# CHAPTER 1
# INTRODUCTION

## 1.1.    Background

The Internet, in the year 2009, is a powerful tool which implemented in almost every area in our lives. We send emails, make calls, and discuss topics we are interested in through the internet. Even our banking is going virtual now because of the internet.

Internet has been virtualized every area of interest and we called this as the virtual world. Virtual world enables us to do activities without time and space constraints. This is the reason why today everything goes online through the internet.

The education, in year 2009, is also start to become virtualized. Considering that the internet can remove the time and space constraints, this should be very helpful to makes the education more effective. Because of this reason, the thesis team is interested to take Mr. Fredro Harjanto topic about online course management system and web portal development that is available for the thesis in year 2009 in BiNus International University.

Mr. Fredro Harjanto is interested to develop an online course management system and web portal that able to support the study process nowadays. He found out that the development of an online course management system and web portal will help every actor in the system a lot. So the thesis team will create an online learning system and will be named: smartergeneration.com.

## 1.2. Scope

This thesis is conducted by the thesis team that is consist of two person which are Adi Ariyanto Sani (BiNusian - Computer Science 2009) and Felix Juniarto Hanafi (BiNusian - Computer Science 2009). The thesis team has agreed the best way to distribute the thesis scope is by the use cases of the system. The use cases itself are classified by the actors in the system into four groups which are the super administrator, the administrator, the lecturer, and the student.

Felix Juniarto Hanafi will responsible in the development of the use cases for the super administrator and the lecturer and my responsibility in smartergeneration.com is the development of the use cases for the administrator and the student. The agreement of the scopes at the beginning of the development process for the development of administrator and the student use cases are listed below:

Administrator system:

- login
- logout
- change password
- add/view/edit/delete students
- add/view/edit/delete lecturers
- add/view/edit /delete materials
- add/view/edit /delete courses
- add/view/edit /delete classes

Student system:

- login

- logout

- view/change profile

- change password

- enroll/drop courses

- show own courses

- download material

- view member page

- enroll class by using sms

This thesis will be written under assumption that considering the development is based on Mozilla Firefox and Internet Explorer; the developers assume that these two browsers is the standard.

## 1.3. Aims and Benefits

The aim of this project will be to create an effective design for smartergeneration.com. By achieving the aims, the benefits that can be obtained are:

- easy access for the current study information taken by the students

- easy access for the lecturer to distribute the study material

- introduce every actors in the system about information technologies that are implemented for education

- ease the administration for courses and classes

## 1.4. Structure

This thesis will be written in seven chapters, as listed below:

- Chapter 1. Introduction

  Chapter 1 will be consist of the background, the scope, aims and benefits, assumption, and also the structure of the whole thesis written.

- Chapter 2. Theoretical Foundations

  This chapter will explain some theory that can support or help us to do the research.

- Chapter 3. Analysis

  During this chapter, we are going to do analysis for the requirements. The analysis will be very detail to analyze the suitability of the requirements to reach the aims.

- Chapter 4. Proposed Design

  The proposed design is the design that reflects all the findings on chapter 3. This chapter will contain diagrams and everything that supports the creation of the application.

- Chapter 5. System Implementation

  This chapter will need us as developer to execute the proposed design in real environment. This chapter will include surveys to find out the overall satisfaction of the system.

- Chapter 6. Evaluation

  This chapter will discuss about the findings and experiences during the thesis progress from chapter 1 to chapter 6.

- Chapter 7. Conclusion and Recommendation

  This chapter is the conclusion of the thesis. There will be summary of the whole process and draws the conclusion about the overall result of the thesis. It will also state the possible research for further development.