

CHAPTER 1

INTRODUCTION

1.1 Background

Bina Nusantara University International has a department among many departments named IT department. The work of IT staffs is not only to control the IT systems, but the IT labs in its physical forms too. They need to check whether equipment has gone missing, or some things are left behind by the university students after they had their classes. This causes the IT staffs to have to patrol on labs on their daily routine, and report back the result of their patrols. Not only labs, IT staffs also have numerous numbers of other miscellaneous works.

Possibly due to shortage of hands / understaffed, the IT staff's works are left unmonitored, leaving many loopholes and unanswered question marks on their routine. Not only those, but problems such as forgetting to report to the head of IT staff can sometimes be inevitable, even forgetting the work itself. Slacking in the middle of the work also becomes a factor which sometimes may occur.

Therefore, a solution of this working system has to be created, and this application is built for such reason. A monitoring application, as well as reminder application will be created as one. Monitoring for supervisors, and reminder application for those who have their routine work to do. In this way, all the people in IT staff will be able to be monitored, despite of the short on hand of the department.

1.2 Scope, Constraints and Assumptions

The thesis itself is a field project, so this section will explain what the things are done within the application, or what the application is capable of doing. The application is web application itself, using a PHP scripting language, with XAMPP Apache Server as its server, and MySQL as its database.

This project will include the following features:

- ✓ User data control module
 - Admin
 - Log In, Log Out
 - Add, Edit, Remove users
 - Add, Edit, Remove divisions
 - User
 - Log In, Log Out
- ✓ Activity plan data module
 - Admin
 - View all activities
 - User
 - View own activity
 - New, edit, delete activity
- ✓ Actualization module of plan
 - User
 - Do / Start activity
 - Finish / Report activity

- ✓ Activity monitoring report module
 - Admin
 - Look through all of staff's activity
 - User
 - Look at subordinate's activity

There are, however, several limitations of the application. They are:

- ✓ Not able to alter division / staff's authority (for example, division B, whose parent is division A, is able to see division A despite of its position being a child, just for an exception).
- ✓ One child cannot have two different parents (see chapter 4 and 5 for further elaboration)
- ✓ No one should have more authority than the admin
- ✓ Security and robustness of the application, since this aspect will be taken care by IT department itself before running it as one of the BiNus International system.

1.3 Aims and Benefits

By completing this application, the department should be able to monitor the staffs more thoroughly, and it will enhance the communication process because any reports are filed instead of being reported in a conversation. This application is expected to work until the way of the department operates has been altered. Whether the hierarchy of the department is altered in any way does not matter, since the application is adapted to any changes within the hierarchy.

And upon the aims being fulfilled, the IT staffs will automatically have a more efficient work in terms of time management and working progress.

1.4 Structures

These are the list of seven chapters that will be in this thesis, along with its brief explanation of what it will contain / elaborate.

- ✓ Chapter 1: Introduction

This chapter contains all of the explanation of the background of the problem, how to solve it, and what does the application of the thesis do.

- ✓ Chapter 2: Theoretical Foundation

This chapter contains all of the elaboration of any unfamiliar technologies (especially for those who does not have any computer science background), explaining it of how to understand some diagrams and concepts.

- ✓ Chapter 3: Analysis on Existing System

This chapter contains the department and company's background, how does it operate, its detailed problem, and an existing alternative solution that may solve the current problem at hand

✓ Chapter 4: Design of the Proposed System

This chapter explains the solution of the existing problem. How it works, how will it solve the problem, and all the individual modules and how it is interconnected will be explained in detail here.

✓ Chapter 5: System Implementation

This chapter contains some explanations regarding the testing of the application, individually (by module) or by whole running application (integrating it to the existing whole system).

✓ Chapter 6: Discussion

The purpose of this chapter is to evaluate and clarify the most important result of the thesis paper. The other problems that arise from the proposed solution will also be included here.

✓ Chapter 7: Conclusion

This chapter concludes the whole application development and also provides some recommendation or future improvement.