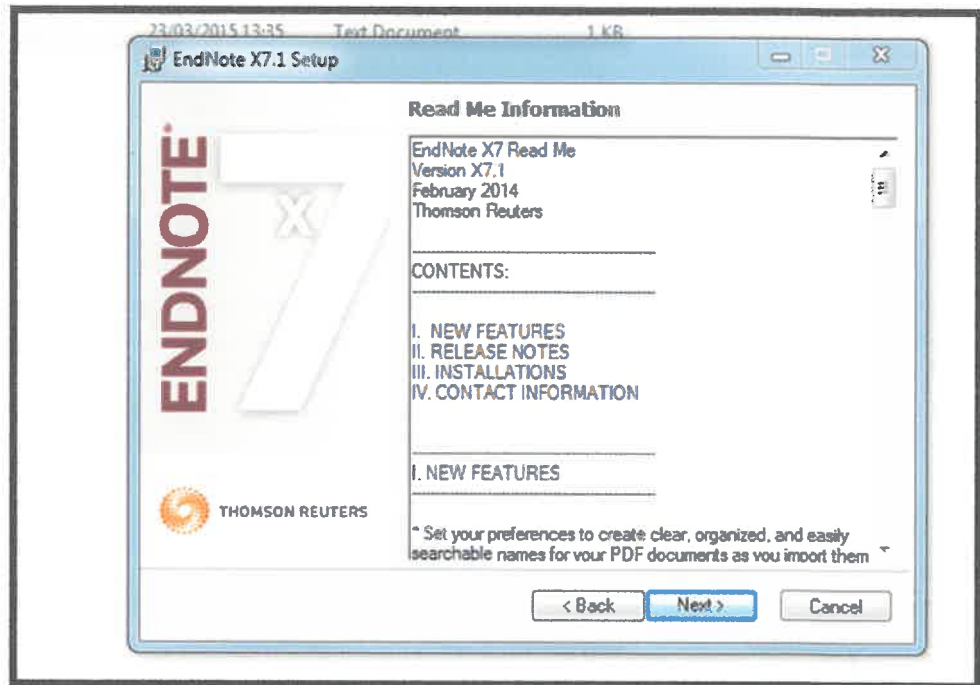
Picture 15 : Step 4



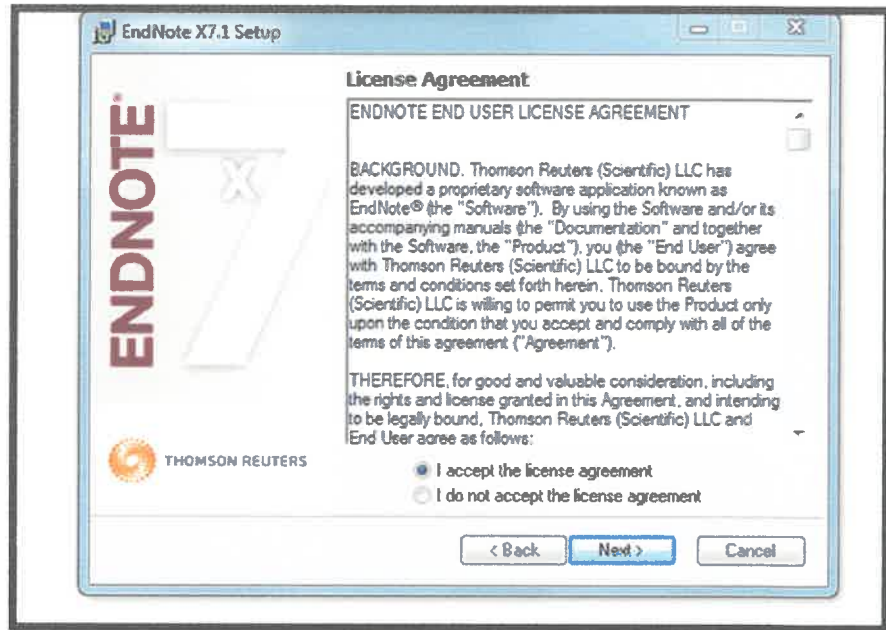
Picture 16 : Step 5



Picture 17 : Step 6



Picture 18 : Step 7



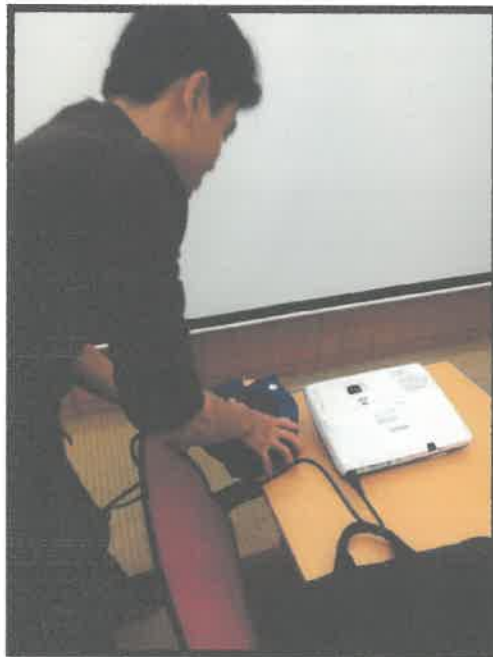
Picture 19 : Step 8



Picture 20 : Step 9

3.1.5 Activity 5: Setup projector

This task is not a daily activity that need to do by trainee. It is because this activity or work is need to do by ict staff only but the trainee got opportunity to follow and to setup the projector in the class by following the ict staff Mr. Mohd Shafiq Bin Mohd Reuan. As we know all the class will have their own projector but sometimes there are a projector that not working so they need a backup projector that being kept in ict department. So, Mr shafiq is being responsible to check or setup the projector in the class that have the problem with their projector. Other than that, trainee also get a chance to follow Mr Shafiq to a few server room that have in the UMK Jeli Campus.



Picture 21 : Projector setup



Picture 22 : Setup projector



Picture 23 : Server room

3.1.6 Activity 6: Gotong- Royong

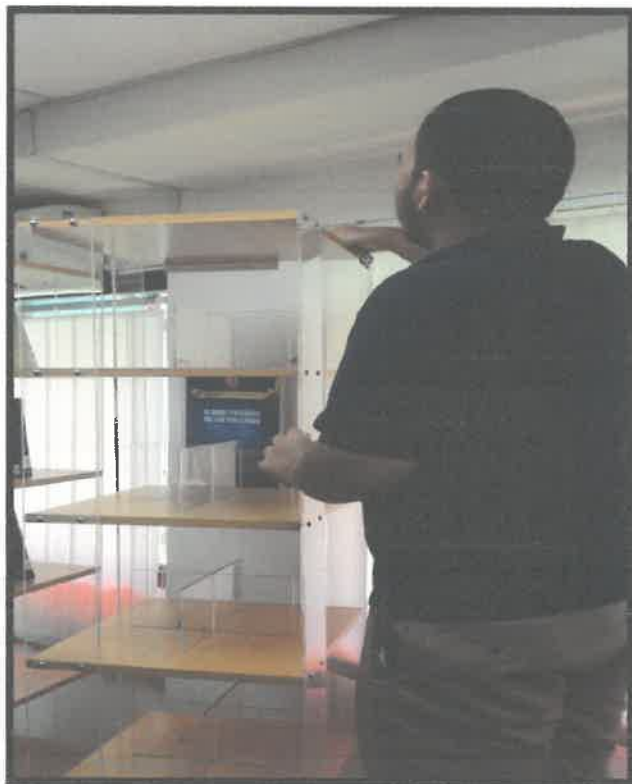
Activity of gotong-royong is one of activity that being done by UMK Library Jeli Campus. Most of every month. The purpose of this activity is to make sure that the library always in a good condition and also stay in a fresh air environment. This activity will take part in the early of the morning until the afternoon of the day. All library staff will take part in this activity to make sure all place in the library being clean and to make the gotong royong activity become more fun and enjoy.



Picture 24



Picture 25 : Cleaning The Shelves



Picture 26: Cleaning the special book shelves

3.1.7 Activity 7: 'Program Pengurusan Perpustakaan Dan Literasi Maklumat Bersama SK Gemang Dan UMK Kampus Jeli'

Task	Collaboration Library from UMK Jeli Campus with SK Gemang
Date	6 April 2017
Participants	Library supervisor from SK Gemang and Staff from UMK CampusPengkalan Chepa (PC) and staff from UMK Campus Jeli and also the intern student from Library of UMK jeli and UMK PC
Times	8.00 A.M – 1.00 P.M

Table 3 : SMK Gemang program

This collaboration activity or program being held by practical student from UMK Library Jeli Campus name Anis Nabilah Binti Abdul Khalid. This program being held as a special project for the trainee. So for this program trainee being give a task to be a facillitator to guide the student that participats in this program during this prgram being held for five hours that is from 8.00 a.m until 1.00 p.m.

This program start with the talk from Hariz Bin Hasini. The trainee started the talk with introducing a little bit about the University Malaysia Kelantan (UMK). After that, the trainee start a sharing knowledge session where in this session the trainee sharing the library knowledge to the student that participate. The input in this talk is to tell the student especially the shcool librarian how to manage the book in their library in the

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proper way. It means, they need to recheck back their book arrangement in the library to make sure the book being arrange based on the category that being set.

After that, the program continue with the activity that being called dewey decimal classification. This activity is involved the trainers and the student. At this time the trainers and the student will together paste the new call number on the new book that being prepared by the school library of SK Gemang. The last activity is play game. The game being name explorace where the student need to stop at station by station and solve the problem and the task that being given by facilitator that being responsible stay at the station. Before the ending of this program, the staff from UMK has delivered a gifts to the winner.

PROGRAM PENGURUSAN PERPUSTAKAAN DAN LITERASI MAKLUMAT
BERSAMA SK GEMANG DAN UMK KAMPUS JELI
TARIKH: 6 APRIL 2017 (KHAMIS)
MASA: 8.00 PAGI - 1.00 TENGAHARI
TEMPAT: SEKOLAH KEBANGSAAN GEMANG, JELI KELANTAN

Anjuran Bersama:
Pejabat Perpustakaan Dan Pengurusan Ilmu
Universiti Malaysia Kelantan
Kampus Jeli & Sekolah Kebangsaan Gemang, Jeli Kelantan

Picture 27 : SMK Gemang banner



Picture 28 : Student hear the instruction from Hariz



Picture 29: Gift caremony



Picture 30 : Photography session with all participant

3.1.8 Activity 8: Open Appsheet Workshop For Final Year Student From FIAT

Task	Open Appsheet workshop for final year student from FIAT
Date	8 March 2017 / 12 April 2017
Participants	Final Year Student from faculty of FIAT
Times	2.00 A.M – 4.00 P.M
Hardware	Laptop
Software	Appsheet

Table 4 : Workshop Information

This workshop being handel by trainee. This workshop purpose is to expose the appsheet software to the final year student besides to help the final year student to develop their own mobile apps that can help them in their final year project. This workshop is continues workshop that require the same participants for both workshop that being held. For the first workshop, trainee expose the user about appsheet and for the second workshop trainee teach the student to create their own mobile apps using their own data,



Picture 31 : First workshop poster



Picture 32 : second workshop poster

3.1.9 Activity 9: Open Appsheet workshop for student from faculty of FIAT

Task	Open Appsheet workshop for student from faculty of FIAT
Date	19 April 2017 / 17 May 2017
Participants	Student from faculty of FIAT
Times	2.00 A.M – 4.00 P.M
Hardware	Laptop
Software	Appsheet

Table 5 : Information about workshop

This workshop is being handle by trainer partner that is Indera Syah lyman Bin Roslan. In this workshop trainer will be facalitator that need trainer to guide the participant if they have a problem during the program. This workshop being held for two times that is in 19 April 2017 and also 17 May 2017 and both of this workshop being handle by trainers partner. This workshop take almost two hours from 2.00 p.m until 4.00 p.m

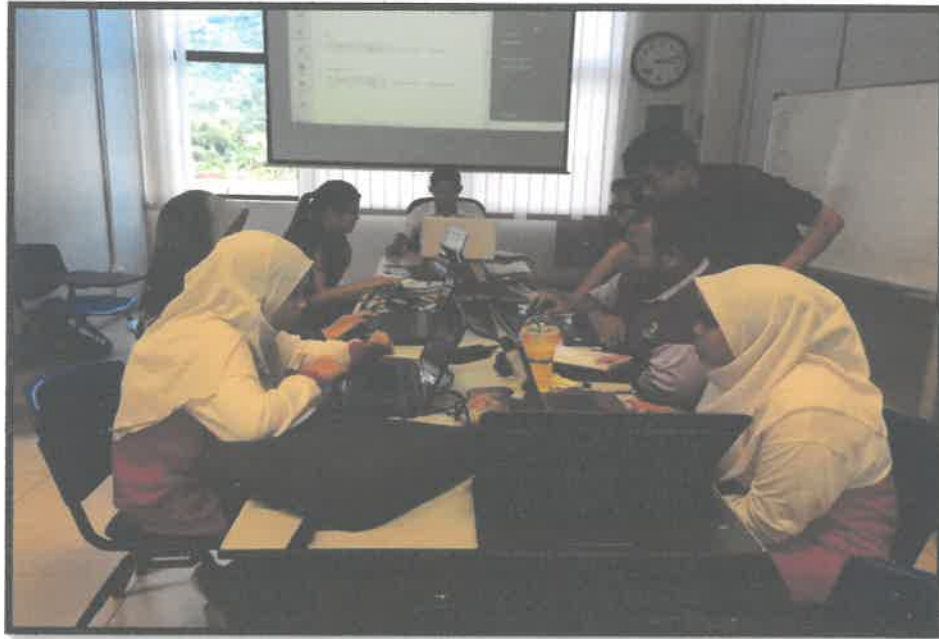
The input or the objective of this workshop is to share and to teach the student about this appsheet software. Our supervisor that is Dr. Leony Tham Yew Seng want the trainers to create one simple mobile apps that can help the paticipant in their life as a student. After discussing with each other (me and my partner), trainers decided to create an mobile apps that will help the student to manage their asignment receive task.

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This apps will help student in managing their assignment progress level. So, by having this type of apps the student will know the percentage or the progress of their own assingment. What they need to do is updated the information everytime they have done the progrees in their assignment.



Picture 33 : Participants following Instruction by traineer



Picture 34 : The fasilitator help the student



Picture 35 : Photography session with participant



Picture 36 : Second Open workshop for student

3.1.10 Activity 10 : UMK Library Open Day

Task	Collaboration Library from UMK Jeli Campus with PRS club
Date	21 May 2017
Participants	Student from UMK Jeli Campus and outsider
Times	9.00 A.M – 5.00 P.M

Table 6 : Information about Library day

This Library open day is a program under department of library that being held by Hariz bin Hassini that is on of the practical student under library department. The purpose of this event is to fulfil the requirement that needed by Hariz as his special project. This program is a program that take a coolobaration with the Pemimbin Rakan Sebaya club (PRS) that is student club from UMK Jeli campus. This event take place in 21 May 2017 and start at 9.00 a.m until 5.00 p.m it means this event is one day event.

In this program, trainee being assigned as facillitator. Trainee need to guide the participants that joining in this program to make sure that their name being register before they join the program. Trainee also need to explain a little bit about the program and the game that being provide in this library open day program. This program being handle smoothly with the help from each crew that is involved in this program.



