

## CHAPTER 7

### CONCLUSION

In this chapter, the strength and the limitations of **ACIS** is describe in the first part, while the conclusion of the thesis is discuss in the second part of this chapter.

#### **7.0 System Strength**

The strengths of **ACIS** are given as follows:

1. *ACIS provides asynchronous communication via Internet*

Students can take an assignment during their traditional terms and can take their time to complete the learning path. They can go over the system many times or proceed quickly and use the system during the day, after school, during breaks, in the middle of the night or at regularly scheduled intervals – whenever is convenient to them.

2. *ACIS supports information sharing workspace*

On-line help is available for every screen in the application. This is to ensure that students are not lost and have no idea what is the next screen does. On-line help describes each existing icon and its functions; to enable students to click on the right button.

### 3. *ACIS provides user-friendly graphical representations*

The application has a simple and easy to learn interface so students are not afraid to use all the available icons. The application is suitable for novice users and people who are unfamiliar with Lotus Notes.

## 7.1 *System Limitations*

System limitations existed in the application is due to some internal and external problems.

1. **ACIS** is only able to run in Lotus Notes software environment version 4.6. This is due to the fact that internal problem has occurred during the conversion of the application to the Web.
2. Password protected. As **ACIS** is a prototype version and only available for view in Lotus Notes software, password protected is not created.
3. Currently, **ACIS** provides an online help with brief description of the functions available and provide simple user guide for users to follow.

## 7.2 *Thesis Constraints*

A vast knowledge on groupware and asynchronous technologies need to be grasped in order to get an overall idea of the concept. The knowledge is either from reading books, journal and surfing in World Wide Web

1. Lotus Notes is a new technology, which consumed more time to develop due to the fact that it is different from other software. Project studies took a longer time than expected; as the progress goes, the ability of learning is still going through even until the analysis phase is completed. Encounter with these problems has been proven to be a valuable learning experience.
2. Lotus Notes has very limited references for novice developers in the market. Lack of support from Lotus Notes experts and references have slowed down the implementation phase. More time is used to get the information via Internet and e-mails. Lotus Notes needs special applets namely Java applets to make the implementation on the World Wide Web more smooth and better-looking interface.
3. As there is no prior knowledge in programming using Lotus Notes, especially asynchronous applications, a lot of studies need to be done. Lotus Notes need to be learnt within a short time span. Besides, programming concept for collaborative information sharing is quite different from the traditional way of programming.

### 7.3 *Future Enhancements*

Future enhancements can be done to make **ACIS** more robust and easy to use. There are several enhancements that could extend the functionality of **ACIS**.

1. *Password protected.*

Currently, there is no password protected in the application. **ACIS** is a stand-alone application and does not require any password for protection. In future, the enhancement is made to the application so that it provides passwords to protect from unauthorized users.

2. *Extend the ability to access through World Wide Web.*

Currently, the application is running through the Lotus Notes application, which is to be upgraded to extent the ability for the software to be accessed through the World Wide Web.

3. *Additional functions to facilitate students.*

More modules such as Project Management module, instructor/lecture module to insert and append new assignment, facilities to access other third-party software such as ABC flowcharts, Microsoft Word is added to make the application a complete and exciting application to facilitate students.

#### *7.4 Overall Conclusions.*

Based on the analysis and development phase, it can be concluded that ACIS has proved its capability in assisting group working among students and lecturers; which can be enhanced to a fully working application.

The long-term objective of the work is to develop more flexible support for group working among students and lecturers particularly in assignment and projects. The leading step towards good implementation is based on a thorough understanding of the tools to use. In the case of this research, its first part was devoted to understand the features of the tools, which is the Lotus Notes 4.6 programming language, and the context of its use, which is the groupware and asynchronous information sharing.