CHAPTER 1.INTRODUCTION

1.1 The Background

Supporting education through scholarships to students of higher learning is an important aspect of government's effort to assist students at all levels of learning to allow them afford the basic needs that accrue during their studies. It's a government plan to develop a critical mass of professionals who would serve as catalysts of change and agents of scientific and technological advancement, as well as sustainable economic development. However, the cost of education has risen drastically over the past few years hindering the families of low income earners to send their children to school as they can barely afford the cost. The term "scholarship" according to [1] is a form of financial assistance that does not require repayment or employment and which is usually offered to students who show potential for distinction, or who possess certain characteristics important to the scholarship provider (such as religious beliefs, hobbies, ethnicity, etc.). A scholarship is a form of financial aid that is specifically geared towards students who are attending college. It is used as a way of financing their education, and it may pay a part of their education, or it may pay the entire cost of a student's tuition. As [2] point out, Scholarships will require students to meet certain requirements, both before and after they've obtained it. Currently, the procedures of applying for scholarships, managing scholarship and evaluating application forms are all done manually using paper-based processing.

In Indonesia, it still very difficult to find information about scholarships, especially scholarships to study abroad or from the school itself. Most of the several school or institution announce the scholarships through the third party, mostly via private educational agency. In facts, often through poster and banner advertisement. This makes the process of applying for scholarship not transparant and make misscommunication which can be fatal. Also in the last year with the Covid 19 pandemic that has hit one world, it has made it difficult for prospective scholarship applicants to find scholarships directly. During the Covid-19 pandemic, there were also many obstacles in the financial perspective of students, where some universities in Indonesia did not cut tuition fees during the pandemic. Many students end up taking time off during the pandemic or even dropping out of school just because they have difficulty paying their tuition fees. Meanwhile, the Indonesian government only subsidizes Internet Quota to run online courses. This is an important aspect of why this web application was created.

For that, I want to create a web system that can connect applicants directly with institutions or schools that provide scholarships online and without using paper as a form of reducing paper waste, which is getting higher. Where applicants can find scholarships according to their interests and match the applicant's criteria. If there is any problem with their applications while they are processed, it will also take an extra time for both the reviewing committee as well as the applicant to communicate and correct the errors. Therefore, additional paperwork for the review may cause a delay in the entire procedure. The processes of screening the applicant's credentials, evaluation of applicant's form, conducting aptitude test and oral interview are also tedious. This informed the development of an online web-based system (e-scholarship system) which

can facilitate the processes of various scholarship applications.

1.2 Identification

Based on the background that has been explained above, the author identified some problems as motives for the development of this application. The problems are as follow:

- 1. How to create a web-based scholarship registration system?
- 2. How to developed a web-based scholarship using filter function?
- 3. How does this web-based application system benefit all stakeholders in applying for scholarships?

1.3 Purpose of the Study

The purpose of this application system development are listed as follow:

- 1. Produce a web application that functions to manage scholarship registration and selection for Indonesian students that can accelerate and increase accuracy in the student selection process.
- 2. This web-based application is intended to be part of the user experience research systemin the information technology industry.

1.4 Limitation of the Study

Some limitations of this application system are listed as follow:

- 1. Applications include student registration and administration.
- 2. This application includes a selection of scholarship admissions for students.
- This application does not cover the disbursement of scholarship funds to students who have been accepted.
- 4. The number of criteria used in the selection process is static
- 5. This research does not cover maintenance

1.5. The Benefit of The Study

The benefits of this application system are listed as follow:

1. Make scholarship registration easier for students.

- 2. Make it easier for administrative data archiving.
- 3. Minimizes the risk of losing registration documents.
- 4. Make it easier to see the registration and acceptance reports for scholarships.
- 5. Speed up the process and accuracy in scholarship selection.

1.6 Research Methodology

The software development process is a very complicated task if it is done without any proper step by step procedure. Then, in order to make the software development processes simple and systematic, the Software Development Life Cycle (SDLC) came into existence. The SDLC definesthe framework that includes various activities and tasks to be carried out throughout the softwaredevelopment process. Various SDLC methods are used in the software development process, heaving their advantages and disadvantages.

In this research, the author implemented SDLC Prototype method to the development process. This method emphasizes on the iterative design process that enables the target user to try the pre-release or sample of the system before the development process occurs. During the process, the prototype is built, tested, and then reworked based on user's feedbacks and suggestions as necessary until an acceptable outcome is achieved and finally proceed to the development phase.

1.7 Writing Structure

The systematic writing is made to facilitate the writing of the final project report. Thus, the systematic writing of this thesis is divided into six chapters, with the explanation for each chapter, as follows:

CHAPTER I INTRODUCTION

This chapter discusses the background of the study, problem identification, purposes, limitations, benefits of the study, research methodology, and also schedules of this study.

CHAPTER II THEORETICAL BASIS

In this chapter discusses the basic theories that support and relate to this research.

CHAPTER III ANALYSIS AND DESIGN

This chapter discusses the analysis and design of the system. Analysis of the current system, analysis of problem, implementation of the methodology, problem solving with analyze the system needs and conducting the system design to generate a new system.

CHAPTER IV IMPLEMENTATION AND TESTING

This chapter discusses the result of the analysis and design into code to build a working application, and testing to find out whether the application is working or still needs improvements.

CHAPTER V CONCLUSION AND RECOMMENDATION

This chapter discuss the conclusion of this thesis and suggestions for further research.

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