Picture 37 : Library Open Day banner



Picture 38 : Crew of library open day



Picture 39 : Participants join the event

3.1.1.11 Activity 11: Workshop for Lecturer of UMK

Task	Open Appshhet and blogger and wix workshop for lecturer of UMK
Date	24 May 2017 / 31 May 2017
Participants	Lecturer of UMK
Times	2.00 A.M – 4.00 P.M
Hardware	Laptop
Software	Appsheet

Table 7 : Workshop information

This is the second last and the last workshop that being held by trainee and the trainee partner Indera Syah lyman Bin Roslan. So for the second last workshop is handle by trainee and the last workshop being handle by trainee partner. For the second last workshop the input is about appsheet. In this session, trainee need to expose and share the knowledge and the fuction about the appsheet software to lecturer. This workshop only open for 10 early participants only. Trainee start this workshop by explain the information and sharing the knowledge about the appsheet. After that, trainee together with participant create the apps by using the appsheet. In this workshop trainee only teach the basic apps by using their own data and also pamphlet that already being given. This purpose of this workshop is to teach and to expose the knowledge about this appsheet software it is because based by trainee observation, by using this apps, lecturer can use its to help them in their daily task life .

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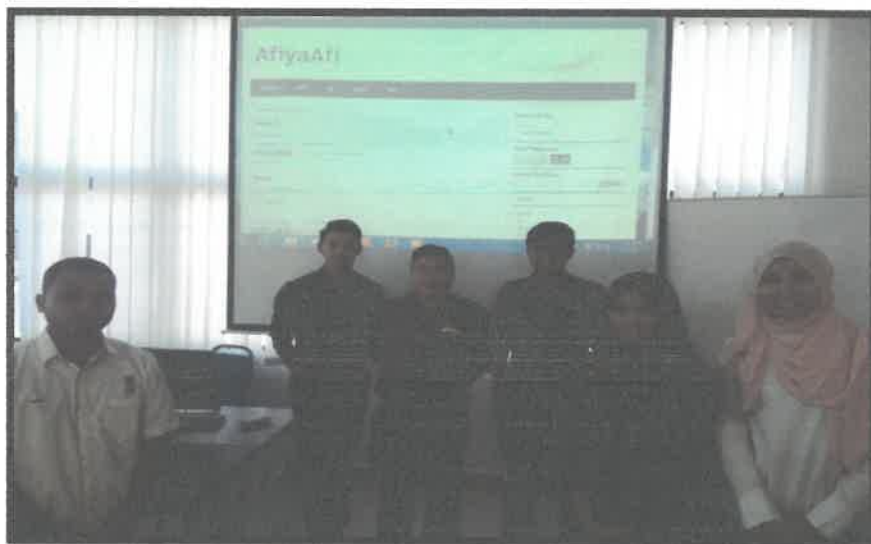
For the last workshop is being held by trainee partner. This workshop is quite different from the others because in this workshop, the input is different from the others. This last workshop will give a knowledge about how can user use the blogger in more expert way and how can wix help the user to create their own website. Before this workshop, the trainee and the trainee partner need to study a little bit about the input that will be given in this workshop. As we know, the blogger is the platform that can be used by user to share their information such as their travel story, food resipe and so on. In this workshop, trainee partner will teach them how to make their blogger become more intresting and will attract other user to view the blog. Other than that, for the wix, my trainee partner show to them the way how to use the wix that is open source that being provided to user to create their own website. This workshop being hels for two hours.



Picture 40 : Fifth workshop poster



Picture 41 : Photo session with participats



Picture 42 : Last workshop

3.2 Special Project

3.2.1 Introduction

3.2.1.1 Project Overview

Appsheet is a new software that being used by trainee in this practical training program. Being asked by trainee supervisor, Dr leony Tham Yew Seng in the first week coming for the internship program to review and study about this appsheet software. Appsheet is a software that can be used by user to create a mobile application by using their own data that being stored in excel or google spreadsheet. What the user need is create their own Gmail account and link it with google drive. This mobile apps can be created without using any single coding.

After a few weeks the trainee study about this software, trainee being asked by the supervisor to conduct the workshop for the final year student and also. This workshop is continues workshop that means the trainee need to handle two workshop with the same participants that is final year student. The purpose of this workshop is to introduce the new software for the final year student that maybe this software can help them in their final year project. The participants is from final year student under trainee supervisor.

3.2.1.2 Problem statement

Based on the information that being given by trainee supervisor Dr Leony, for the previous final year project the data being key in using the manual way that means they only key in the data in the sheet of paper and then transfer it to the report. So, they are report that sometimes, the data that being write in the paper is missing so, the student need to go back to the project site to get back the data.

After knowing about this appsheet software, trainee supervisor want trainee to share the knowledge and help his student to find a solution to the problem that they had. It is because, appsheet software is a suitable platform that can be used by student to key in the data and store their data. And one thing for sure the data will be kept and always be there at least the student already delet the main database that is excel or google spreadsheet.

3.2.1.3 Objective

The objective of this Appsheet workshop is to expose the appsheet software to the final year student beside to help them in their final year project. Other than that, this workshop also to share this new knowledge to the lecturer of Fiat. By having this mobile apps system, the data that be key in by the student will be store in more save place that can decrease the percentage of losing data. The objective are as follows:

- I. Store the data of final year project in more secure place
- II. Student can share data with their supervisor in anytime
- III. Expose the new knowledge to the student about this appsheet software

3.2.1.4 Target User

The project being develop for the final year student from Faculty of FIAT. The main target user for this appsheet workshop is for final year student under Dr. Leony Tham Yew Seng. And the participants for the both workshop is the same participant because of this workshop is continues workshop

3.2.1.5 Tools Used For Development

- I. G.mail account - To link the google spreadsheet with the google drive
- II. Excel or google spreadsheet - As a platform to store information about the apps
- III. Google drive - As a place to store image before it being put in google spreadsheet or excel
- IV. Appsheet – Need to install this apps software in the mobile phone of user to make sure the apps can be transfer to the smartphone

3.2.2 Preparation Time schedule

3.2.2.1 First Workshop

In date of 22. February 2017, trainee being give the task by Dr leony Tham Yew Seng to conduct a workshop for his final year student. And the workshop will take place on 8. March 2017 at computer Lab one. So, the trainee have only two weeks to prepare the materials or the input that will be used for the workshop. For this first workshop, trainee need to expose and share the knowledge about the appsheet software. It means the trainee need to introduce the software to the student.

For this first workshop, trainee only introduce to student what is really this appsheet software and trainee explain to the user how this software can help them in their final year project. After the explanation, trainee together with them log in into the gmail and appsheet. For this starting, trainee use the pamphlets that already being given in the appsheet so, they dont need to modified their apps interface by themself. What they need to do is to key in the information in the google spreadsheet and transfer the data into the appsheet. The data that being key in also include with the image. By using this way, it can make the student become more understand about this appsheet software. Other than that, in this session trainee also teach the student in how to change or to modified their apps interface using their creativity. Starting from change the colour of the apps until change the logo of the apps.

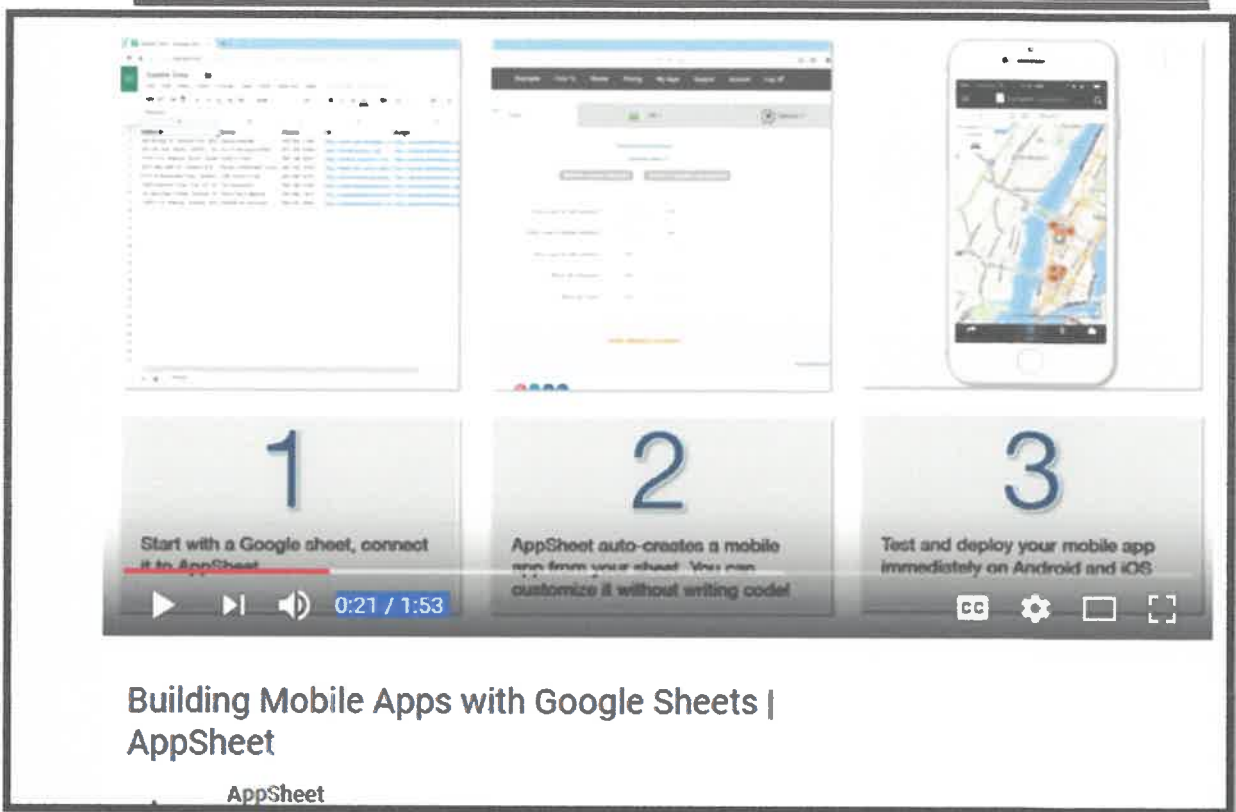
After about one and half hour, trainee has ask the student to send the appsheet to their mobile phone to make the data with the appsheet become the real mobile apps that they can use by only using their smartphone. And all the participate finally can have their own mobile apps in their smart phone. With the manual book that being prepared by trainee to the student its a little bit can help them to understand and follow the steps that being teach by the trainee.

Based on the explanation above, trainee prepare the simple schedule that will explain the activity or task that being do by trainee before and after the workshop being conducted.

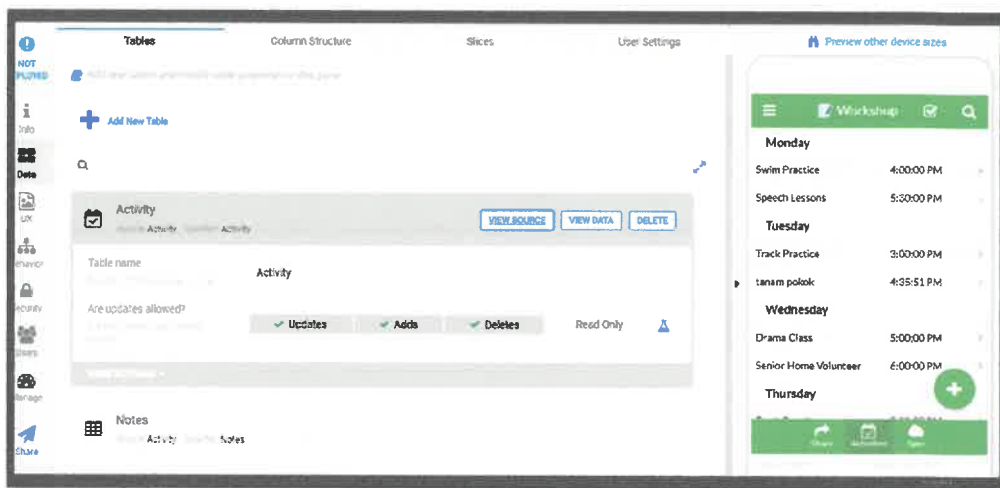
INDUSTRIAL REPORT 2017

Time	Task
22 February 2017	Get a task for the workshop from Dr Leony
23 February 2017	Start to study about the appsheet
26 February 2017 – 1 March 2017	<ul style="list-style-type: none">• Create a poster for the workshop• Submit the poster to the supervisor for the announcement about the workshop• Discuss about the input that being plan by trainee
2 March 2017 – 7 March	<ul style="list-style-type: none">• Prepare the slide for the workshop• Create basic mobile apps for the workshop• Prepare the user manual• Discuss with the supervisor one day before the workshop being held
8 March 2017	<ul style="list-style-type: none">• Workshop start at 2.00 P.M – 4.00 P.M• Seven participant from final year student under Dr Leony• Start the section with the introduction of trainee and also introduction for the appsheet software• Ending the workshop with photography session

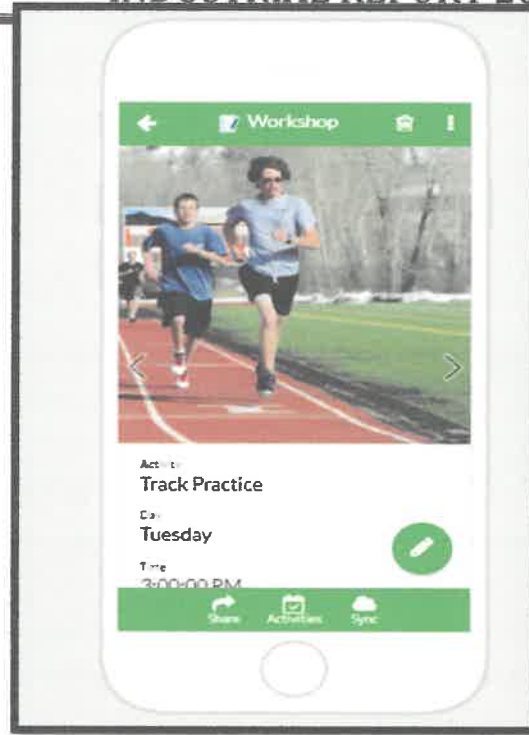
Table 8 : Trainee time schedule before and during the workshop



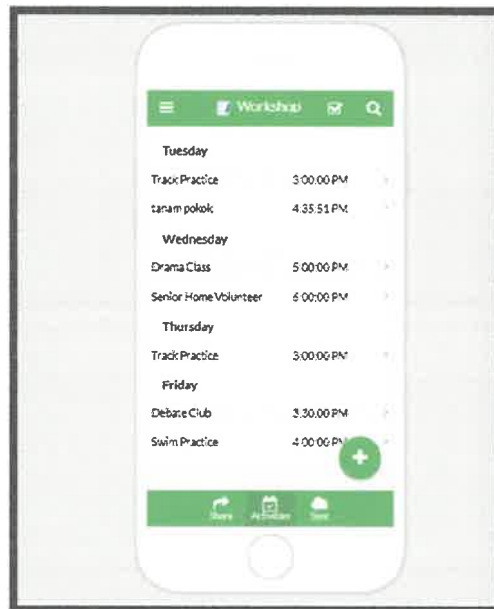
Picture 43 : Self study about appsheet with youtube



Picture 44 : First page of appsheet



Picture 45 : Starting page of apps



Picture 46 : Interface of apps



Picture 47: The poster of the workshop



Picture 48 : Workshop In Progress



Picture 49: Photography session

3.2.2.2 Second Workshop

In 29 March 2017 trainee being given a task to held a second workshop for the final year student and the participant will be the same as the first one. And the workshop will being take place in the same place as before that is computer lab one in 12 April 2017. Unlike from the first workshop, this time trainee need to teach them how to cretae an mobile apps still using the appsheet but using their own data. It is because, after this workshop they need to build their own mobile apps that suitable with their upcoming final year project. So, this time trainee need to use or put different input for this second workshop.

