

Authentic Internship Journal Assessment of Industrial Training Application

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Abstract—Authentic internship journal assessment of industrial training program application is a web-based system for students, the industrial training coordinator, the academic supervisor and the industry supervisor. It was created due to the limitations and problems occurred from conventional methods. In paralleled with the change of internet technology the application is developed to manage the industrial training process. The application will become a solution to improve the current process of managing and monitoring the industrial training which were previously being done manually.

Keywords—Authentic internship journal assessment, industrial training program, logbook, student report

I. INTRODUCTION

Industrial training refers to the placement of students at selected organizations in their respective field of study. Usually, it involves several parties such as the students, the industrial training coordinator, the faculty supervisor and the industry supervisor. However, most activities are still performed manually including student's placement, obtaining industrial training application letter and update logbook. In addition, integration among all parties is still lacking.

Most of the time, before students go for industrial training, lecturers need to complete the registration manually for students. The preparation of letter to selected organization, offer letter from organization to accept students from the faculty and students must inform the faculty their attendance at the organization are all traditional process and takes time to be settled. Many problems arise since all processes are still been done manually, such as data missing

A logbook is an important document which is a permanent record of students' progress throughout training session. A logbook is a way to record and keep track of events in your classroom. Logbooks are important classroom management tools that can be used in a variety of ways such as recording tardy students entering the classroom, communication with students' parents, and student-teacher conferences. Some logbooks may be used by the students, whereas others are for use by the teacher only. Traditional assessment which involves multiple-choices tests, fill-in-the-blanks and essay writing may not be suitable with evaluating the student's performances in industrial training program. The training component that need to be assessed include daily logbook activity report, the technical report, oral presentation and the performance skills [3].

This objective of this article is:

1. To develop a web-based application for managing industrial training process
2. To obtain live reports.

Nowadays, computerized management system developments are expanding over the past years and most of these systems are increasingly replacing the manual system. In order to develop good and effective system, developers should understand and know what users actually want from their system. In order to develop good and effective system, developers should understand and know what users want from their system. Developers should try and error in developing system especially in the process of planning, analysis and designing. Errors can be fixed if it is still at early stage. If the errors cannot be detected at early stage, it will drag the system down. Reference [2] said –one of the major concerns in developing an online system is to enhance user's accessibility to relevant information by providing

users with useful relationships or navigations. Based on [4], navigation represents the action of jumping from one page through another hyperlink.

II. MATERIALS AND METHODS

Authentic Internship Journal Assessment is designed and developed specialized for Faculty of Information Management, UiTM Machang, Kelantan Branch. The development of Authentic Internship Journal Assessment is for students who are enrolling Industrial Training (IMC690) subjects. It involves several parties such as the students, the industrial training coordinator, the faculty supervisor and the industry supervisor. To ensure the project run in accordance to the date that has been assigned, project timeline or Gantt chart was used to ensure all the task was completed as following the deadlines. Moreover, project's timeframe was planned properly in order to overcome overdue of the project planning. Project planning is referring to assessing schedule feasibility in which it is related to project duration. Project planning helped in determining all potential time frames and completion date schedules can be met and that meeting these dates will be sufficient for dealing with the needs of the organization. Gantt chart was used in order to estimate the time frame of Authentic Internship Journal Assessment development. The cost and budget involved in Data Flow Diagram (DFD) was calculated. System development life cycle (SDLC) was used to develop Authentic Internship Journal Assessment. SDLC is very important to ensure that during development and the end of the system will produce the actual deliverables or good result. By following the phases step by step, it can provide the best output from the project. The five phases of SDLC are planning, analysis, design, implementation and maintenance.

A. Planning

In planning phase, preliminary study or known as feasibility study was conducted to collect information needed for system modules. Then three team created consist of project manager, programmers and system analyst. All resources required was identified and the timeline set was followed to avoid overdue of time. There are few things to be considered in feasibility study such as project feasibility, technical feasibility, economic feasibility and schedule feasibility. Firstly, for project feasibility, during the Authentic Internship Journal Assessment development, the team need to ensure no problems are encountered current and future. Secondly, for technical feasibility, what are the software and hardware needed for developing Authentic Internship Journal Assessment is identified. Thirdly, for economic feasibility, financial benefits and costs associated with Authentic Internship Journal Assessment development was identified. Fourthly, for schedule feasibility, setting the timelines for each phase to develop the system before the team met the deadlines.

B. Analysis

In analysis phase, interview was used in order to gain more information about industrial training and search information on the internet and find similar systems to Authentic Internship Journal Assessment. The features for the Authentic Internship Journal Assessment were created according to the flow of industrial training process and also referring to related documents that contain information about industrial training.

C. Design

Authentic Internship Journal Assessment has multifunction that focuses on various users. The users are LI coordinator, students, faculty supervisor and industry supervisor. A diagram for a structure of data was created, in order to fully meet all users' needs to our system. The design is accurately designed with actual structure by identifying using context diagram, data flow diagram, and entity relationship diagram. The data structure design used in developing the system easily by following the structure, arranged it systematically and enabled the team to develop the system smoothly without any problem. Besides, in developing the Authentic Internship Journal Assessment, the most popular and familiar use computer languages in used to write web pages. It is the combination of Hypertext Mark-up Language (HTML) with hypertext pre-processor or the popular name is PHP language. For database, WAMP software that contains MYSQL was used as a platform of the database that keeps the data, to open MYSQL it uses phpMyAdmin and stores the data insert by users.

