## CHAPTER I INTRODUCTION

# 1.1 Background of Research

In the current era, information can be delivered with multiple ways and forms. Information can be view and distributed by text, image, sound and video (Hoffman, Krzic, Nashon, & Schmidt, 2017). Information can also be delivered through website, like a website for a university to display information related to the academic for the students (Setiawan, Utami, & Fatta, 2017) or website that is used in hotel as a marketing tool to increase the hotel image (Wang, Law, Guillet, Hung, & Fong, 2015).

The website rising phenomenon supported by infrastructure development and internet popularity, make it easier to access and cheaper every day. Many industries, educational institutions, health institutions and governments are using website as business enabler and gain advantages from website implementation. Most of the people now prefer website for delivering effective information (Suhartanto, 2012). The current website demand by business nowadays versus supply force to develop website is dangerously skewed. Therefore, making website faster methods are preferable and recommended.

Laravel is a framework based on Model-View-Controller (MVC) that used Hypertext Preprocessor (PHP) as its programming language. Website that used Laravel works faster and has a robust code (Das & Saikia, 2016). According to Alfat, Triwiyatno, & Isnanto (2015) the advantage of using Laravel is that it helps the web developer to access and manipulate the database easier and faster without

going through a long process of coding This advantage will result in produce a website faster yet maintain equal good quality.

Simple Additive Weighting (SAW) is one of the Fuzzy methods that can be used in Multi Criteria Decision Making (MCDM). SAW methods are used to select candidates according to the applicant data to produce a final ranking (Suprapty, Malani, & Nurhayati, 2016). SAW is also known as scoring technique and SAW method is based on the weighted average and the evaluation score is measure by multiplying the normalized value of each criteria. Then the objectives could be ranked and the objective that has the highest score is selected as the preferred one (Jaberidoost et al., 2015).

System flow is described using Unified Model Language (UML) diagram to defines needs, create analysis and design the flow of a system (Susanti, Junianto, & Rachman, 2017). UML itself has some diagrams which are Use Case Diagram, Activity Diagram, Class Diagram and Sequence Diagram (Nugroho, Listiyono, & Anwar, 2017). According to Agner, Soares, Stadzisz, & Simão (2013) by using UML, the development of system especially for developers can be more structured, tidy and consistent with the project purpose, which result in minimization of error and bugs during integration process.

Job seeking for job seekers now is much easier by using website because job seekers are not required to come directly to the company or job agency to do registration, so it saves time and cost of the job seekers (Habibie, Purnama, & Triyono, 2014). Job seeking website has been an option for young professional now in order to find a suitable job and build professional network. Students that have just graduated can reached a level of professionalism and more mature in a

short time by using job seeking online service (Kawuryan, Musadieq, & Prasetya, 2017).

Most Japanese company will start recruiting people at the same day every year which is April 1. They will gather students and hold a company information session to hire a new employee in a lecturer hall of the university or in the classroom. Students as the job seeker will receive a written examination and multiple job interview and they also have to participate in some briefing sessions in the company which they are interested. If students of Japanese university want to be a full time worker at Japanese company, they have to do this job hunting process and get a job before graduation (Seki, Oishi, & Kondo, 2016).

According to the exposure above, we are interested to take the title "Development of Job Seeking Module Backend Using Laravel Framework with SAW Method For Employee Ranking in Japan" to help job seeker or job provider to get jobs and candidates.

#### 1.2 Research Problems

According to background of research that has been explained above, then it can be formulated that the scope of the problem is as follows:

- 1. How to develop job seeking website.
- 2. How to rank a candidate with the criteria and weighting value given using Simple Additive Weighting.
- 3. How to develop website using Laravel.

# 1.3 Scope of Research

For the discussion of the research does not deviate from what has been formulated, then the limitation of research is needed. The scopes of this research are:

- 1. The development of web based job seeking is using PHP as its programming language, Laravel framework and MySQL database.
- 2. This system consists of job seeking process and provision of jobs process.

#### 1.4 Objectives of Research

According to the research problems that we have written above, the objectives of this research are:

- 1. So that we can master the system of web based job seeking system using Larayel.
- To fulfill one of the requirements of obtaining a bachelor's degree in Computer Science.
- 3. To contribute to knowledge and academic reference about the development system especially about web based job seeking system using Laravel.

## 1.5 Benefits of Research

As for the benefits of this research involves several parties:

1. For user:

Save time when searching for job, able to access recruitment information easily, apply jobs according to their abilities and provides job vacancy.

#### 2. For academics:

Academics could add knowledge about the development of a web based system using Laravel framework and Simple Additive Weighting.

## 1.6 Report Writing System

Systematic Discussion of the research report is structured to make it easier in understanding the research report as follows:

## CHAPTER I INTRODUCTION

**CHAPTER IV** 

In this chapter, we elaborate the reason of choosing the title, research problems, limitation of the research, benefits of the research, objectives of the research and systematic discussion.

#### CHAPTER II THEORITICAL FRAMEWORK

In this chapter, we discuss about scientific theory revolving the topic, and also discuss about research findings before that is related with this research.

## CHAPTER III RESEARCH METHODOLOGY

Method that is used to develop a software that consists of stages that are literature review, analysis, development and implementation will be discussed in this chapter.

# IMPLEMENTATION AND DISCUSSION

Database design, interface design, flowchart, system result and procedures for system usage will be discussed in this chapter.