For this second workshop of appsheet, trainee will get a help from the trainee partner that is Indera Syah lyman Bin Roslan. Because of this second session of this workshop will become a bit hard than the first one. Trainee will be the speaker and the trainee partner will monitor the student and help them if they have any problem during the time of building their own apps. Same with the first workshop, trainee need to create a simple poster and give it to the supervisor that is DR Leony. The purpose of creating this poster is to announce to the participant about the second workshop and also it will be post into the faculty forum group to inform that the faculty has held a intresting program that maybe can attract the other student. It is because Dr Leony is planning to open this workshop to FIAT student after the trainee ending this second workshop for final year student. Before the workshop being started in one weeks, trainee has meet the supervisor to discuss about the input that need to have for this second workshop. Based on the discussion, the supervisor want the trainee to build the apps that can help them to key in the data about their final year project. The input of this workshop is state below:

- The apps can capture image from the smartphone
- Need to put 1 month activity for data key in
- Every day need to key in five different type of plant
- The data need to key in everyday except the weekend
- The progresses and the calculation need to be put into the apps

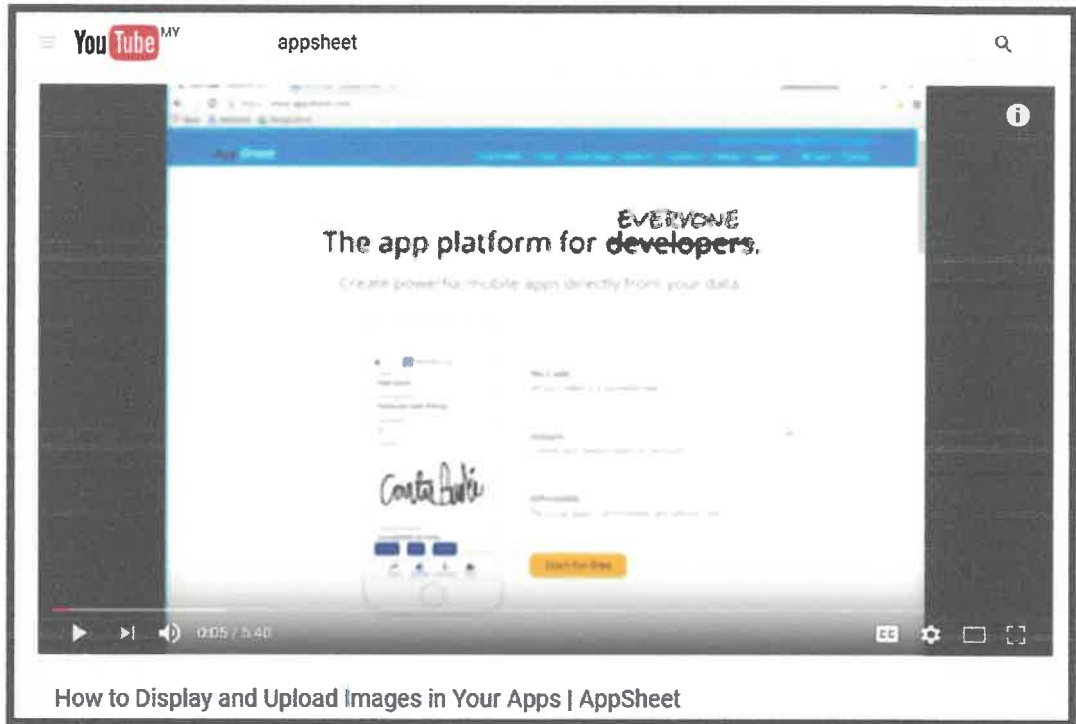
Different from the first workshop, this second workshop being started by trainee ask the student to open the appsheet by themself and the trainee want them to create their own interface that include change the apps logo, change the background colour, change the colour of the apps and so on. After that, the trainee ask the student to follow the steps that being show in front. For the first step, traineer has ask the student to key in the that similar to the need that being asked by the Dr Leony. After that, trainee teach the student in how to separate the table between the day and the daily task. For the next step, trainee has show to the student in how to link the day table with the number of the plant that being key in.

Because of the lack of time, the workshop need to be stop at 4.00 p.m. And the end of the workshop, finally the student can create their own mobile apps using their own data. With the manual book that being given to them, a little bit its can help them for their future in managing their fnal year project. Thanks to trainee partner Indera, the second appsheet workshop being held smoothly. And after the workshop end, the trainee has meet the supervisor that is Dr leony and he ask the trainee to create one complete mobile apps that can be use by the final year if they have a problem build their own mobile apsss during the final year project start.

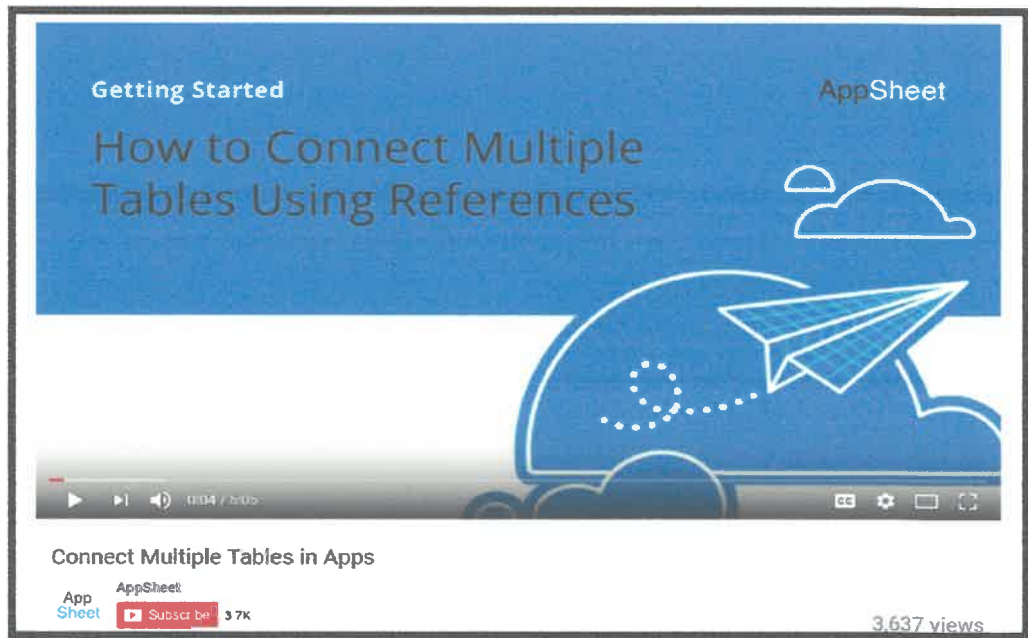
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Time	Task
28 March 2017	Get a task for the workshop from Dr Leony
2 April 2017	Start to study about the appsheet
3 April 2017 – 6 April 2017	<ul style="list-style-type: none">• Create a poster for the workshop• Submit the poster to the supervisor for the announcement about the workshop• Discuss about the input that being given by Dr Leony• Continue the stude about appsheet
9 April 2017 – 11 April 2017	<ul style="list-style-type: none">• Prepare the slide for the workshop• Cretae mobile apps for the workshop• Discuss with the supervisor one day before the worshop being held
12 April 2017	<ul style="list-style-type: none">• Workshop start at 2.00 P.M – 4.00 P.M• Same participant from the first workshop• Theach the participant to create the apps using their own data• Ending the workshop with photography session

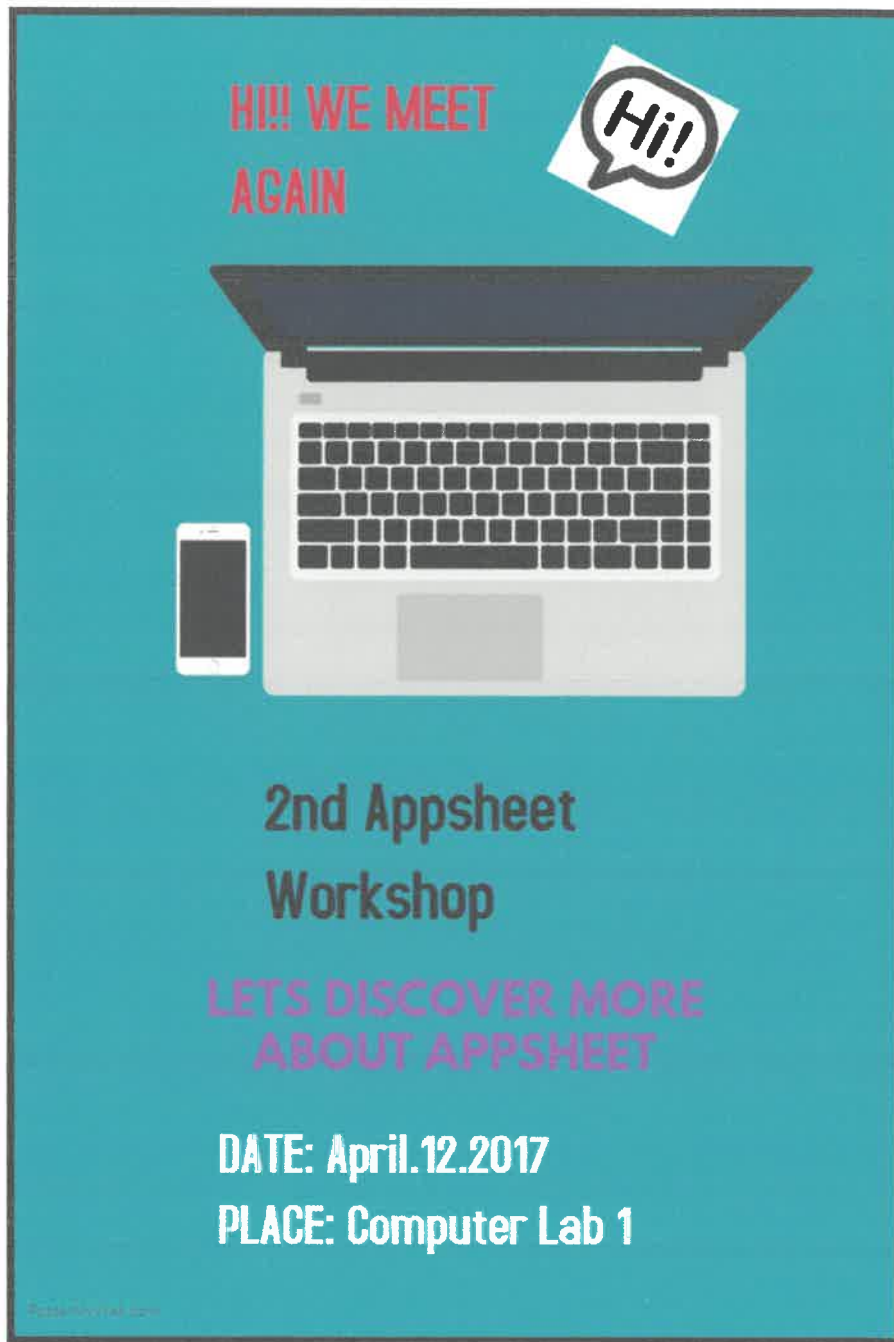
Table 9 : Trainee time schedule before and during the workshop (2nd workshop)



Picture 50 : Appsheet self study with youtube



Picture 51 : Appsheet self study to connect multiple table



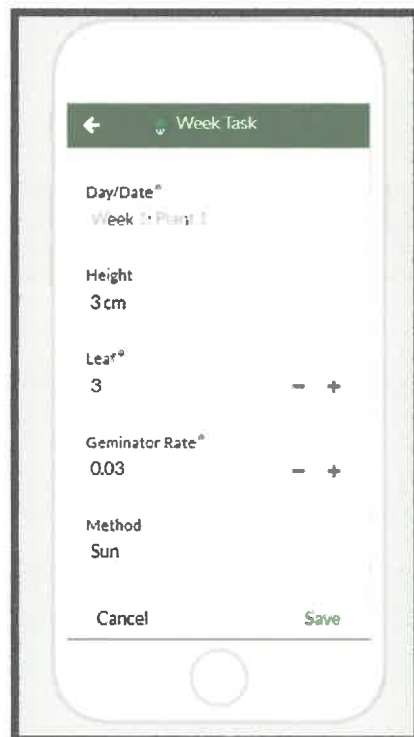
Picture 52 : Appsheet workshop poster



Picture 53 : Starting page of the apps



picture 54 : Interface of the apps



Picture 55 : The data that being key in using this apps



Picture 56 : Trainee held the program



Picture 57 : Photography session

Chapter 4: Conclusion

Through the five month in Industrial training program in Faculty of Agro-Based Industry (FIAT), University Malaysia Kelantan (UMK), the trainee has gained a lot of experience and one thing for sure the environment as a workers and student is totally different. Futhermore, traineer has being placed under the library of UMK Jeli campus. So because of that, traineer have an opportunity to learn about the workflow in the library. Other than that, during this industrial training program, trainee have learn a ot of new things, new skills and new knowledge that trainee will not gain in the class.

4.1 Application of knowledge, skills and experience in undertaking task.

There is a lot of knowledge and skills and experience that has being gained by trainee during this industrial program training for a five month in the faculty of FIAT and also under the library of UMK jeli Campus. All this knowledge, skill and experience that being gain by traineer right here are cannot being grab in the class.

New Software

During this industrial training program, traineer have gain a new knowledge based on software. Starting the first task that being given by traineer supervisor Dr leony Tham Yew Seng to explore about Appsheet software. Traineer need almost two weeks to understand and to learn waht is relly the appsheet and the basic function of this apps. So, what have learned by traineer, this appsheet software is platform to help user to cretae their own mobile apps without using any single coding. What the user really needed is, the Gmail acoount, google Drive and google spreadsheet to form one

complete mobile apps. So, for trainee this is a new knowledge that will be useful to trainee in future. Other apps software that being study by trainee is like Appy pie, Good barber, Bizness Apps and Apps machine. Most of this software will help user to create mobile apps in fast and easy way but to use this software, user need to pay first and different with appsheet its free to use by user. Basically, the trainee learn about appsheet is by review the youtube and self learning using google.

Shelving and Reshelving

With the opportunity being place under library, trainee use this chance to learn a little bit about the workflow in the UMK library. The trainee get to learn the most important activity that need to every day before the library being open to the student that is shelving and reshelving activity. The last time trainee got learn about this call number is during trainee diploma time. So, by having this opportunity, trainee can gain a little bit knowledge in how the book in the library being organize based on their categories. And this kind of knowledge and experience surely will nit being gain by trainee in the class.

