PROMOTING RELIABILITY AND SECURITY OF THE OJT STUDENT RECORDS FOR THE COLLEGE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY THROUGH THE DEVELOPMENT OF ONLINE MANAGEMENT SYSTEM WITH SMS NOTIFICATION

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ABSTRACT

The main purpose of this study is to design and develop an Online Management System for the College of Information & Communications Technology OJT Office with SMS Notification.

The On-the-Job-Training (OJT) Office in the College of Information & Communications Technology at Bulacan State University manually process and keep the records of every student who are taking up their OJTs. Compiling student documents needs a lot of work and greater space, and maintains them organized and safe. Web-based Management System with SMS Notification gives a solution in managing time, improve working processes, design precise monitoring program, and capability to store a huge data that could generate different reports accurately. This web application features expandability and flexibility by making standard procedures for database back-up and archiving of records and transactions. The website lets every student create an account and access all its features such as announcements, downloadable forms, schedule of visits and forum discussions. Submission of requirements can upload to the website anytime. Information dissemination like important announcements and events could send to the students via Short Message Service (SMS) notification.

KEY WORDS: OJT Student Record, Management System, SMS Notification.

INTRODUCTION

Online file management system describes different fundamental methods for naming, storing and handling files. Almost all forms that the student needs to submit are required of signatures from their parents, employers, and should be notarized by a lawyer. As the students compiled with the requirements, they need to scan all forms and upload it in their respective accounts which will be sent to the administration.

There are private repositories to store all students’ personal documents. Only the system’s administrator is authorized to view or access the files being submitted by a particular student.

CICT OJT Office manually uses papers to record student’s data. The OJT coordinators gathered all the OJT students for orientation to comply with the requirements and they inform the students to return after a day to get their waiver and the five (5) forms which needs to be filled up by the students. Form 1 is the student intern sheet that contains...
BACKGROUND OF THE STUDY

Apparently, as of now the CICT OJT Office manually uses papers to record student’s data. The OJT coordinators gathered all the OJT students for orientation to comply with their requirements and they inform the students to return after a day to get their waiver and the five (5) forms.

Research Objectives

The study aims to develop an Online Management System for the College of Information & Communications Technology-OJT Office with SMS Notification.

Specifically, the study will integrate the following significant features needed:

i. Account Control
ii. Profile Data through database
iii. Downloadable Forms
iv. Informative System for announcements and forums
v. SMS Notification
vi. Calendar Scheduling
vii. Report Generation

Scope and Delimitation

This system provides students to lessen their work and time by having an alternative way of managing documents in the OJT Office. It features managing their user profile for important personal things, fill up forms within the page and ready to be printed and you can upload, view and overwrite forms. It also provides forum page for feedbacks. One of the main features also is having an SMS notification to inform students for events; visit schedule and some announcements or important agenda. By means of using Database in this system, it secures and stores all the data of the entire students and SQL file can be extracted from it. Admin page has the features of restoring and backing up data of the student’s record and interference to their performances and number of hours of their work; also admin can manage accounts specifically in system utilities and coordinator settings.

The limitation of the project is that the student cannot access the system without the internet connection; it has a compatibility issue in design when it comes to mobile viewing of records and the student cannot reply to any SMS notification.

The Online Management System for CICT-OJT Office with SMS Notification follows the process called IPO that stands for Input-Process-Output. The IPO model is a general system model and is used to convey systems overview and is a preliminary investigation tool in system’s processes as shown in Figure 1a. The first frame of the diagram is the input which refers to all raw materials required to develop and produce the output. The most common input includes the knowledge requirements, and the hardware and software requirements. The researchers gathered related information through websites (DFA passport appointment) and some related literatures.

The second frame is the processing side that involves different stages and illustrates the iterative waterfall model. It explains the flow and the procedures that are followed by the developers during the system development. The first phase in the figure is the system requirements phase. The researchers specified all the requirements needed to develop the system. In the analysis and design phase, it includes object model and subsystem interfaces wherein the interface is properly lay out and successfully developed by the researchers. The fourth phase is coding. It is the symbolic arrangement of data or instructions in a computer program or the set of such instructions. Testing is the fifth phase. It is performing a variety of tests on the system to identify any problems that may occur.

The last phase is the implementation. It is where the learning and training products, processes, and services are actually being delivered.
The Online Management System for CICT-OJT Office with SMS Notification must be working to check if the system has been successfully done. For the deployment, the system must be installed, initial user training must be completed, and user documentation should be delivered. When this has been completed, the application is in the steady-state production. Once the system is in the steady-state production, it is reviewed to ensure that we met all of the goals in the project plan for a satisfactory result.

