## **INFS7901** project proposal

Student information management and school educational administration application

The domain being modeled is student information management (SIM) and school educational administration (SEA) domain. It will focus on the about students, their courses, teachers, departments and grades of course of students.

As is known to all, students have a wide range of activities during their study and life in the university, and the amount of information has been increased compared with that in the past. During their period of university, students are not only contact with their, but also sometimes communicate with the teachers of courses they are learning about the feedback of their assignment and grades of exam. In addition, students sometimes need to contact director of their department when they would like to change major or apply for more difficult courses. Due to these scattered and large amount of information, it is difficult to gather them together. Therefore, I would like to create this application to combine the information related to students, teachers and departments, and structure the data for the convenience of students and teachers to query these information.

There are two classes of courses that are prescribed to the students: compulsory courses and selective courses. Each subclass has a disjoint participation within the course superclass.

There will be three classes of users for this application: the students, the teachers and the director of departments. All of these classes will be able to view and update information in the system. However only the teachers and director will be able to add information about grades and courses and projects for the students.

The system will be built primarily using mySQL and PHP.

The ER diagram below displays the entities for the model which have the following associated primary keys and candidate keys:

Entity	Primary Key	Candidate Key(s)
Department	Dept_ID	Dept_ID
Class	Dept_ID,Class_ID	Class_ID, Dept_ID
Student	Student_ID	Student_ID
Course	Course_ID	Course_ID, Teacher_ID
Teacher	Teacher_ID	Teacher_ID
Project	Teacher_ID,Project_ID	Project_Id, Teacher_ID