Software Install

Trainee being given task by En Fitri Bin Hanif, the librarian of UMK Jeli Campus to help him to install the endnote software to student that come to the counter. It is because, endnote software is a software that being paid by UMK, so there are key that needed to patch into the software before it being installed. The purpose why only the librarian staff can only install the software to student is because, to avoid the installer being bring out outside of the UMK and being used by othe student outside of the UMK. Other than that, the student that come to install this software need to wright their name

in a sheet of paper and they need to join the workshop that being prepared by the library staff, This workshop purpose is to teach student especially the first yer student in how to use the endnote software, turnitim and APA style that being called Modul PPI service workshop. So, the traineer will help the student to install the endnote software and they need to bring their laptop to the caunter.

User Training/ Workshop

Through the five month industrial training program in UMK Jeli Campus, traineer has being asked by the Dr. Leony to do a user training or workshop to share the knowledge that traineer have gain with the student in the UMK especially under faculty of FIAT. So, traineer has join about six workshop that is three of them being handel by traineer and the other workshop being handel by trainees partner Indera Syah lyman Bin Roslan. Thank you to subject information system interaction and consultation (IMS 556) that being teach Madam Saliza Binti Radzi, the traineer have a little bit confident to handel the workshop in a proper way. The workshop that being handel by traineer is about the software that being study by traineer that is appsheet software. Two of the workshop is being held to the student and third one is being held to the lecterul from faculty of FIAT. For the first and second workshop, traineer supervisor want the traineer to help the final year student under him to learn about this software because he want his student to use this software to help them in their final year project. So, for the first and second workshop is continuesly workshop that include the same participant. And for the last workshop traineer once again baing asked by Dr leony to introduce the appsheet software to the lecterul from faculty of FIAT. Traineer takes about two hours for every workshop that being held. This opportunity not only give a new experience to traineer but also it helps traineer gain a little bit confident to talk in front of people and thanks to

presentation experience that being gain during study time because it helps trainee to increase the confident level to talk in front of the participation.

4.2 Personal Thoughts and Opinion

University Malaysia Kelantan (UMK) is one of new university in Malaysia and UMK Jeli Campus is one of them. But, the size of campus is quite small than the other campus especially in Pengakalan Chepa (PC). But, although the campus is little bit small from the others, the facilities and management in this UMK Jeli Campus is quite advance not from the others of UMK branch but from the others university. During the industrial training program, trainee have learned a few new skills and gain a little bit new knowledge and experience based on what that being done by trainee in the organization.

The Faculty of Agro-Based Industry (FIAT), is a faculty that based on the course that have relation with agroculture. Because of lack of space work in the office, trainee don't get an opportunity to stay and work in the environment under the faculty of FIAT otherwise, thank to Library of UMK Jeli Campus because they give a chance to work under their department. Because of this opportunity, trainee can learn the daily activity that being done by library staff. The important activity that need to do by library staff is sheving and reshelving book and this task need to be done one hour before they open the library to student and from that task trainee can learn that high level of patience is needed every day by the staff. That is because there are some student that not put the book back into the shelve after they done reading its. So, the library staff need to recheck back their shelve to make sure all the book being put based on the call number that being state.

The size of space works in library is absolutely in different level with the size of space work in Faculty of Agro-Based Industry (FIAT). So, the space work in the library quite comfortable rather than in FIAT. It is because library is a big department and FIAT is only the faculty. But, based on the absorption from trainee, because of the size of the working area in FIAT is small, the environment of the work in the office is so life because of the desk of staff is located near of each other. The trainee only go to the office if something come up like there are any document that trainee need to sign or anything about submission allowance that need the trainee go directly to the FIAT office.

Trainee will get instruction directly from trainee supervisor that is Dr. Leony Tham Yew Seng. So, if any new task come up, trainee will go directly to Dr leony office. Dr Leony is a person that importance of punctuality and because of that, the trainee a little bit learn to be more punctuality with the time. Basically, most of the meeting with him will be held in every weeks on day of Wednesday. Every weeks the trainee and trainee partner will go to his office and discuss about the pogram about the upcoming task and also we discuss about the new idea or new knowledge that can be shared together. Being placed under him is quite good by trainee because Dr leony is a one great lecturel in the UMK Jeli Campus.

4.3 Lesson Learnt

During the industrial training program in Faculty of Agro-Based Industry (FIAT), and also in UMK library, trainee learnt a lot and improves a little bit. There are some of skills that the trainee gain during five month in this industrial program

Teamwork

The trainee had involved in several program or activity that being held by UMK library. For each program, teamwork is relly important to make sure the program being handle in a good way. Two big event that being join by trainee under the library is program that being lead by two practical student under the library. This two event needed a strong teamwork team during the event in the progress it is because this is event that involve outside participats. Other than that, during the workshop that being held by trainee and trainee partner also teach us about the important of the teamwork. It is because, without the strong teamwork, the workshop can be handle smoothly based on wahat we already plan.

Communication Skills

With the communication subject that being learn during study time its a litle bit help trainee during this practical training program. In addition by joining this training program, the trainee can increase and improve the communication skills in the trainee. That is because most of activity need a communication especially during traineer being assigned to on duty in caunter. Other than that, the communication skills also being improve during meeting with trainee supervisor that is Dr. Leony. It is because, The trainee learnt how to communicate with professional level and unprofessional level.

There is a bit different way to communicate with them but still shows respect each other

Problem Solving

The trainee learnt how to solve the problem by self. This problem solving skills really being improved during the task for the special project being done. With lack of knowledge about the new software, trainee need to review and get help by youtube to increase the knowledge about the new software that being used that is appsheet. To learn how the apps can being function and then the trainee need to held a workshop to teach the others, this problem solving skills is really help trainee during this critical and hard time. Youtube is a great platform to user or newbie to learn something new because the user can find a tutorial video that can be followed by user.

Time and Self- Management

In working life, time and self- management is very important. This is because without this attitude in organization, the company will become nothing. So, the trainee need to come to work at 8.00 a.m and end at 5.00 p.m every day except the weekend. To make the trainee come early everyday, discipline also play their rule. Besides that, by having a supervisor that really straight in punctuality in every works, the trainee need to finish the task based on the date that being given. From the observation, the efficient of time and self management is very important in both side that is in Faculty of Agro-Based Industry (FIAT), and also Library and Knowledge Management, Universiti Malaysia Kelantan.

4.4 Limitations and Recommendation

After five month trainer being in the practical industrial training program, there are a lot of things that being done by trainee to complete the IMC 690 course. And one thing for sure is, the life as a workers is totally different with the life as a student. And based on the five month trainee being involved in Faculty of Agro - Based Industry (FIAT), there are a few limitations and suggest the recommendation for it.

4.4.1 Limitation

Work Space

As being inform before, the lack of space work is a reason why trainee need to be placed under department of library. For trainee that is not a fair decision because trainee is doing the practical training program under the name of Faculty of Agro - Based Industry (FIAT), but the faculty itself can provide a proper work space for trainee otherwise trainee being place under the library. So, trainee don't have an opportunity to get involve in the daily task activity that have in the faculty. During five month in the UMK Jeli Campus, trainee only spending time in library without being invite or being asked to work in the office of FIAT and trainee only go to the office if something come up that need the trainee to be there.

Allowance

In this economical era, the allowance that being given by UMK is to low that is RM 200 per month. It is because during the first time trainee coming in the UMK Jeli Campus, trainee has asked for the room to stay during the practical training program in progrees. But the rent that being charge to traineer is to high for the one room only. With the allowance that being given, for trainee it is not enough unless trainee do a saving for every month.

Lack of Expert staff in System

Based on observation and information that being received by trainee, the Faculty of Agro - Based Industry (FIAT) is lack a expert staff in system it means there are no staff in the faculty that have a expert knowledge or skills in the system so anything happen in the faculty system, they need to depend on IT department of UMK Jeli Campus. It is because, during the meeting with trainee supervisor that is Dr leony, trainee have request to create a system for the faculty but the request is being rejected by Dr leony with the reason they don't want to take any risk. It is because, if the system that create by trainee is function and it be used by faculty and then the trainee already left the UMK, if the system have any problem for upcoming days, faculty don't have any expert staff that can handle this problem.

Lack of Knowledge About Practical Student Course Background

Trainee supervisor that is Dr leony Tham Yew Seng, is misunderstanding about the course background that being learn by trainee. Because of that, there are a few task that cant being done by trainee. Because for trainee the task is to heavy to handle and

trainee don't have a knowledge to do it. For the trainee supervisor, he assume that trainee is from a computer science background and trainee has a expert knowledge about build the big system.

4.4.2 Recommendation

Provide a big Space Work

To prevent the same situation happen again. Trainee recommended the faculty increase their size of work space. It is because every year, the faculty will receive the practical student from other University so they need to prepare a work space for the practical student. It is because, it will feel unfair for trainee if they need to be put under other department but their name is under others faculty name. So, FIAT top management need to take action about this problem seriously.

Increase the Ammount of Allowance.

This matter is need to being revise based on the econimcal era that we being through. Not to be a demand, but the trainee need to have their own right of need. At least, the top management UMK can provide a room for practical student if they don't want to increase their ammount of allowance for practical student. It is because, if the practical student is not come from that area especially not from Kelantan, they need to rent a house that the price can reach RM 150.00 until RM 200.00 per month. So, it gonna give a big impact in life of the practical student.

Hire Staff That Expert in IT

Trainee recommended the faculty of FIAT to hire at least one staff that have expert knowledge and skills in IT. It is because if they have their own expert staff in IT, the

workflow in that office will become more smooth it is because right now, most of the data like performance of staff and lecturer under faculty of FIAT still need to key in in the sheet of paper before they transfer it into the excel. Other than that, if they hire the other practical student that have background study of IT, it will makes the task for the student become more easy because anything about the system they can directly discuss with the staff that expert in the system and with this matter, they can plan to create a new and suitable system for the faculty.

Study the Background of the Practical Student

For this recommendation trainee recommend the lecturer that want to hire any practical student under them, they need to study or make a review about the background study of that student. It is because to avoid the supervisor given a task that don't have relation with the trainee study background. So, the lecturer need to understand and give the relevant task that suitable with the program that being study by trainee to make sure that the trainee can accept all the task that being given.

Reference

- A. (n.d.). Mobile apps from spreadsheets : My Apps. Retrieved July 5, 2017, from <https://www.appsheet.com/Template/Apps>
- Build Project Management Apps with AppSheet - Deep Dive Webinar. (2017, February 27). Retrieved July 8, 2017, from <https://www.youtube.com/watch?v=wNkUoJwLn4I&t=281s>
- Connect Multiple Tables Using References | AppSheet. (2016, May 16). Retrieved July 8, 2017, from https://www.youtube.com/watch?v=TcfoApZ_GOk&t=178s

APPENDIXES

APENDIXES A : USER MANUAL

AppSheet

MANUAL BOOK

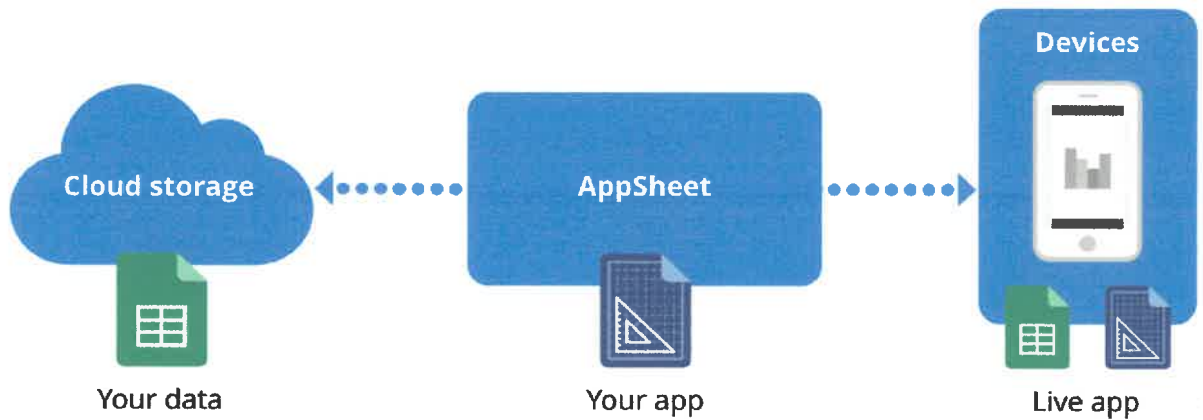
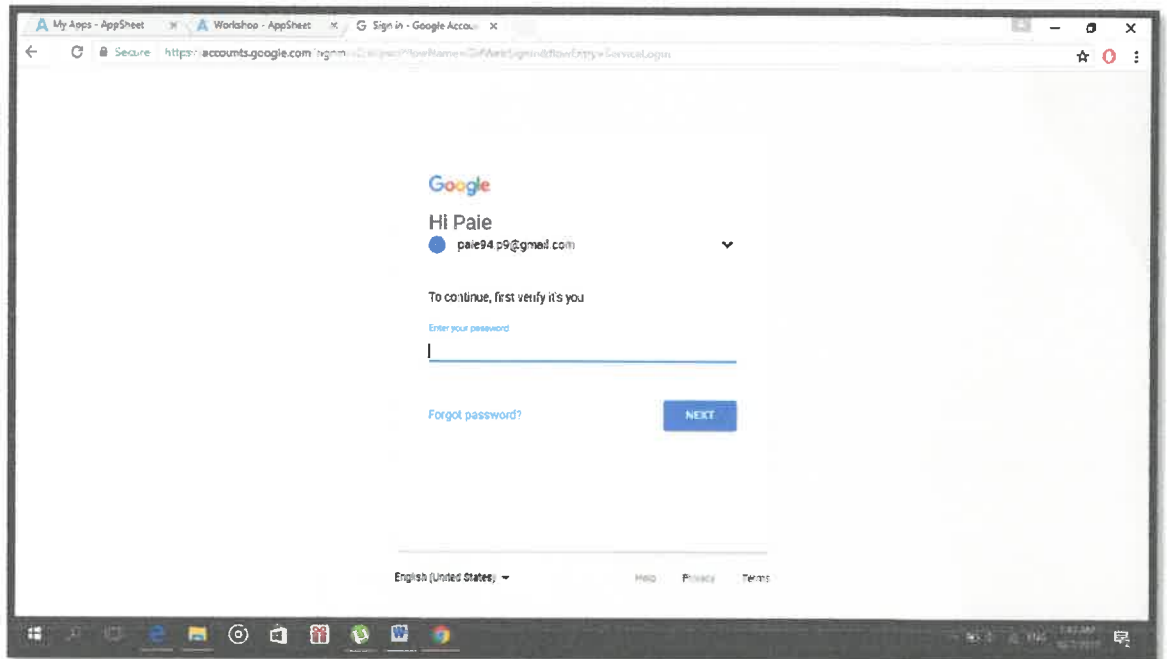


