

Project 2:

Write programs to implement a basic course registration system for students. The system should base on object-oriented programming and the basic functions include:

1. Add new registrants in the system;
2. Record the courses of each student selected;
3. Generate the schedule table of selected courses for each student after course registration finished;
4. Modify the saved course information for each registrant student;
5. Course management function supports to add students and grades to each course;
6. Support registrants to print their course-schedule table and query grades and credits;
7. Class-definitions should store in a module file, *basic_class.py*;
8. Provide a *main.py* to support the running of system.

To implement the system, an alternative class-scheme includes:

1. Course class, describing each course's information, and attributes like as (course id, course name, department, credits, time, location);
2. CourseManagement class, describing the course's information, registrants and their grades; for each course object, it can add students, set students' grades, return its registrants information, their grades and average grades, etc.;
3. Person class, describing the basic information of each person object, and attributes like as (last name, first name, gender, birthday)
4. Student class, describing the information of each student object, and can inherit Person; student class have attributes (student id, last name, first name, gender, birthday, department, selected courses); student object can get the information of selected courses; get his/her courses schedule table; modify selected courses and save the list of selected courses; get the grades and credits of the selected courses; get GPA scores, etc.

The system functions may like as follows:

```
#####
##### Welcome to our course registration system! #####
#####
##### 1. Course registration for new user #####
##### 2. Modify user course registration #####
##### 3. Course management #####
##### 4. Print selected course schedule #####
##### 5. Query grades and credits #####
##### 6. Exit #####
#####
```