CHAPTER I
INTRODUCTION

1.1 Background

According to Suhartanto, (2012), the development of website now is fast, this is caused by the factor of infrastructure development like internet. The use of web technology has been applied to many companies. The uses of website for company from just giving information for user to supporting business in the company. According to Hermawan, Hidayat, & Utomo, (2016), web based information system have advantages where this system can be access by user using web browser that can be found in all computer and smartphone operating system.

Angular Framework is a leading framework for building JavaScript heavy application which is often used to build ‘Single Page Apps’ or SPA for short which mean reload only the view whose contents is requested. Because Angular is one of the leading framework and has a huge community support, it is backed by Google and demand for Angular developers are constantly increasing. (Lim, 2017). Angular incorporates the basic principles of original Model-View-Controller (MVC) software design pattern into how it builds client-side web application but not in traditional sense, but rather than something close to MVVM (Model-View-ViewModel). (Jain, Mangal, & Mehta, 2014).

Characteristics of MVC also cause website development to be much faster and directed according to the purpose. Website development with framework is mostly chosen because not only ease the developer, productivity
stage is also increase like in the research of Cavlek, (2016) the causes of the productivity of the hotel is affected by fast development of the hotel website.

During website development, there are some research methodologies that can be applied. One of them is Extreme Programming (XP). XP has advantage which is time that is needed for development is reduced and much easier to change module if the user needs changes or additional features. According to Prabowo, Sholiq, & Muqtadiroh, (2013), XP is a software engineering process that tends to use object-oriented approach and the target of this method is a team formed on a small to medium scale and this method is also appropriate if team faced with unclear requirements as well as changes in requirement which is very fast,

Website provides different kinds of information that is useful for user, one of it is to help in obtaining job vacancy information. Job seeker can save time and easily contact the company for interview. Website now is also easy to navigate and provides different kind of jobs so that job seeker can also easily get the job vacancy according to their abilities (Kuhn & Mansour, 2013). According to Shimmi, Arashi, & Yon, (2015), to find jobs in Japan, it is considered hard even if you have degree. Above 20% Japanese students that study abroad for more than one year experience challenges in finding jobs in Japan compare to others Japanese students that don’t have experience study abroad. Moreover, the lack of information related to jobs for abroad students reported by Japan Student Services Association (JASSO) on 2005.
According to what have been stated above, we decided to take research that is titled “**Frontend Development Web-Based Job Searching System Using Angular Framework with XP Method in Japan**” which is to help job seeker to find job information in Japan.

### 1.2 Research Questions

This research aims to tackle some issue as stated as below:

1. How to build a website that provides information about job vacancy?
2. How to display information about job vacancy from internal database and internet?
3. What is the process of applying job that available in the website and how to develop website to cater those functions?

### 1.3 Research Scope

Scopes are needed in order to keep this research’s purpose not deviated from what it is for. Those scopes are as stated below:

1. Frontend development of job search system in Japan using JavaScript with Angular Framework.
2. This research talks about the process of frontend in job searching system at Japan that consist of job searching and job applying.
1.4 Research Objectives

According to the research problems that has been mentioned above, the objectives of this research are:

1. So that we can prove the abilities in computer science major especially in Angular Framework.
2. To fulfill one of the requirements of obtaining a bachelor’s degree in Information System Course of Computer Science Faculty in UIB, Batam.
3. To add knowledge and academic reference about the development system of web based job searching system using Angular Framework.
4. So that the result of this research can be used by user for obtaining information about job vacancy according to the user abilities.

1.5 Research Benefits

There are also benefits in this research that involves some parties, which are:

1. User

To be able to access the job vacancy information and apply for jobs according to their abilities.

2. Academics

To be able to add knowledge about development of a web based system using Angular Framework.
1.6 **Report Structure**

Research report is structured to make it easier in understanding the research report as follows:

**CHAPTER I  INTRODUCTION**

This chapter is explain about reason of research, the problem that occurs, the scope of research, limitation of research, benefits of the research and report structure.

**CHAPTER II  LITERATURE AND THEORY REVIEW**

This chapter contains theories, findings, and previous research material obtained from various references made as the basis for conducting the proposed research are discussed.

**CHAPTER III  RESEARCH METHODOLOGY**

This chapter describes the research method, website development and required tools that will be used in answering research to achieve the research objectives, as well as detailed research stages, short and clear.

**CHAPTER IV  IMPLEMENTATION**

This chapter describes about system implementation in further detailed and interface design.

**CHAPTER V  CONCLUSION AND RECOMMENDATION**

In this chapter written conclusions of research results or thesis conclusions and suggestions for further research.