1 Introduction

You will specify, design, develop, and test a software system used by restaurants for handling table assignments and reservations. Part of your job will be to determine what exactly the software is supposed to do. However, the following is already known:

- The maître d' or other waitstaff will use the software to determine table assignments when patrons arrive.
- The waitstaff will use the software to handle reservations phoned directly to the restaurant.
- There will be a web-based interface used directly by patrons who make reservations via the restaurant web page.

2 Objective and Work Required

Your job is to work as a group to produce a useful piece of reservation and table assignment software by the end of the quarter. This software should be high-quality. This means:

- You must determine what exactly the software must do in order to be useful and successful.
- You must determine what non-functional properties of the software must exist in order for the software to be successful.
- You must determine what amount of functionality you can complete by the end of the quarter.
- You must design a system that the intended users can easily comprehend and want to use.
- You must produce a design that has the "3 good software engineering properties" (you will learn these properties in class)
- You must implement a system (in code) that has the "3 good software engineering properties".
- You must test the system to ensure it works in the way that users anticipate.

Some of the Labs we do throughout the course will guide you through some of these steps, as will the lecture sessions and section.

3 Approach

Writing any nontrivial piece of software involves some **risk**. There may be things we have to implement that we don't know how to do on the outset. There may be constraints on us, such as time or money, that may make completion difficult. We may invest all this time in building some software, only to have the user decide that they want something different. We try to **reduce our risk** in a number of ways. One way we reduce risk is to build an evolutionary prototype.

In this class the Evolutionary Prototype Milestone will be due on February 20, 2002. The Final Project Milestone will be due on March 18, 2002. Part of your job will be to determine what should be completed by the Evolutionary Prototype Milestone Deadline.

4 Required for Submission

More details will be provided later on what exactly is to be handed in on each of the Project Milestone dates. Assume at the very minimum that you will hand in a legible listing of your source code and a concise text description of your design.