D. Implementation

Implementation phase is the most expensive and time-consuming phase of the entire life cycle. The work that are completed during this phase are coding, installation, testing, documentation and training. Coding is a process by which the physical design specifications are created by analysis team and the programming team turned it into programming working code. After Authentic Internship Journal Assessment is completely done, testing process or user acceptance test is conducted in UiTM Machang, Kelantan Branch. Few samples were taken from a student, Faculty of Information Management course coordinator and the industrial training coordinator. Comment from sample regarding Authentic Internship Journal Assessment was recorded for improvement. For installation, it is the process of replacing the manual system to the new system, user documentation or user's manual were created to assist users to adapt to Authentic Internship Journal Assessment. It is provided for each user of the system. User documentation or user manual is provided to give assistance to the users so that they know what they should do once they log into the system. For training, we conducted training for all users in UiTM Machang, Kelantan Branch, specifically for Faculty of Information Management. The training process will be conducted for five days. During training process, users was exposed on how to use the system.

E. Maintenance

In maintenance phase, any flaw based on comments given by users was used to correct the Authentic Internship Journal Assessment during implementation phase. Improvements based on minimum bugs and errors from implementation phase. During maintenance phase, debugging and fix errors was performed. Initially Authentic Internship Journal Assessment were using 5.7.31 the but webhost server support PHP version 5.7.30. Therefore, another initiative was done which is to debug the code. Other problem occurred where the interface shown in Authentic Internship Journal Assessment but images cannot be loaded. Therefore, the team fix the errors and manage to upload it back. During testing phase, user fails to update their profile picture because the file size is too big. Alteration on the coding was done so that user can upload files with larger size. Regular backup will be conducted y so that all record in Authentic Internship Journal Assessment is not lost

III. RESULTS AND FINDINGS

Analysis phase is essential to identify system requirements and gather as many information as possible from the client. The client share their expectations of IMS and they had explained who are the user and how they will make use of IMS. As a team, there is a need to understand the needs of client because each one of information given is critical to develop IMS as requested by the client. After they provided the requirements, analysis phase were began in order to avoid problems with system functionality.

A. Analyzed Existing System

Faculty of Information Management in UiTM Machang, Kelantan Branch still manage their activities manually. Students communicate with the organization by phone call, e-mail and sometimes they have to post letter to the organization to request placement for industrial training. Students also have to find for the organization by themselves. Using IMS, industrial training coordinator registers the lists of organizations for students. So, students do not have to worry about the placement. Table I shows the comparison of manual system applied by Faculty of Information Management and Fig. 1 shows computerized system after IMS has been implemented.

B. System Developed Discussion

IMS help students to find qualified organizations for industrial training. The industrial training coordinator will register faculty supervisor, industry supervisor, approve students' application of industrial training placement in order to obtain the auto-generated industrial training application letter. Once students are registered into IMS, they can apply for organizations they want. Then, industrial training coordinator will approve or reject their application first because to find out whether there is any vacancy left. Industrial training coordinator will assign industry supervisor and faculty supervisor to students. During industrial training, students will update their log book. From the log book, remarks will be given by the industry supervisor and faculty

supervisor. Remark is like a brief comment of their daily activities. Students are also required to report their special project.

TABLE I. COMPARISON BETWEEN EXISTING SYSTEM

Module	Industrial Training Management System – UiTM Perak	Internship Management System – UiTM Melaka	Internship Management System – UiTM Kelantan
Online System	YES	YES	YES
Industrial Training Place Application	YES	YES	YES
Auto-generated industrial training application letter	NO	NO	YES
Report special project	NO	YES	YES
Daily activity	YES	NO	YES
Upload report	NO	NO	NO
Assessment	NO	NO	NO

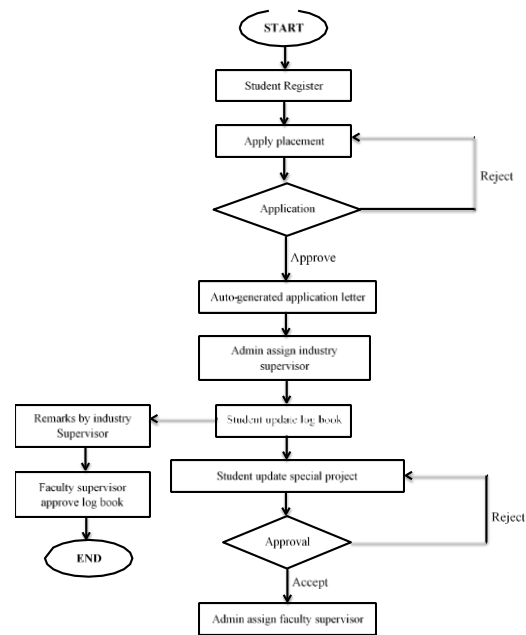


Fig. 1. Computerized System

C. Illustration of Diagram



Fig. 1. IMS Homepage Interface

IV CONCLUSION

Authentic assessment intends to determine how well a student can use knowledge. The log-book report is produced to analyze the overall performance, measures the assessment and determines the effectiveness of the industrial training for further improvements. Authentic internship journal assessment run virtually online and can be adapted to suit any preferences of an organization or faculty. It also be able to generate data which can be customize by administrator. The product may apply to other faculty which in need to manage internship.

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