



# Final Project Part I

## ICS4C/4U Software Engineering

The final project will give you the opportunity to make use of the programming concepts, statements, and structures that have been presented in this course to produce a ready-to-use software application. You may work independently or in groups of 2 people.

Your project needs to incorporate aspects of every programming concept you learned this year as outlined below:

- User input
- If or Switch statements
- Loops
- User created methods
- Objects and object arrays
- Accessing external data

You are expected to follow the stages of the Software Development Life Cycle to create your application.

***Assessment of this project will take into consideration both the process and the final product. This portion of the assignment must be submitted before moving on the next part.***

## Choose a topic

Start by choosing a topic. It can be one of the ones shown below or another topic of your choosing.

- Video Store Movie Reservation/Rental System
- Inventory System
- Plane/Train scheduling program
- Ticket or Reservation system
- Payroll System
- Interactive Game - Trivial Pursuit, Teaching Game, Mine Sweeper, Master Mind, etc.

## Problem Analysis

1. Gather information about your project. You can do this through the following means: Interviews/Questionnaires, Meetings/Brainstorming, Independent Research.

Remember that you are just gathering information about the features people will want in your program. The more thorough you are here the easier time you will have later.

**You do not need to submit your research.**

2. Fill out a project One Sheet and submit it to me for approval. You need to do this before doing any actual design or coding. Example One Sheets can be found on the class wiki.

**NOTE:** *You will receive a mark for all the Proposal and Design phases of your project once Part II of the final project has submitted.*