The third frame is the fully functional Online Management System for CICT-OJT Office with SMS Notification.

**Figure 1b: Context Diagram of Online Management System for CICT-OJT Office SMS Notification**

![Context Diagram](image)

Figure 1b shows the flow of connections between the admin user and the individual member of the organization. Listed below are the features of the system:

i. Account Control
ii. Profile Data through database
iii. Downloadable Forms
iv. Informative System for announcements and forums
v. SMS Notification
vi. Calendar Scheduling
vii. Report Generation

**Testing and Evaluation Procedures**

After developing the system, the researchers let its end-user to evaluate the system performance and function being part of their evaluation strategy. The ratings from the respondent are treated statistically using a Likert Scale and has been recorded based on the weighted mean or average. The response to the Website Quality Evaluation Criteria such as (a) Authority, (b) Purpose, (c) Coverage, (d) Currency, (e) Objectivity, (f) Accuracy, (g) Functionality and (h) Training and Documentation. There are three measurements of the central location widely used in descriptive statistics. The mean has its appropriate use in describing the sample or population being studied in three measurements. The weight mean is more reliable in computing the data and considered to be the most stable measures of central location associated with the interval and/or ratio of data in which the distribution is normal.

**RESULTS AND DISCUSSION**

The Online Management System for CICT-OJT Office SMS Notification is a developed system that can enable the office to have a better record keeping and maintenance in their services and transactions.

**Figure 2: OJT student’s Homepage**

![OJT student’s Homepage](image)

Figure 2 shows the home page of OJT student. It shows the sign in and sign up button

**Figure 3: OJT Student’s sign in modal view**

![OJT Student’s sign in modal view](image)

Figure 3 shows the modal view where the OJT student can sign in using their student number and password.

**Figure 4: OJT Student’s Main page**

![OJT Student’s Main page](image)
Figure 4 shows the menu that the OJT student can use to operate the website.

**Figure 5: Student Profile**

Figure 5 shows the student profile modal page. OJT students can edit their email address and contact number.

**Figure 6: Upload CICT-OJT Forms**

Figure 6 shows the upload modal view for forms. The Students can upload their forms and submit those forms to the admin page. And file must be in .jpg format.

**Figure 7: Template for Form 1**

Figure 7 shows the Student-Intern Information Sheet.

**Figure 8: Template for Form 3**

Figure 8 shows the Application for Special Certificate to employ, learner for apprentice without compensation as a requirement of a school curriculum or as a prerequisite for a board examination.

**Figure 9: Template for Form 4**

Figure 9 shows the On-the-Job Training Performance Evaluation Report template.

**Figure 10: Template for Form 5**

Figure 10 shows the Internship/On-the-Job Training Accomplishment Report template.

**Figure 11: PDF Forms**

Figure 11 shows the PDF forms. Students can preview their forms as pdf and download it.

**Figure 12: Student Forum Page**
Figure 12 shows the student forum page where the students can add new threads.

**Figure 13: Announcement Page**

Figure 13 shows the announcement page for the students. They can only view all announcements of the admin.

**Figure 14: Back Up and Restore**

Figure 14 shows the setting of backup and restore. Admin can choose a semester to change the system configuration.

### CONCLUSION AND RECOMMENDATIONS

The following conclusions are based on the result of the study.

i. The Online Management System for CICT-OJT Office with SMS Notification features account profile, forms, forums, reports, announcements, account and administrator page.

ii. The Online Management System for CICT-OJT Office with SMS Notification used development method called Iterative Waterfall Model. The Iterative Waterfall model is a sequential design process, in which progress can be seen as flowing steadily downwards (like a waterfall) through the phases of system requirements, analysis, design, coding, testing, production/implementation.

iii. The Online Management System for CICT-OJT Office with SMS Notification will be using PHP as the base programming language of the system. It can do all sorts of things: evaluate form data sent from a browser, build custom web content to serve the browser, talk to a database, and even send and receive cookies. It is designed to work whether you are using a PC, or a Tablet, or a Smartphone. WAMP Server for the database and Adobe Photoshop on its design.

iv. The Online Management System for CICT-OJT Office with SMS Notification is portable because it runs in a wide variety of environments.

Based on the result of the study are the following recommendations:

i. The website is applicable to all courses of the university.

ii. A feature that suggests companies for students through data mining.

### REFERENCES


