

Software Construction & Development

Section A, Fall 2024

Assignment 1

Due Date: Thursday, September 26, 2024

Event Scheduling

Consider an event scheduling system. This system intends to facilitate the scheduling of seminars (as part of a conference event) by identifying the conflicts that may occur during the process. Following functionality is required:

1. Read a file that contains a list of seminars along with its speaker and attendees information (comma separated), as in the following example:

```
Generative AI, John Adams, 12512, 13719, 12926,13643  
Ethical Hacking, Mark Philips, 13235, 13913, 13719, 12926  
Model Driven Development, Yang Xi, 12926, 14927, 13101, 13789
```

2. Read a file that contains scheduling information (Seminar, Room and Time-slot). For instance:

```
Generative AI, R203, 1  
Ethical Hacking, R204, 1  
Model Driven Development, R204, 2
```

3. Goal is to facilitate the scheduling through relevant functionality:
 - i) Find list of seminars that have overlapping attendees with a given seminar
 - ii) Find whether a seminar will conflict with others in the given time-slot
4. Implement your solution with proper object-oriented design techniques making use of associations, inheritance and polymorphism, wherever applicable. Suggested classes are: Seminar, Slot, Room, Scheduler. For simplicity, assume that rooms have sufficient capacity and all seminars are of same duration.