Table of Contents

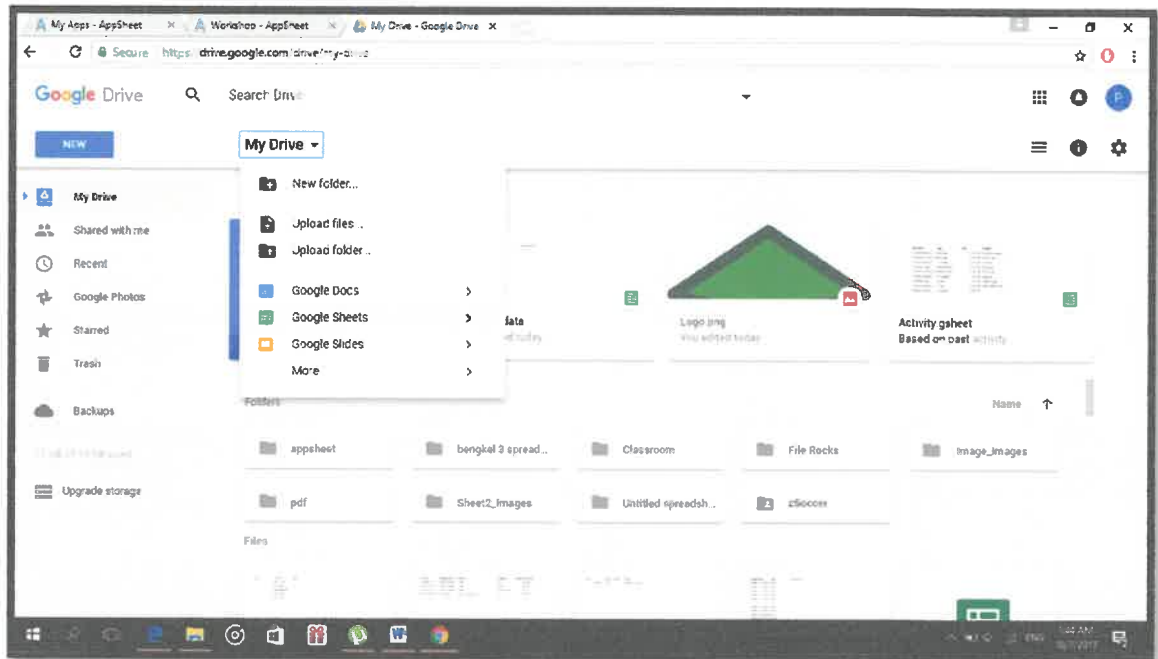
1. Create your own Google Mail Account	3
2. Open your Google drive using the Google emails that already being sign in or sign up.....	4
3. Key in the data into Google Spread Sheets	5
4. Go to www.appsheet.com	6
5. Click the button on Make new apps.....	7
6. Create your own apps basic data	8
7. Click the Google button to import the data from Google spread sheets	9
8. Choose the data from the Google spread sheets and import it into appsheet	10
9. The first of interface from appsheet will appear.....	10
10. Data Button.....	11
11. UX button.....	12
12. Behaviour button	13
13. User Button.....	14

1. Create your own Google Mail Account



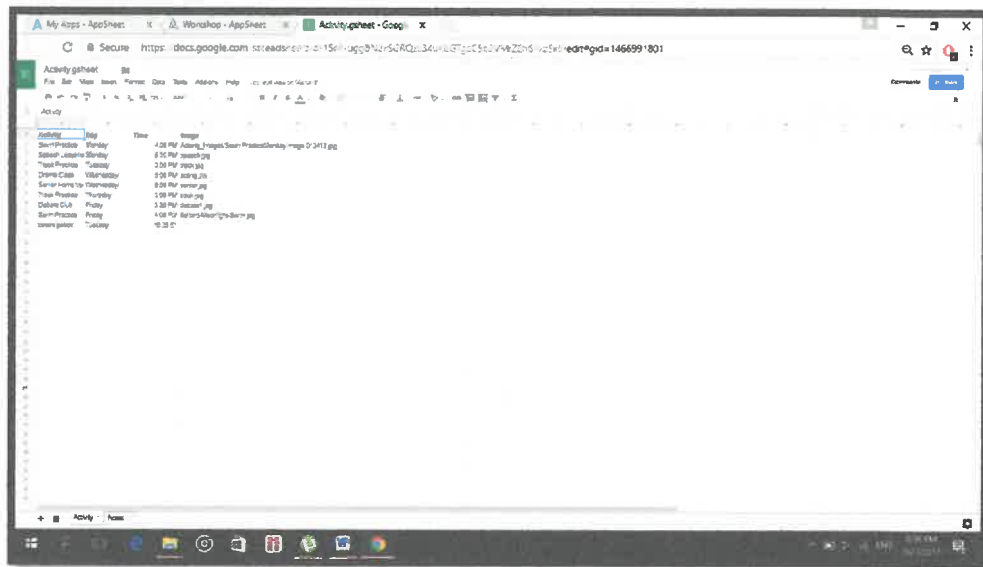
First thing that need to do by new user is create their owns Google mail account. The purpose of this G.mail account is to link the account with the Google drive.

2. Open your Google drive using the Google emails that already being sign in or sign up

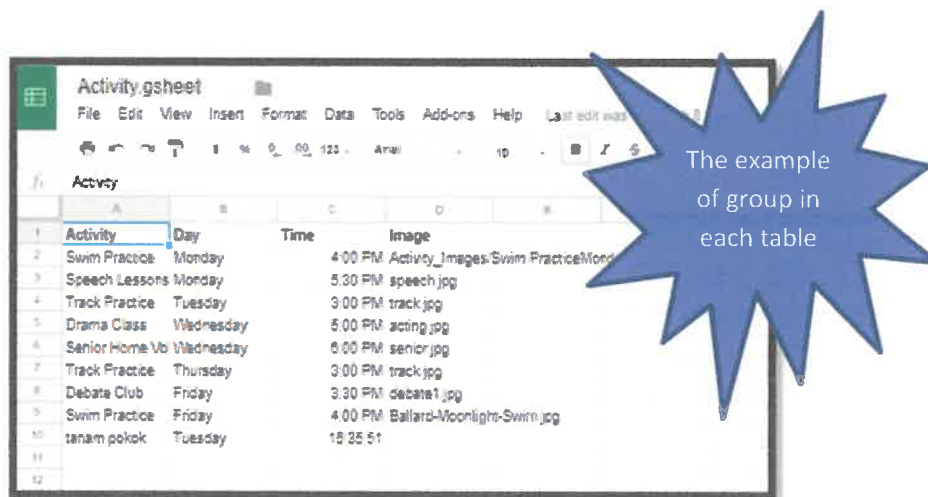


For this second steps, the user need to log in into the Google drive. The function of this Google drive is, any picture or document that wants to use for this appsheet software will be store into the Google drive. Other than that, by using this Google drive, the user can automatically link the Google drive with the Google spread sheet.

3. Key in the data into Google Spread Sheets

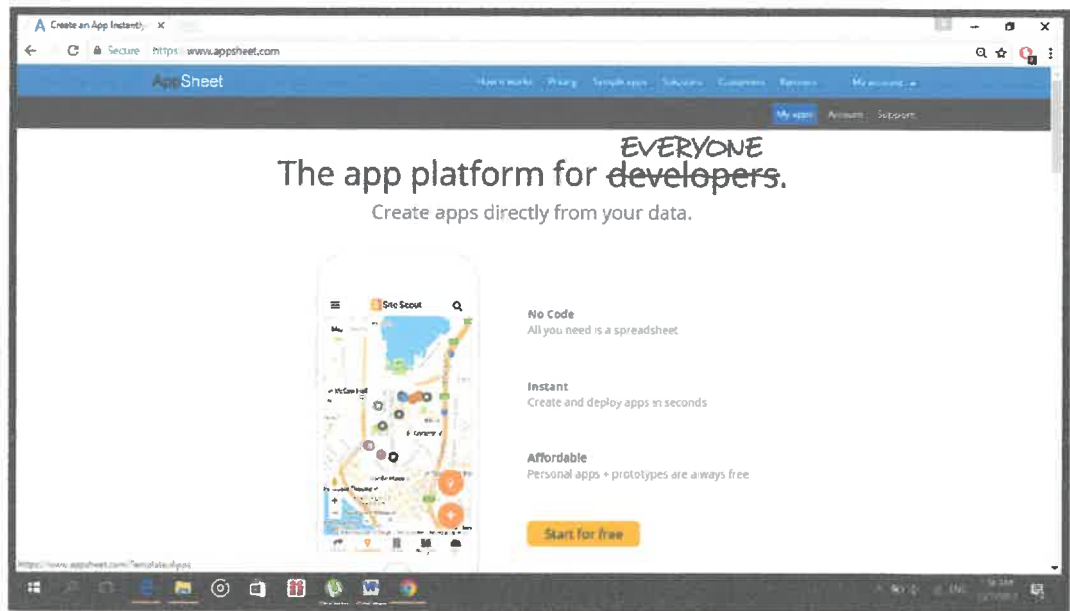


After log in into Google drive, user needs to click into the Google Spread Sheets. The important things about this part is, this Google Spread Sheets will be a platform or as a database to user data. It means it is a place where the user need to key in their data about the apps that will be created by user. Other than that, the user need to create a group for every data table that being created.

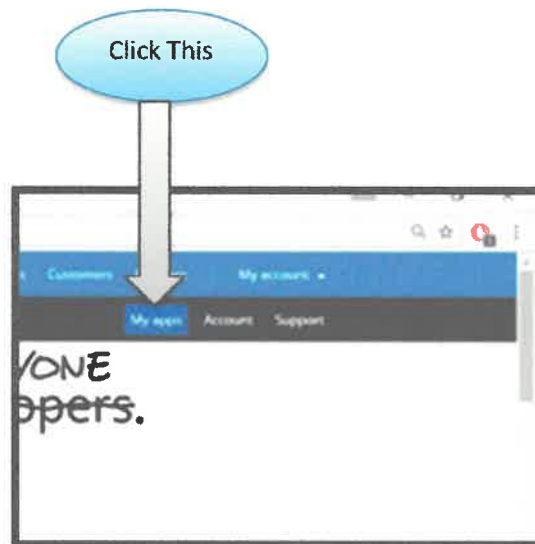


The purpose of this table group is to make the data easy being read by the appsheet when this data being transfer into the mobile apps. And the user needs to give a name for this spread sheet data to make the user easy to import the data into appsheet.

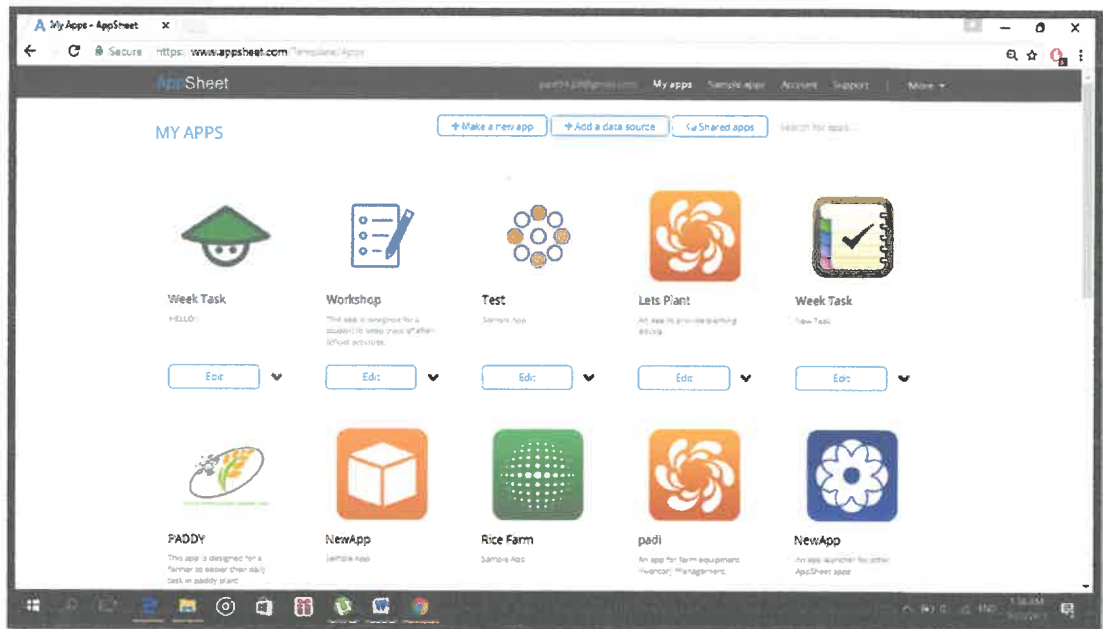
4. Go to www.appsheet.com



This fourth step is the step where the user finish key in the data into the Google Spread sheet. After the user get in into this page, the user need to click on the button of My apps.



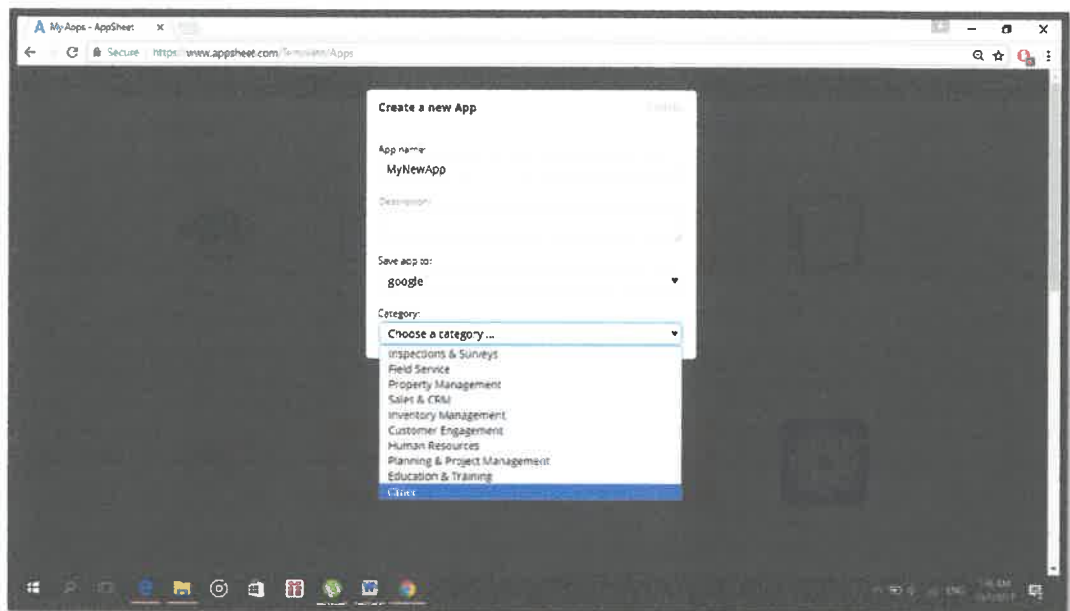
5. Click the button on Make new apps



After the user click on the button my apps, the appsheet will bring the user to the page that being show above. After that, the user needs to click the button of + Make new apps on the top left page.

