

Task Brief

You have been asked to develop a Course Administration System for Coatbank College.

The system will make use of four main files: Staff, Student, Course and Enrolment. The basic record format for each of the files is as follows:

| Staff | Student | Course | Enrolment |
|----------|----------|----------------|-----------|
| IdNumber | IdNumber | CourseId | StudentId |
| Forename | Forename | CourseName | CourseId |
| Surname | Surname | CourseStart | |
| DOB | DOB | CourseLength | |
| Gender | Gender | CourseLocation | |

(Some modification to the record formats may be needed to deliver the required functionality.)

The files will be stored externally and read in to memory, stored as an appropriate data structure, at the start of processing. Any new or amended data will be written back to file on completion of processing.

The system should be able to carry out the following tasks:

- ◆ Add, delete or amend a Staff record
- ◆ Add, delete or amend a Student record
- ◆ Add, delete or amend a Course record
- ◆ List all the Students enrolled on a specified Course
- ◆ List all the Courses a specified Student has enrolled for