## AUTOMATED ISPSC COLLEGE ADMISSION TEST WITH ONLINE REGISTRATION

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# A CAPSTONE PROPOSAL PRESENTED TO THE FACULTY OF ILOCOS SUR POLYTECHNIC STATE COLLEGE INSTITUTE OF COMPUTING STUDIES SANTA MARIA, ILOCOS SUR

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#### Chapter I

#### INTRODUCTION

#### **Project Context**

Today Automated Examination and Online Registration has become a fast growing examination method because of its speed and accuracy. It is also needed less manpower to execute the examination. Almost all organization nowadays are conducting their objective exams by online examination system, it saves students time in examinations. Organization can easily check the performance of the student that they give in an examination. As a result of this, organizations are releasing result in less time. It also helps the environment by saving paper.

The examination is a key factor in performance assessment and must be carried out with accuracy and precision. Examinations involve a lot of activities, right from registering students, preparing roll lists and creating timetable to setting question paper and many more. If all of these activities are not carried properly, it may lead to a lot of repetitive tasks due to missing or disorganized data, along with loss of crucial time.

Nowadays, computer serves as an important role in our society, most especially in school. The increasing numbers of students seeking admission in the college are causing tremendous pressure on the administrative body of the institute to manage and arrange the admission process manually. It is difficult to conduct the process



accurately and in timely manner. As the population of the students continue to grow, many schools face difficulties in handling the information in manual process. One of the most effective ways to solve this problem is to convert the manual system into computerized system. Hence, the need for online registration and automated examination is inevitable.

Ilocos Sur Polytechnic State College aims to take a lead for globalization. The school supervises entrance examination as a gateway to be admitted in the school. The entrance examination serves as the initial diagnostic test that will help assess the students which will help them choose the right career track that meets their intellectual ability. The school, in the contrary uses the manual process in administering the examination.

As the new generation of the people who aims to exhaust and utilized, the researchers came up with the idea of Automated ICAT and Online Registration. This system will aid the existing problem in using manual process.

Automated examination has become an effective complement to traditional and manual process of examination. It is a very common knowledge that students are prone to cheating under the pen and paper method which would highly affect the fairness and the result of the examination. It has been decades of using the traditional type of examination and it is undeniable that it has been unpleasant due to the



problems associated usually examination venue capacity constraints, delay in the release of results, examination malpractices, cost implication of printing examination materials and human fault.

The Automated ICAT and Online Registration will permit to take and give online examination and maintaining master information and generating various reports of test. The main users of the project are Student or Member and system Administrator.

From an end-user perspective, the Examination System Project consists of two functional elements: enhanced Member modules for registration, giving examination, manage profile and Administration module for Mange members, examination, question bank and view the reports.

The system seeks to efficiently evaluate the exam partakers thoroughly through a fully automated system that not only saves time but also give fast results. The Automated ICAT and Online Registration system helps to completely automate the old manual procedure of ICAT process. It also significantly eliminates the need for monitoring while the exam is being taken. All instructions are displayed to the exam taker before the tests begin.

Being a paperless solution, the chances of data loss are highly eliminated with the Automated ICAT and Online Registration System and as a college aspiring to keep pace with the rapid changes must opt a proficient admission examination system. This will not only save their



time, efforts and hassles but also will help them making the process easier to handle and manage.

A major highlight of using the Automated ICAT and Online Registration System is that it gives a high level of transparency as opposed to the traditional method or remote method.

It is almost impossible to compromise exam questions and evaluations because they cannot also be influenced. The system will generate their results instantly and it is possible for the exam taker to get information on his results immediately.

The Automated ICAT with Online Registration System would be of great benefit to the students, staffs and the institution.

#### Purpose and Description

This study aims to develop an Automated ICAT and Online Registration and it will provide a faster way of retrieving information.

The following are expected to be benefited:

Administration. This study helps the school administration in accommodating the students in taking and administering the ISPSC College Admission Test and contributes in fast release of results.

**Students.** The study will help the students minimize their time consumption in registering for ICAT and provide ease of access in taking the examination.



Researchers. The researchers will be able to apply their knowledge on creating the system, thus, it will enhance their skills in programming and web developing.

