Chapter 1

Introduction

Admissions in colleges and universities have dramatically changed in the digital age. Digital technologies are accelerating educational transformation in colleges and higher education around the world, thus it will solve the real-world problems in education [1]. Educators are encumbered with manual admission process and experiencing stress and confusion while making important decisions. However, it probably makes sense to understand the impact of technology to empower admission process [1].

With an online registration solution, common errors that come with manual registration are prevented. Within a school system, the standard process of registering a student for their education has been that the parent personally fills out the forms, which are handed over to school staff in order to be manually entered into the student information system (SIS) and then filed accordingly, as well as distributed throughout the staff appropriately [2]. School systems and offices are now feeling relief when it comes to the registration information and necessary documentation of their staff and clients. A similar process also occurs when new employees are hired and have to submit the same information to the human resources department [2]. In relation to the online registration, for example, the University of the Philippines has now the online application of their entrance exam or known as University of the Philippines College Admission Test (UPCAT). Instead of having a manual registration which may take long days or weeks or months in gathering the applications forms, thus determining the total number of takers becomes a tedious task and highly stressful and time consuming to the staffs' workload.

The MSU-Main is using a manual admission process, as discussed in Section 3, which could be tedious for persons involved and responsible of the process. As the researcher gather some initial data, problems identified are but not limited to: (1) Incorrect and unreadable data in forms; (2) Incompleteness of required documents to be submitted and, especially; (3) Time-consuming for the staff for admitting process and data encoding in saving on students' information system; (4) Long queuing to get forms; (5) Duplicative filling of same data field in forms; (6) No query reports.

Systematizing a pre-admission could help in solving said problems. Pre-admission will cover the online filling of admission form to eliminate those incorrect data and unreadable data during manual filling, which would be save in existing student information system and could be great problem in the future. The system will also provide an interface for attaching those scanned required documents to be checked by the admin of the admission office in able to guide the student if the said documents are the proper documents at the said specific required document, which could avoid the incompleteness of required documents to be submitted by the students during the manual submission of original copies of documents. With all of this process, we could eliminate the problem of being time-consuming of admission. Thus, this pre-admission system's purpose is to have a smooth process of admitting an incoming freshmen students during admission.

In this Pre-admission process, there are some manual process that we could not eliminate such as submitting all the original copies of the required documents for document authenticity, which we should consider.

1.1 Project Context

The proposed project is named "A Web-based Pre-Admission Framework of Incoming Freshmen Students of Mindanao State University- Marawi". It aims to design a pre-admission framework that will provide a fast and efficient admission process to incoming freshmen. A web-based application will also be developed for the said pre-admission framework. The proposed project is also focused on the development of a database that is required for the web-based application to be developed.

It is designed to decrease the workload of the staff of Office of Admission in admitting a mass number of students every semester and to have a light process of admission. In addition, they would not need to encode those information of the students given via manual application to the student information system that the existing system has which we could acquire the accuracy of data. It has also a feature to query reports or data about the number of students who had filled up pre-admission together with some information that could be used for decision making of the staff for the admission process.

The proposed project will be designed to guide the students and make them at ease while applying for admission. Instead of making the students fill-out an application form manually, with

pens and papers, the students could just apply online or through provided KIOSK and just will confirm by the chairperson of the college that he/she wish to concede and then pass all the required documents in the Office of Admission. Also, the students have given an option either he/she could print his/her filled-out application form to be signed by the Chairperson of the College through any printing shop or private printer or he/she could ask the department to print there.

The proponent of this project will recommend the use of Software Engineering techniques to come up with the desired software and hardware requirements and specification.

1.2 Purpose and Description

The proposed system intended to have a smooth process of admitting an incoming student during admission. This project aims to implement a web-based and preferably an online application for admission process. The automation of repetitive task is what the proponent wish to resolve to achieve a smooth admission process. The following key officer and personnel who will be benefitted in this proposed project are:

Staff of Office of Admission. This user has a privilege to check the application of the students. Also, edit or manage all the information of the students.

Chairperson. This user will be the one who will confirm the students preferred college that he/she where to concede.

Student. Aside for the privilege to fill up an application online or through KIOSK for admission, he/she has also given to upload all the scanned required documents for admission via online only.

1.3 Objectives

This capstone project aims to design and develop a Web-based Pre-Admission Framework for the incoming Freshmen of Mindanao State University-Marawi.

Specifically, this proposed project aims to:

1. Study the current processes of existing system of admission to determine what processes needed to be included and enhanced in the pre-admission process. Also, study various database concepts and select form among them that will be used for the database design of the project.
2. Design the pre-admission framework and the database structure based on the requirements specification obtain from objective one.
3. Design and develop a web-based pre-admission application software implementing the database structure specified in objective two; and
4. Test and evaluate the performance of the framework through the system created using usability and functionality
5. Evaluate the significant influence of the pre-admission framework based from objective four.

1.4 Scope and Limitations

This project will focus only on the creation of a web-based application for online application form for admission of incoming freshmen students of Mindanao State University-Main who passed through System Admission and Scholarship Examination (SASE), this project will not cover the online form for admission of transferee and students who passed through College Entrance Test (CET). It will also provide an interface for attaching files for the required documents of admission of student.

The project excludes the incoming Senior High School for applying online. Also, entering of load subjects for students and billing system are excluded in this project.