

2019

ACADEMIC INTELLECTUAL INTERNATIONAL INVENTION,

INNOVATION & DESIGN BOOK

Published by: Student Affairs Department,

Universiti Teknologi MARA Kedah,

P.O. Box 187, 08400 Merbok, Kedah, Malaysia.

Patron : Dr. Wan Irham Ishak

Dr. Abd Latif Abdul Rahman

Project Manager : Yazwani Mohd Yazid

Design Director : Mohd Hamidi Adha Mohd Amin

Fadila Mohd Yusof

Editorial Director : Mohd Hamidi Adha Mohd Amin

Mas Aida Abd Rahim

Copyright © 2019 Student Affairs Department, Universiti Teknologi MARA Kedah. No part of this publication may be reproduced, stored in retrieval system, or transmitted in any form or by means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

ISBN: 978-967-0314-71-6

Printed by: Perpustakaan Sultan Badlishah,

Universiti Teknologi MARA Kedah,

P.O Box 187, 08400 Merbok, Kedah, Malaysia.

89.	Dadu BiMate TJI: AN INNOVATION OF BOARD GAME FOR FUN AND	91
	EFFECTIVE NUMBER, BASIC OPERATIONS AND BASIC MEASUREMENT	
	FACTS LEARNING IN PRIMARY MATHEMATICS	
90.	ANICARE	92
91.	PEMPEK BO SANG (FISHCAKE MADE OF BANANA'S FLORAL STEM)	93
92.	EXAMINATION MANAGEMENT SYSTEM (EXAMS)	94
93.	KLEAN	95
94.	MUSON (MUSHROOM NOODLE) INNOVATION OF HEALTHY FOOD	96
	PRODUCTS FROM OYSTER MUSHROOMS WITH NEW INNOVATION AS A	
	POTENTIAL BUSINESS OPPORTUNITY IN PUBLIC SECURITY	
95.	TENAGA GUNA SEMULA (TEGUSE)	97
96.	ANALISIS PUNCA MASALAH PEMBELAJARAN OPERASI TOLAK	98
	DALAM LINGKUNGAN 10 DAN KEUPAYAAN BITOBI MATCH-UP	
	DALAM MENGATASI MASALAH: KAJIAN RINTIS	
97.	IMPROVING STUDENTS AWARD SELECTION PROCESS THROUGH THE	99
	DEVELOPMENT OF AKSIS (ANUGERAH KECEMERLANGAN SISWA) WEB	
	INFORMATION SYSTEM	
98.	IMPROVING RECORDS' MANAGEMENT PRACTICES VIA	100
	ATTENDANCE MONITORING SYSTEM (AMOS)	
99.	DELAT ADLER: THE PORTABLE AND VERSATILE ELECTRCITY GENERATOR.	101
100.	DISASTER E-DRONE PREVENT INCREASING OF VICTIM ENGLISH!	102
101.	SPEAK UP SYSTEM	103
102.	H-BALM: HARUMANIS-BASED RELIEVING PRODUCT	104
103.	H-CUBE: INNOVATIVE HARUMANIS PERLIS PRODUCT	105
104.	DARE TO INVEST: CREATIVE MIND AND INNOVATIVE IDEA	106
105.	POLYVALENT CARREL	107
106.	Ezi4BANNER 2.0	108
107.	RANGGU "THE NATURAL COLOUR"	109
108.	SMART EMERGENCY DRONE FOR MANAGEMENT OF DISASTER	110
109.	SMARTOVATION YUZA WITH LONG DEPENDABLE WIRES	111
110.	THE CONVERSION OF THERMOELECTRIC ENERGY INTO ELECTRICAL	112
	ENERGY IN APPLICATION OF DEREM CHARGER	
111.	TEH HARUMANIS PERLIS	113
112.	CAR CARBON MONOXIDE DETECTOR (CARMOD)	114
113.	RECYCLE BIN: WASTE BUSINESS PLATFORM TO IMPROVE	115
	SCAVENGER'S CHILDREN EDUCATION BASED ON MOBILE APPLICATION	
114.	SMART WUDHUK	116
115.	CAPTION (CANTILEVER PIEZOELECTRIC ENERGY HARVESTER	117
	WITH ENERGY BANK SYSTEM FOR FISHERMAN) AS AN ALTERNATIVE	
	TECHNOLOGY INNOVATION TO OPTIMIZE MARITIME ENERGY RESOURCES	
116.	AUTO WATER RECLOSE	118
117.	WIRELESS AIR POLLUTION DETECTOR (MAGIC NOZZ)	119
118.	E-CAMFINDER LEARNING APPLICATION	120
119.	ROTARY GRILL-gen2	121
120.	GARBARGAIN: A SOLUTION FOR PRA-PROSPEROUS COMMUNITIES	122
	BY EXCHANGED GARBAGE TO GET THE SUITABLE LEFTOVER FOOD	



COLLEGE ACTIVITY ATTENDANCE REGISTRATION & SCRUTINIZATION SYSTEM USING BARCODE SCANNER (COLLAARS)

Muhammad Nabil Fikri Jamaluddin

Members:

Mohd Hairul Nazreen bin Jamil, Shukor Sanim bin Mohd Fauzi, Ray Adderley JM. Gining & Nur Dini binti Hashim

Bahagian Hal Ehwal Pelajar Universiti Teknologi MARA 02600, Arau, Perlis

Students' attendance in all academic institutions is very important and cannot be overlooked because all institutions have certain criteria for their student's attendance in class, college activities, and examinations. Hence, the lecturers in most academic institutions are concerned with the students' inconsistent attendance. The manual method of taking attendance is not effective because there are several challenges to that kind of method. The data collected through the conventional method is difficult to manage; time consuming to be scrutinized; and it causes the wastage of human and material resources. Therefore, the aim of this project is to develop a web-based application for handling college activity attendance registration and scrutinization system for college application by using barcode scanner. The special criteria is the web-based application will use the barcode scanner to scan the barcode on students' matric card in order to retrieve the data. By using the barcode scanner, it can help management to reduce the waste of sources and also help to reduce the need for manual labor to do manual sequential examination for each of student's data. In short, this project is conducted to find the feasible solution for the related issues by implementing the web-based and barcode technology for the research and development purpose. Also, the prototype enables the management to facilitate in handling the college application and can keep on track the attendance of student's activity from time to time.