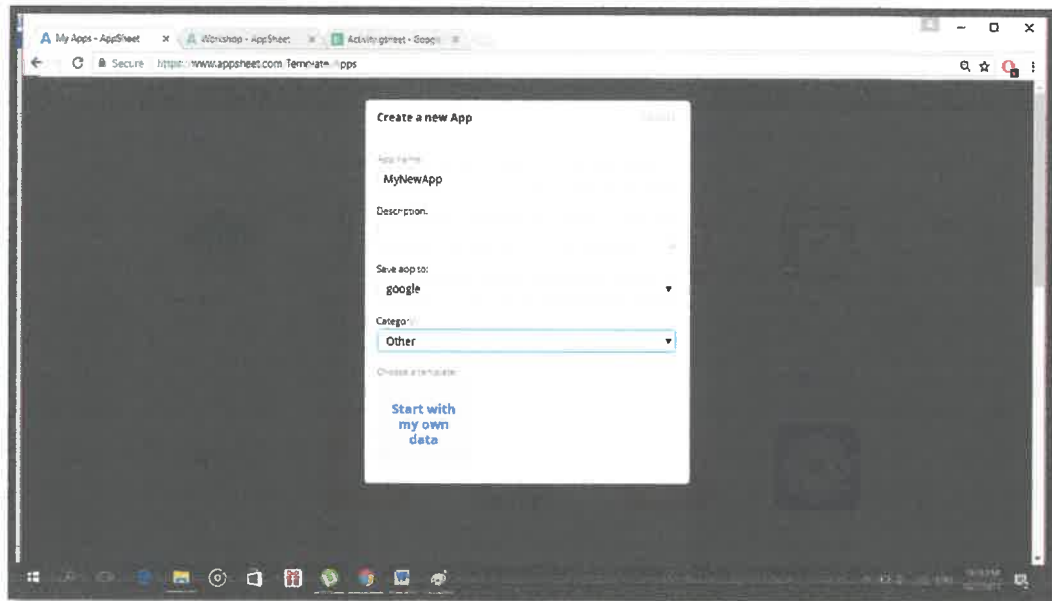


6. Create your own apps basic data

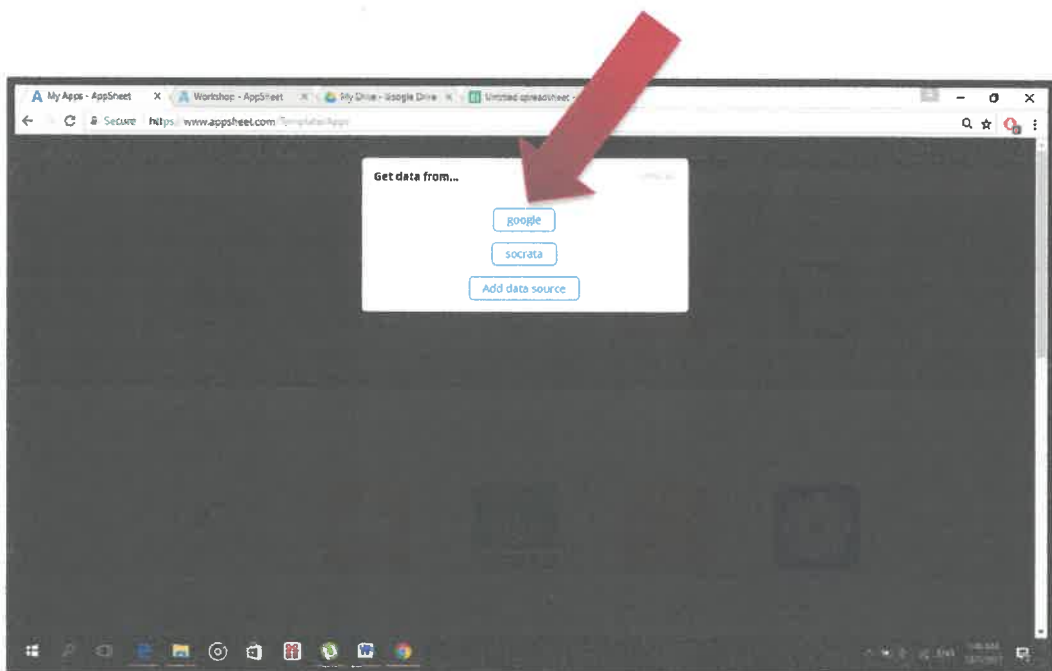


After the user click on the button of + Make new apps, the pop up page will appear like on the image above. At this time, user need to key in the basic data about their apps that is the name of the apps and category choose. There are several choice will be appear after the user click the button for choosing category. For use that wants to create their apps using their own mobile apps they can choose others, but to user that wants to use the pamphlet that being given they can choose the category that being given above the others category.

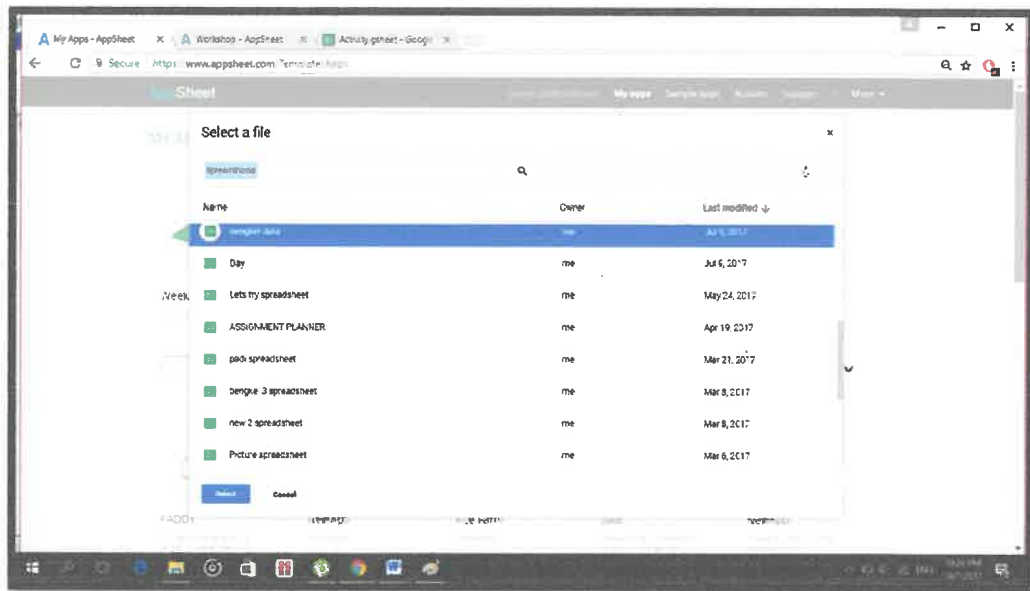
7. Click the Google button to import the data from Google spread sheets



After the user click on category of others, the pop up page will show the user the button to start with user own data. Then the user need to click on that button and then click the Google button like on the page below.

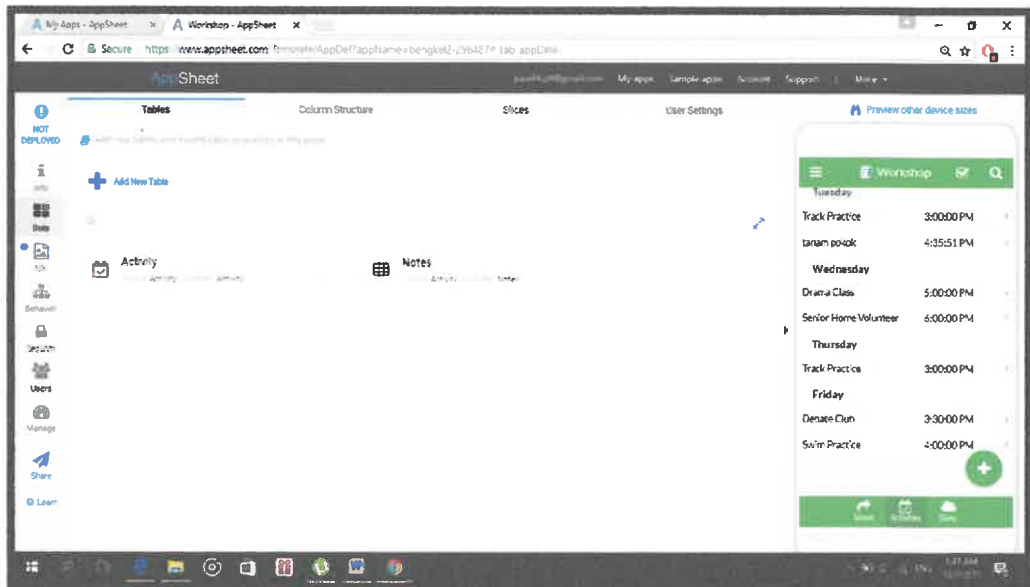


8. Choose the data from the Google spread sheets and import it into appsheet

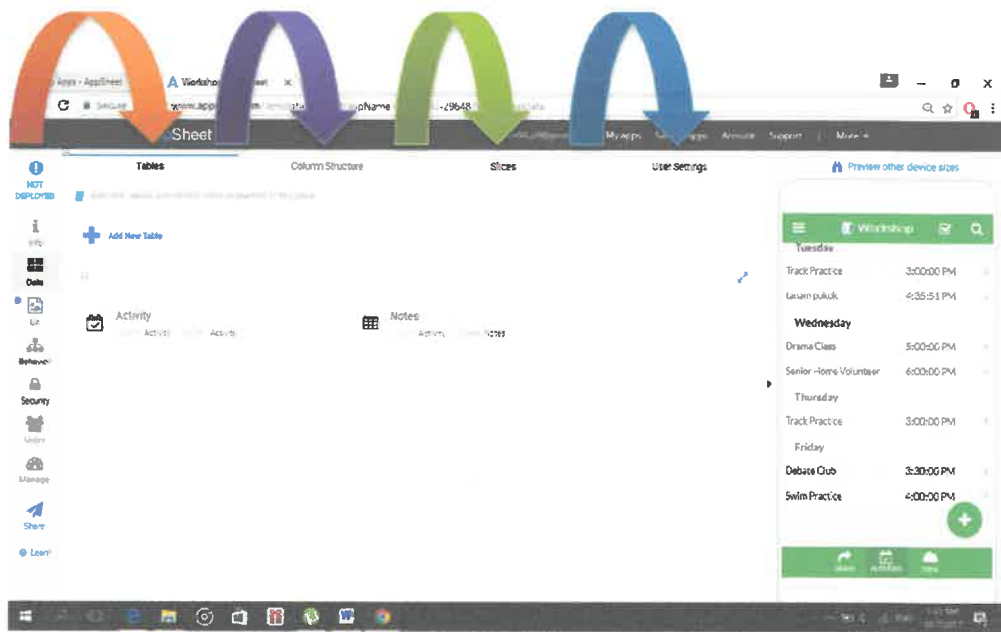


The user need to choose the data that being created by user using the Google spread sheet at the early of the process. Choose the data that being name in the Google spread sheet and then select the data.

9. The first of interface from appsheet will appear



10. Data Button



In the button of data there are four other functions that can be used by user to modify their apps based on their need. The function of each data being state below:

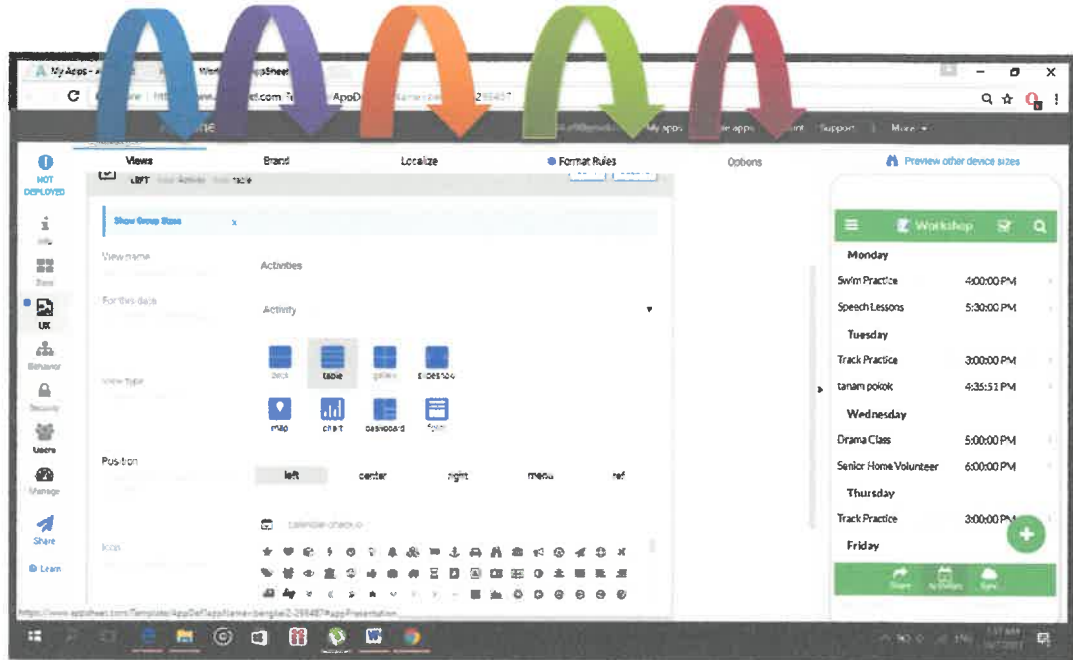
Table arrow- Table page is the main page that will show the total table that being import into the appsheet by the user. And each of the data can be click by user to make riview the criteria of the data.

Column Structure arrow- This page is the page where user can add or remove columns in a table, change the structure of the spread sheet and then regenerate the appropriate column structure.

Slice arrow- This page will allow the user to add new slices and modify slice properties in this pane. Slices allow the user to filter the rows in a table.

User setting arrow- User settings are options that each user of your app can set independently to control the behaviour of the app.

11. UX button



In the UX button, there are five small buttons that can be used by user to make their apps become more organize. In a simple word this UX button the user can decorate their apps interface based on creativity of the user.

View arrow- This view page will present your data to user. At this page, user can choose the criteria that suitable with their data and they also can choose to hide any table that they want.

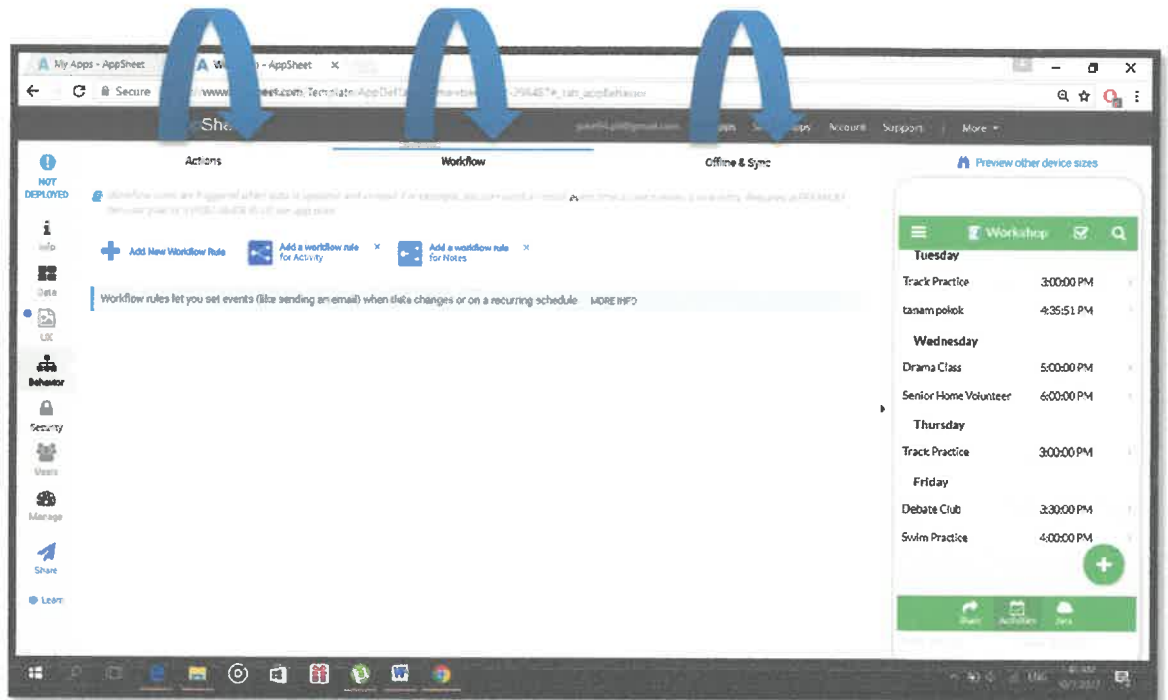
Brand arrow- This page will allow user to design their own apps based on their creativity. That means, this is the page where the user can change the colour of their apps, change logo and so on.