Future Researchers. The result of the study will serve as future reference for researchers who have interest in the same undertaking.

#### Objectives of the Study

This study aimed to create and develop an Automated ICAT and Online Registration.

Specifically, it sought to:

- 1. Identify the problem of the existing system based on
  - a. Data entry and consistency
  - b. Time Consumption
  - c. Student's information storage and retrieval
- To create and develop an Automated ICAT and Online Registration.
- 3. Test the usability of the system in terms of:
  - a) usefulness;
  - b) ease of use;
  - c) ease of learning;
  - d) satisfaction;



#### Scope and Limitation

The developed system included the following features: the system allows the applicant to register for College Admission Test, the system allows the examinee to take the exam, the system automatically checks the answered items of the examinee upon submission. The system allows the admin to post and delete announcements, view and print individual reports and whole list of the result of examination and to create questions and categorize them accordingly. The system allows the examinee to view the posted announcement online.

The automated ISPSC College Admission Test with Online Registration System is limited to abstract type of test, uploading photos and any type of documents are not accepted by the system and some special characters such as: double quotation marks (""), apostrophe (') and single quotation mark ('') are not accepted by the system. The answer from the current page will be voided and discarded when the examinee chooses to return to the previous page of the question. The system does not interpret the result of the examination.



#### Chapter II

#### REVIEW OF LITERATURE

This literature cited in this chapter tackle the different concept, understanding, ideas, generalization or conclusions and different development related to study of the online examination from the past up to present and which serves as the researchers guide in developing the project. Those that were also included in this chapter helps in familiarizing information that are relevant and similar to the present study.

Web-based Examination System is an effective solution for mass education evaluation. They developed a novel automated examination which carries out the examination and auto-grading for objective question and operating question, such as programming, Microsoft Windows, Excel, etc. It has been successfully applied to the distance evaluation of basic operating skills of computer science, such as the course of computer skills in Universities and the nationwide examination for the high school graduate in Zhejiang Province.

Automation in the modern period will not only make our life easy and convenient, but also it males our task easy. The programs and devices are increasingly user friendly. Schools started to use computer process for evaluating students. The commodities, new devices, services, technology are needed of man for a better fuller life which is the concern of the research. Through the use of technology, the economy of the



country is moving forward. Nowadays, most people are using computers to make their works easier and faster. Most jobs in the country involve use of computers because of their importance in the society. (Couse and Chen, 2010)

According to some research, the origin of taking entrance examination started in China. Ancient China was the first country in world that implemented a nationwide standardized test, which was called the imperial examination. The main purpose of this examination was to select qualified candidates for specific government positions. The computer is the revolutionary technology that affected many facets of our lives including the schooling of the students. And having an entrance examination that is computerized will be a good help to the examiners and examinees for it will lessen the time of taking examination. Many schools that conduct examination are using manual based system up to present. In managing their system they have encountered difficulties and problems. (Steven Johnson, 2009)

Electronic exam is difficult part of e-Learning security. The paper describes a cryptographic scheme that possesses security requirements, such that authenticity, anonymity, secrecy, robustness, correctness without the existence of a Trusted Third Party. The proposed protocol also provides students a receipt, proof of a successful submission, and it is based on existence of anonymous return channels. (Huszti and Petho, 2012)



Importance of computer application is increasing day by day. In the latest decades of the Millennium winning organization are those willing to integrate business strategy and computer information technology in plying their respective trades. The use of computer information technology results for them to be able to develop products fast and make decisions fast, ability to have fluid organization structure, able to cope with the demanding work force and external environment by the rapid development of innovative approaches and lastly using information system confirms the company's missing vision. The transformation of manual entrance examination to automate is one example of what has driven partly by rapid technological innovation. Anyways just to make work easier and faster like examination processing is possible with emergence of computer technologies. (Aquino, 2005)

At the University of New South Wales, Sydney studied the effect of online formative assessment on learning. The outcomes support the contention that integrates well designed online formative assessment can have significant positive effect on learning. Web based formative assessment also support equity and inclusiveness by allowing students to attempt each assessment anonymously on multiple occasions at any time. (Gary, et al., 2011).

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