

Computer Engineering 174

Project Assignment

1 Introduction

The course project requires you to work in teams with your classmates in order to build a room reservation and scheduling system. You will be randomly assigned to a team of 6–8 people to form a company. Each company will build the same product. Your customer will be the teaching assistant. Dr. Noll and myself will act as “coaches”.

Your team will be further decomposed into smaller groups. You not only will need to work with members of your own subgroup, but also will need to work with members of other subgroups to ensure that the project works. The project is worth 30% of your course grade.

2 Team Assignment

To ensure fairness, you will be randomly assigned to a team. However, for the sake of simplicity, all members of a team will be registered in the same lab section. *Therefore, you cannot change lab sections once assigned to a team. If you do so, you will receive a zero for the project. Furthermore, lab attendance is mandatory.* Once assigned to a team, you will not be reassigned.

One major goal of this course is to expose you to team dynamics, team structures, and different process models. In the past, you have most likely worked either by yourself or with your best friend on a project. In the real world, this will certainly not be the case. We will be using two different process models in this course for the project: extreme programming (XP) and a traditional incremental model that models the senior design guidelines and which we’ll call the rational unified model (RUP).

The students in the class will be assigned randomly to teams as follows: Two XP teams will be chosen from the Monday lab section along with one RUP team. The entire Friday lab section will also be a RUP team. Once again, all teams will be building the same product. The only difference is the way in which the product is built.

3 Schedule

The project has the following major milestones:

- September 30 / October 4: Project kickoff, repository initialization (XP)
- October 14 / October 18: Design document (RUP)
- October 28 / November 1: Initial operational system (RUP), first release (XP)
- December 2 / December 6: Final system (RUP), second release (XP)

4 Grading

In addition to completing the programming component, each team will be required to do a presentation during the last week of class. The individual weighting of the components for the RUP teams is as follows:

- Design report: 20%
- Initial operational system: 20%
- Final system: 40%
- Presentation: 20%

For the XP teams, each of the eight iterations is worth 8% and each of the two releases is worth an additional 8%, and the presentation is worth 20%.