## 31927 32998 Application Development with .NET .NET Application

**Development - Spring 2023** 

**ASSIGNMENT-2: Group Project** 

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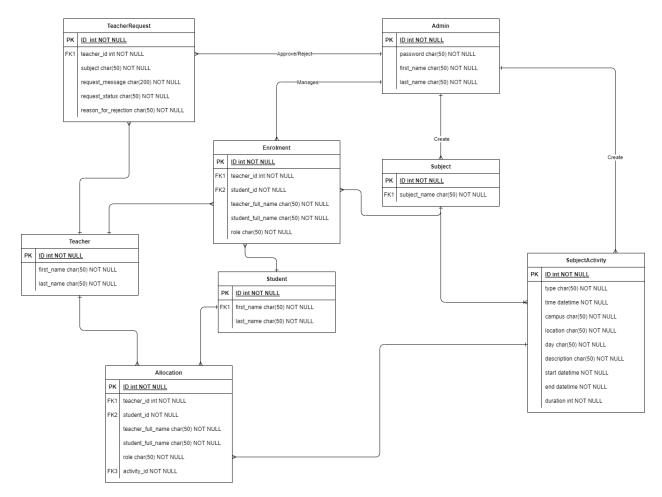
## Introduction and Summary of Project

This project consists of an enrolment and timetable system for students and teachers to enrol into subjects and allocate themselves to subjects classes/activities they wish to take. There are three unique roles in the system: Student, Teacher, and Admin. The unique roles will each have their own unique functions so they can interact with the system according to their needs. The aim of this project is to provide a way for teachers and admins to communicate with each other throughout the enrolment process and students to find ease in enrolling and viewing their timetable.

<u>Development approach (approach and methodology used in creating the application for example any frameworks like Entity Framework, libraries, or external tools)</u>

This project was created with Windows Forms .NET C# through the Microsoft Visual Studio IDE and a database created with .TXT files. An ERD was created according to the features of the system. This ERD was then utilised to create all of the interfaces and incorporate the .TXT file-based database within the system.

## Diagram



## <u>Team Member Contributions (a brief description with a summary table explaining the role of each team member)</u>

| Role                                 | Function No.1   | Function No.2   | Function No.3   |
|--------------------------------------|---|---|---|
| Student<br>(Ji Hyun<br>Choi)         | Enrolment to the subject - students can see all the available subjects in the system and enrol themselves on a subject they wish to take.   | Allocation to subject lectures/tutorials (we will use the term classes or activities in general) - after enrolling on a subject, students can allocate themselves to any available classes/activities they wish to take that are convenient for them.  Students can only allocate to a unique activity of a subject and must not clash with any other activity. | View timetable - once they have enrolled and allocated themselves, they can view their timetable, which lists all the activities they are allocated to. The listing will also display the subject of each activity they are taking. |
| Teacher<br>(Malcolm<br>McCredie<br>) | Request to teach a subject - a teacher can see all the available subjects in the system and submit a request to admin (expression of interest) if they wish to teach a particular subject.  | Allocation to subject activity - if their request is approved by admin, they can allocate themselves to classes/activities they wish to teach. Teachers can allocate to multiple same activities starting at different times as long as that activity is not taken by another teacher.  | View timetable - once they have enrolled and allocated themselves, they can view their timetable, which lists all the activities they are allocated to. The listing will also display the subject of each activity they are taking  |
| Admin<br>(Cuu<br>Dang)               | View subject request - admin can either approve or reject a teacher request (to teach subject) and if rejected they need to provide appropriate reason for rejection. If approved, the admin assigns the teacher to the subject to teach. | Add a subject and subject activities - admin can add a subject to the system and immediately following that is adding subject activities for the recently added subject.  | Remove teacher and student from a subject - admin can remove teachers and students from a subject this consequently remove student's and teacher's enrolment from a subject and all the associated activities.                      |