

# ECSE 321 - Intro to Software Engineering

## Detailed Design

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## 1 Description

The Detail Design Diagram consists of the following entities: ApplicationManager, ProfileManager, CourseManager, Application, Profile, Course, Job, Instructor, Admin, Student, Laboratory, and Tutorial. It consists of a Controller, called Controller, a Boundary, called View, and a Persistence, called Persistence XStream. The Controller uses the entities ApplicationManager, ProfileManager, and CourseManager to save, edit, and modify data within the model, which are then saved within a persistence layer. The functionality of the three "Manager" classes are listed below.

- ApplicationManager is in charge of Application, the job application created and submitted by the student for a job. It is associated with Application, Job, and ProfileManager.
- ProfileManager creates Admin, Instructor, and Student entities, all of which inherit from the Profile class.
- CourseManager creates Course entities.

## 2 Rationale

The three Manager classes were needed in order to give functionality to the user to create the entities associated with the manager classes, except for ApplicationManager creating a ProfileManager. The reason ApplicationManager is associated to ProfileManager is because otherwise the only way for ApplicationManager to have access to Student is by a direct association to it; this would cause a redundancy as now two manager classes are able to create Student entities, which is something we want to avoid.

## 3 Detailed Design Diagram