Localize arrow- Change the text shown in system buttons and notifications.

Formats Rules arrow- Define conditional formatting, that changes based on your data. It means the format rule can change the way the data look in your apps

Option arrow- Provide default settings to control the user-experience across the entire app. In this page the user can change the font style that being used in their apps and also can adjust the size of the font

12. Behaviour button



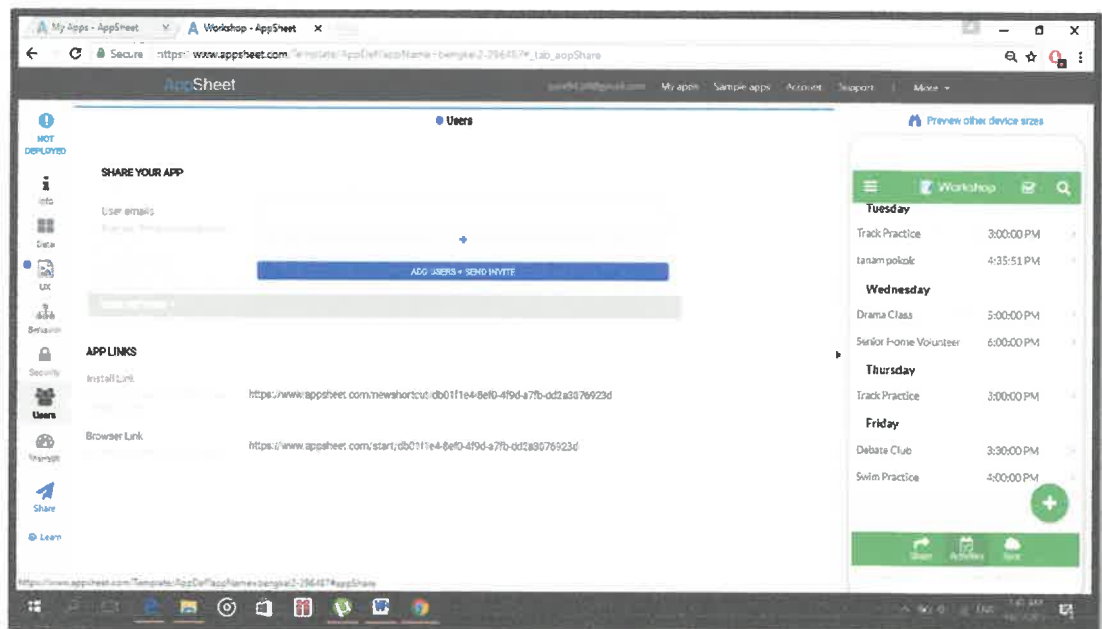
In the button behaviour, they are three small buttons that provide to user to explore more about this appsheet.

Action arrow- Actions are mini-tasks that can modify data in your app.

Workflow arrow- Workflow rules are triggered when data is updated and synced. For example, you can send an email every time a user creates a new entry.

Offline & sync button- Setup your app to work offline and control when changes in the app are synced with your data in the cloud.

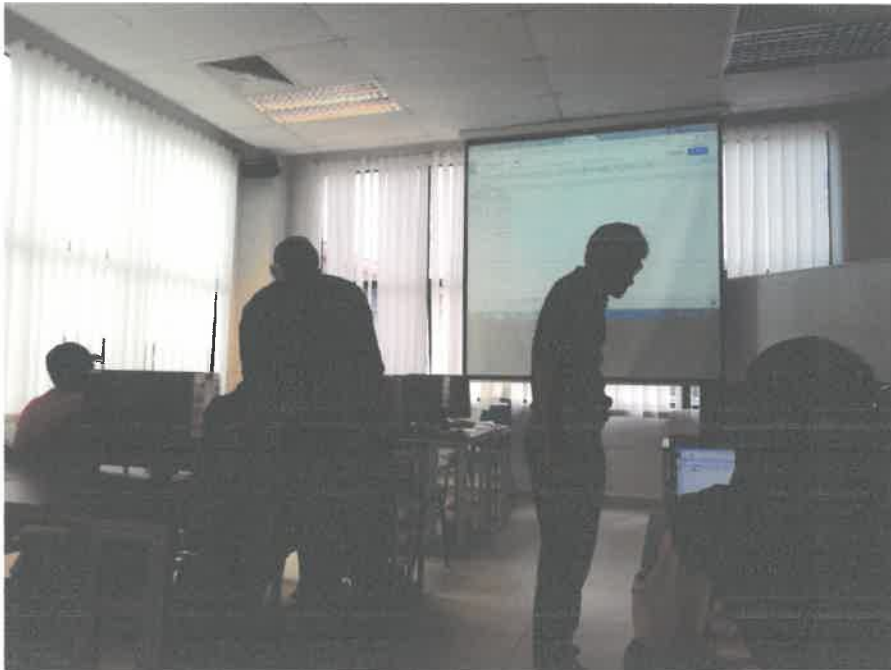
13. User Button



The page in user button allowed user to share the apps with others. It means you need to put the email address of the user you want to share and send it. But then you need to make sure that the receiver has installed the appsheet software in their mobile phone. Other than that, by using this user page, you also can send the apps to your own phone.

APENDIXES B :
APPSHEET / BLOGGER
/ WIX WORKSHOP





**APPENDIXES C : SMK
GEMANG / LIBRARY
OPEN DAY**





APPENDIXES D :

GOOGLE CLOUD

PLATFORM

1 day 2 pages.

1 page Text <40% of A4, Drawing>60% of A4

Secure | https://cloud.google.com/products/

Other Website Download Finance UMK Home - My First Proj Fresh Cordyceps see Rambo 678 HP comp

Google Cloud Platform

Why Google Products Solutions Launcher Pricing Customers Documentation

Products	Learn More	Engage
Compute	13/6/17 Tue 3pm Report done -	Free Trial Sign Up
Storage	14/6/17 Wed 3pm Report done -	Blog
Networking	15/6/17 Thu 3pm Report done -	Community
Big Data	18/6/17 Sun 3pm Report done -	Google+
Machine Learning	19/6/17 Mon 3pm Report done -	Twitter
Management Tools	20/6/17 Tue 3pm Report done -	LinkedIn
Developer Tools	21/6/17 Wed 3pm Report done -	Stack Overflow
Identity & Security	22/6/17 Thu 3pm Report done -	YouTube
System Status	25/6/17 Sun 3pm Report done -	Podcast
	Support	Newsletter Signup
	Careers	UX Research

1 day 2 pages.

1 page Text <40% of A4, Drawing>60% of A4

The screenshot shows the Microsoft Azure website interface. At the top, the browser address bar displays the URL <https://azure.microsoft.com/en-gb/services/automation-control/>. The page header includes the Microsoft Azure logo, a sales phone number (1-800-815-289), and links for 'MY ACCOUNT' and 'PORTFOLIO'. A navigation menu lists various sections: 'Why Azure?', 'Solutions', 'Products', 'Documentation', 'Pricing', 'Training', 'Partners', 'Blog', 'Resources', and 'Support'. The 'Products' menu is expanded, showing a list of categories: 'Compute', 'Networking', 'Storage', 'Web + Mobile', 'Containers', 'Databases', 'Data + Analytics', 'AI + Cognitive Services', 'Internet of Things', 'Enterprise Integration', 'Security + Identity', 'Developer Tools', 'Monitoring + Management', and 'Microsoft Azure Stack'. A white box highlights a list of reports under the 'Compute' category, with the following entries:

- 13/6/17 Tue 3pm Report done –
- 14/6/17 Wed 3pm Report done –
- 15/6/17 Thu 3pm Report done –
- 13/6/17 Sun 3pm Report done –
- 19/6/17 Mon 3pm Report done –
- 20/6/17 Tue 3pm Report done –
- 21/6/17 Wed 3pm Report done –
- 22/6/17 Thu 3pm Report done –
- 25/6/17 Sun 3pm Report done –
- 26/6/17 Mon 3pm Report done –
- 27/6/17 Tue 3pm Report done –
- 28/6/17 Wed 3pm Report done –

On the right side of the page, there is a promotional banner for 'Get credits that enable:' which lists benefits such as '4 Windows or Linux Virtual Machines' and '24 x 7 for a month'. Below this, there is a 'Learn more' link and a 3D cube icon.

1 day 2 pages.

1 page Text <40% of A4, Drawing >60% of A4

Date: _____

Alibaba Cloud _____

Amazon Web Services _____

Microsoft Azure _____

Google Cloud Platform compute _____

My understanding (Text <40%, Drawing >60%)

- google cloud Platform compute engine

VMS - Virtual Memory System

→ create a web-server

↳ create a virtual machine

- machine type / F1 micro
- Image

→ Container engine

also

→ VMS boot quickly

↳ come with

- Pre-Sistent disk storage
- deliver consistent performance.

- App engine

→ build modern web n mobile apps in open cloud platform

- cloud function.

↳ Using your own language / framework

↳ have complete infrastructure focus only on code.

→ support all language communities

↳ Java / Ruby / Python / PHP.

→ google stackdriver will monitor the performance of our apps.

If I have a small company, 1 thing I can use from THIS product

- build an app or web server that can help my company.

1 day 2 pages.

1 page Text <40% of A4, Drawing >60% of A4

Date: _____

Alibaba Cloud _____

Amazon Web Services _____

Microsoft Azure _____

Google Cloud Platform Storage _____

My understanding (Text <40%, Drawing >60%)

- Google Cloud Platform offer:
-> object storage -> managed MySQL -> globally-scalable NoSQL

- Google Cloud Storage

-> can access 3 different storage using single API

- high throughput streaming / batch data analysis / backup & disaster recovery.

~~Cloud SQL~~

-> fully managed database service that make it easy to

- set up / maintain / manage and administer your relational MySQL or PostgreSQL
- provide high performance, scalability & convenience.
- provides a database infrastructure for application running everywhere.

- Cloud Bigtable

-> provide a massively scalable NoSQL database

- suitable for low latency & high throughput workloads.
- integrate easily with popular big data tools like

* spark: lightning fast cluster computing tool

: can run application in hadoop cluster up to 10x faster in memory and 10x faster on disk.

- Cloud Spanner

-> high availability and global scale.

- Cloud Datastore

-> provide an elastic, highly available document oriented database as service

-> fully managed and no need for updates & manage the database solution

-> cloud database core with powerful engine

but on native the database core be access by mobile & workloads

If I have a small company, 1 thing I can use from THIS product

1 day 2 pages.

1 page Text <40% of A4, Drawing >60% of A4

Date: _____

Alibaba Cloud _____

Amazon Web Services _____

Microsoft Azure _____

Google Cloud Platform ^{responsible} _____

My understanding (Text <40%, Drawing >60%)

- Provide Google virtual private cloud (VPC) network,
↳ Can provision ^{resources} var google cloud platform ~~resources~~ resource.
↳ Connect them to each other & isolate them from one another.
↳ ^{isolate}

~ Worldwide Auto scaling & load balancing (Google cloud load balancing).

↳

~ highly available global DNS network. (Google cloud DNS).

↳ is a scalable, reliable & managed authoritative domain name system (DNS)

↳ Service is running on the same infrastructure as Google

↳ low latency; high availability and is cost-effective way to make your application & services available user.

↳ translate request domain name like www-google.com in IP address like 74.125.29.101

~ fns, high availability inter connect

↳ allows cloud platform customer to connect to Google.

↳ connection are offered by carrier interconnect service provider partner, ~~and may~~

~ Google cloud ~~CDN~~

If I have a small company, 1 thing I can use from THIS product

1 day 2 pages.

1 page Text <40% of A4, Drawing >60% of A4

Date: _____

- Alibaba Cloud _____
- Amazon Web Services _____
- Microsoft Azure _____
- Google Cloud Platform Big Data.

My understanding (Text <40%, Drawing >60%)

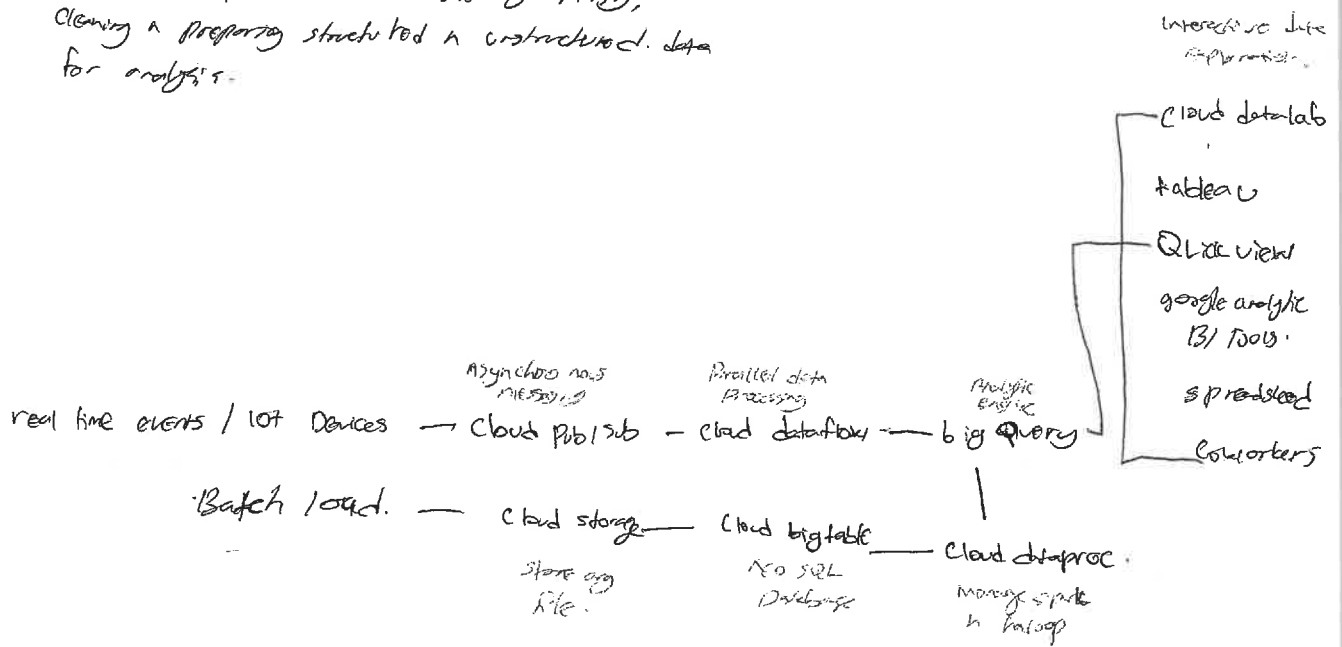
- using google cloud platform
 - u can focus on finding insights rather than managing your infrastructure
 - can consume cloud-native service with open source tool.

