

cis20.2, spring 2010, lab I.1.  
software engineering exercise:  
system requirements and specifications

In the labs this term, we will be designing and developing two different systems:

- **bigNightOut**

as discussed in class on the first day, this system will support a range of features that let the user plan a big night out on the town, including (but not limited to): restaurants, movies, friends to go out with, etc.; system resources will include access to reviews, times, prices, locations and availability (in real-time)

- **betterPortal**

as you have probably experienced in the last week, this system will aim to satisfy your frustrations with the existing college registration system, including (but not limited to): courses offered, degree progress, advice, etc.; system resources will include access to reviews, times, locations and availability (in real-time)

Today, we will divide the class into two groups.

First, each group will write the REQUIREMENTS for one system.

Second, each group will write the SPECIFICATION for the other system (i.e., in response to the requirements written by the other group).

## 1. REQUIREMENTS

You are the client! What do you want? What do you want the user's experience to look like? What functionality do you want *from the user's point of view*? Be as specific as you can. Include drawings, if that is helpful.

**Remember:** you will be giving the Requirements Document to the software engineers, so make sure that you are clear about what you ask for!

## 2. SPECIFICATION

You have just received the **System Requirements** from the customer, and now you have to re-write the requirements from a developer's standpoint.

How will you design the underlying software to make the system work and fulfill the customer's requirements?

What will the **major software components** of your system be?

How will they be implemented?

How will you structure your development team—i.e., what roles do you need each subteam/member to play? who will develop which components?

What will be the major project milestones?