- google big query

- low cost data warehouse.
- is serverless / don't need a database administrator
- focus on analyzing data
- powerful big data analytic.

- intelligent data preparation

- google cloud dataprep.
- intelligent data services for visually exploring, cleaning & preparing structured & unstructured data for analysis.



If I have a small company, 1 thing I can use from THIS product

1 day 2 pages.

1 page Text <40% of A4, Drawing >60% of A4

Date: _____

Alibaba Cloud _____

Amazon Web Services _____

Microsoft Azure _____

Google Cloud Platform Machine Learning

My understanding (Text <40%, Drawing >60%)

— Google cloud Machine Learning engine.

→ easy to build more advance and large scale machine learning models

→ link with other Google cloud data platform such as Google cloud Storage, Google cloud dataflow and Google cloud data lab.

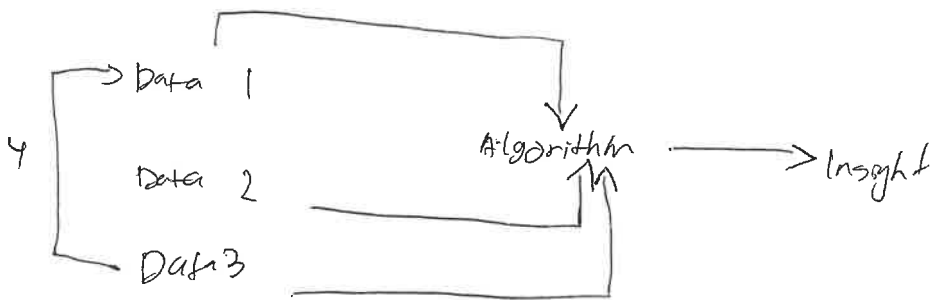
~~TensorFlow~~ — TensorFlow = software

- powerful, flexible, open source
- ML equivalent of machine code
- focusing on advancing the science

→ Cloud ML

→ requirement help the start for the system.

→ teach a computer to learn → what you want.



If I have a small company, 1 thing I can use from THIS product

1 day 2 pages.

1 page Text <40% of A4, Drawing >60% of A4

Date: _____

Alibaba Cloud _____

Amazon Web Services _____

Microsoft Azure _____

Google Cloud Platform Management tools

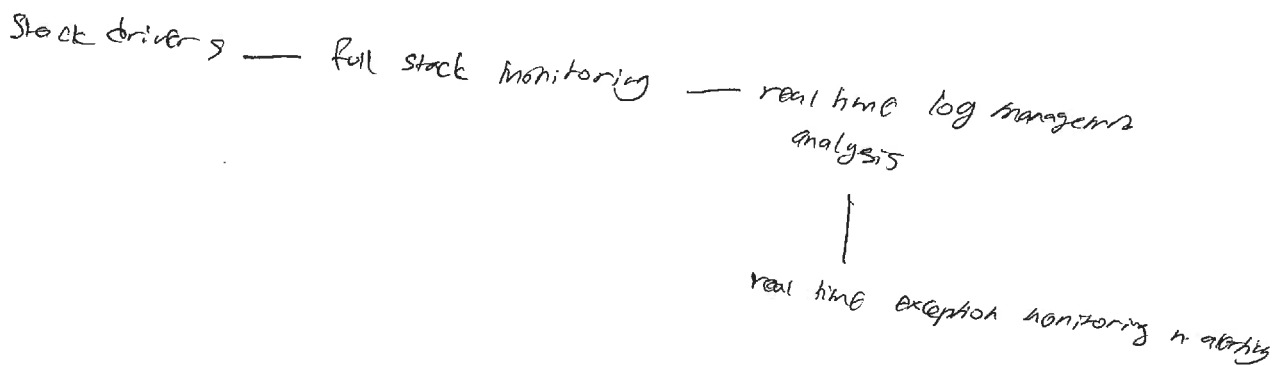
My understanding (Text <40%, Drawing >60%)

- google stack drivers

→ Powerful monitoring, logging, and diagnostic.

→ enable to find and fix issues faster.

→ stackdriver provides wide variety of metrics, dashboards tracing capabilities



If I have a small company, 1 thing I can use from THIS product

5. Maintenance of the corm

The corms were let to grow for 7 weeks and along the weeks the beds were watered evenly with 1 liter water once every 2 days and if it is not raining, it was watered every day.

Technology Evaluation

1. Growth performance

From the study, corm nursery technique has higher number of seedling produced compared to conventional. According to Namuddu *et al.*, 2013, conventional method has low number of seedling is because this method is very difficult to breed banana seedling. Corm nursery technique can produce more seedlings because the corm was sliced the apical dominance of the corm was repressed and this is consistent with finding of Dayarani *et al.*, 2013 about that this technique in which apical dominance is repressed to stimulate lateral bud development and increased suckering rate.

However, undeniably tissue culture technique produce more seedling than both of the corm nursery and conventional way of propagating banana planting material. But because of the cost of production in tissue culture is high, then it is not preferably chose by the small scale growers. That is why, in the corm nursery technique can produce more seedlings compare to conventional and having low cost of production compare to tissue culture technique. Besides that, Kasyoka *et al.*, 2010 studies showed that, conventional method of propagation is a slow process and quite often does not yield adequate suckers of the desired varieties, where the results of this experiment also described the process of conventional method in the same manners. Whereas, corm nursery technique has better performance and faster in process this is probably because of the propagation media.

2. Comparative Benefits

Table 1. Description of nursery technique used in terms of propagation period, cost per seedling and remarks.

Nursery Technique	Propagation Period	Cost Per Seedling (RM)	Remarks
	(Weeks)		
Tissue Culture	12	2.80	Specialized Lab, Costly
Novel Nursery Technique	7	1.50	Supplier Nursery
Conventional Technique	?	1.20	Quality Assurance
Corm Technique	5	1.00	Grower Nursery

Technology verification

1. Usefulness and impact

The developed technology is not only simple and low cost production but also providing the small scale growers with reliable quality of banana planting material which free from disease and fast growth. Thus, the technique is just suitable to be introduced, especially to the third world countries as a technique which could help in the poverty eradication programs. For that reason, this project was funded by the Malaysia government under the Knowledge Transfer Program (KTP) for poverty eradication program for rural population with funding of RM 168,000.00. Moreover, a hands on training was carried out to help the small scale growers to introduce and improve the skill of practicing the corm nursery technique.

2. Accreditation

During the Malaysia Technology Expo (MTE) 2014, this technique was evaluated and was awarded silver medal of innovation award and international design award. For the next exhibition of International Technology Exhibition (I-TEX) 2014 on May, which held at Kuala Lumpur Convention Centre, this technique was awarded gold medal for the innovation award.

Conclusion

With this simple technique of corm nursery technique, it is a low cost technique which could help the small scale grower to produce their own banana planting material for banana cultivation without worrying to buy expensive and good quality banana seedling. Besides that, this

technique for production of healthy banana seedlings. African Crop Science Conference Proceedings, Vol. 10: 469 – 472

Prasad M. 1997. Physical, chemical and biological properties of coir dust. ACTA HORT. 450: 21-29

Robin Mittenenthal. (2010) Using plastic mulch in the garden. www.eaglechiclightsgardens.org/tips/plastic_mulch_handout.pdf. Accessed on 14 July 2014. Retrieved on 14 July 2014

Robinson, J.C. and Sawco, V.G. (2010). Bananas and plantains 2nd Edition, CABI International, UK

Saha Roy, O., Pranay, B., and Kumar S.G (2010). Micropropagation and Field Performance of 'Malbhog' (*Musa paradisiaca*, AAB group): A popular Banana Cultivar with High Keeping Quality. OH North East India. Tree and Forestry Science and Technology, Global Science Book.

technique is the on farm planting material production system which it help the small scale growers in terms of readily available and easily accessible of the banana seedlings. Moreover, they create their own enterprise by selling the banana seedling apart from banana cultivation. Overall, this technique can implemented to help in poverty eradication program.

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Low Cost Nursery Technology for Mass Propagation of Banana Seedling by Small Scale Growers

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Abstract

Small scale growers of banana can minimize their operation cost of cultivating banana by producing their own banana seedling in their own farm. Without worrying about inconsistent supply from private nurseries and buying expensive quality banana seedling from tissue culture supplies. The small scale grower can produce their own quality banana seedling by using low cost nursery technology. Corm nursery technique (CormTech) does not require specific lab and it can be established on site at farm. By establishing low cost nursery technology in their own farm, the growers can have readily available and easily accessible of banana seedling. A part of it, reusing own nursery material can help to reduce the operating cost throughout every cycles of nursery. Besides that, by reusing nursery material we are achieving green technology. Thus, UMK undertakes R&D on nursery technology and management focusing on low cost nursery technology to help the small scale growers of banana to reduce their operation cost to plant banana. A Knowledge Transfer Program (KTP) research grant has been awarded to UMK to help small scale growers establishing the low cost nursery technology for expansion of banana planting in the locality (Jeli).

Key words: conventional methods, tissue culture, planting material, banana seedling, banana corm, mass propagation, nursery technique, low-cost technique, green technology

Introduction

Banana is the fourth most important fruit crop in the world (Saha Roy, O *et al.*, 2010) which grown in 132 countries worldwide, more than any other fruit crop ever grow and it is believed to be originated from the Southeast Asia and is well known among tropical countries around the world through the trading activities (Kamaludin *et al.*, 2012). Banana is an important crop

technique for mass propagation banana seedlings was innovated to overcome the above problems.

Corm nursery technique is a macro propagation method of banana which will not only help the smallholder to cultivate the banana but they also can generate their income from producing banana seedling. Corm nursery technique of banana can provide the smallholder with both availability and accessibility of banana seedling. This technique can be installed in their farm and by performing this technique they can mass propagate banana seedling in faster period. This macro propagation technology can use whole suckers, large pieces of parent corms or sword suckers to produce planting material (Dayarani *et al.*, 2013). In Corm nursery technique, the material used is banana corm. This technique consists of several parts; corm preparation (corm-prep), corm seedling in polybag (corm-poly) and stacking of corm-poly (corm-stad). In each technology, selection is made to grade a better quality of banana planting material. In conventional propagation of banana, whole one sucker is used while giving high growth rate but produce less. In corm nursery technique, a whole one sucker's corm is slice to produce more section. Thus, in this experiment is to evaluate whether corm nursery technique can mass propagate or not based on seedling emergence percentage and number of seedling produced, and to identify growth performance of new seedling from corm nursery technique based on plant height.

Technology Development

1. Selection of corm

The selection of banana corms started from the selection of farm, where banana corms were collected from the non-infected farm. Banana farms are normally infected by diseases such as Black and Yellow Sigatoka (Castellan *et al.*, 2012) and Panama disease caused by *Fusarium oxysporum* (Borges *et al.*, 2004), where these diseases are very dangerous and need to be avoided in order to produce high quality of banana planting materials. The symptoms of the diseases are clearly can be seen on the tree. Thus, healthy banana corms were selected from healthy banana trees or suckers without the symptoms of those diseases.

cultivated in Malaysia. However, there are constraints in the cultivation of banana which had caused the reduction of banana production. The constraints are because of the diseases that caused damages to the banana tree. Generally, the diseases are transmitted from infected banana tree to the banana seedling such as banana suckers and it also can be transferred via pest. Besides that, naturally regenerated suckers often harbored pest and diseases (Njau *et al.*, 2011). Thus, a solution to the problem is that we need to produce free disease planting material or seedling. Currently, tissue culture is a well-known technique for mass propagation of banana free disease planting material. Tissue culture technique also known as micro propagation technique which is used to propagate free disease planting materials of banana (Kamaludin *et al.*, 2012) and also as a tool to mass propagate the banana planting materials in order to give consistent supply of banana planting materials. However, tissue culture technique required expensive instruments and required sophisticated technique, skill and care to handle (Dayarani *et al.*, 2013). In Malaysia, cultivators of banana are mainly from smallholder. Smallholder always cultivate banana in small scale. Normally, they will get the banana seedling either from tissue culture seedling which is sometime expensive and depends on accessibility, because banana seedlings from tissue culture are fragile and susceptible to scorching under prolonged exposure to direct sunlight during the transportation and handling. Due to the requirement in the propagating banana planting material through tissue culture, the small scale growers need to spend a lot of money for the lab establishment and attending the training for the tissue culture practices. Thus, the farmers required affordable and easily accessible banana planting materials.

Because there are no formal standards to regulate banana planting material (Macharia *et al.*, 2010), the farmers use the conventional method to produce banana planting material using suckers as an alternative to reduce the cost of production rather than buying tissue culture banana seedlings. However, these suckers are prone to pest and disease attack although it is easily accessible. In conventional propagation there are two types of banana sucker being used; sword sucker and water sucker. Sword suckers are recommended because it has better output yield (Robinson and Sauco, 2010). However, water sucker is less suitable to be used as planting material because of its low quality. Thus, a simple and cheaper technique is needed to produce banana seedling that have equivalent quality to tissue culture planting material. Corm nursery

2. Cleaning and sterilization of the corm

The selected banana corms were sterilized in order to kill microorganism, insect, and nematode. The corms were soaked into sodium hypochlorite (Chikezie, 2012) with 50% concentration for 15 minutes and were washed with plain water. After the sterilization process, the treated corms were exposed to the sunlight for drying process for 1 day.

3. Corm nursery technique

a. Corm preparation (corm-prep)

Again the treated corms were graded according to size and then it was sliced horizontally from side of the corm. The treated corms then were layout on the bed with the mixture of coco peat and compost with the ratio of 3:1. Coco peat has good physical properties, high total pore space, high water content, low shrinkage, low bulk density and slow biodegradation (Evans *et al.*, 1996; Prasad, 1997; Jadwiga, 2008). The bed with the established treated corms was then covered with polyethylene tarp (PE) which it create the dark environment and retain the humidity and heat of the bed for early bud induction (Robin, 2010).

b. Corm seedling in polybag (corm-poly)

Again banana seedling that grows from banana corm was selected to consider the uniformity. Banana seedlings then were transferred into 9" x 6" inches polybag at the 21 days after layout. The same media was used, the mixture of coco peat and compost were used.

c. Stacking of banana seedling on cabinet (corm-stad)

After transferring seedlings into polybag, the seedlings were then prepared into stacking cabinet until it matured and ready to sell and deliver

4. Propagation banana seedling through conventional method

The sword sucker and water sucker were excised from the mother plant and the pseudostem was cut left out only corm of the suckers. The materials were then undergoing sanitization process to clean from soil and pest. Treated corm of sword and water sucker were then layout on the bed same as corm nursery technique. But in the conventional technique of propagating banana, soil is used as a media