CS2104: Introduction to Problem Solving, Fall 2016
In-Class Activity 1
Writeup Due at 23:00 Friday, November 11
35 Points

This activity will involve joining a group of 5 to 7 people. We will spend roughly half an hour on the activity during each class during the week of November 7.

Once you have joined your group, be sure to exchange contact information with the other group members. You might want to help organize your work by determining a scribe, whose task is to collect the information generated during the group discussion. In the end, the group will need to produce a document and submit it to Canvas by the due date. Only one member of the group should submit the group writeup to Canvas, and the group writeup should clearly indicate the names of all members of the group.

Below you fill find a brief description for various problems. Your group will be assigned one of the problems. Your task will be to read the problem statement, and then apply appropriate techniques that we have learned in class to determine a clearly defined problem statement. Once you have determined a problem statement, you must then generate a significant collection of potential solutions. You should determine and apply appropriate methods that we studied in class for generating the solutions.

The document that your group turns in will have **two parts**. The **first part** will document the procedures used by your group to determine the problem statement. Be sure to clearly state the problem statement, and also clearly indicate what techniques the group used to generate the problem statement, and why those techniques were applied. You should not rely on only one technique for this stage. The **second part** will document the procedures used by your group to generate a wide list of candidate solutions. Be sure to clearly list the candidate solutions, and also clearly indicate what techniques the group used to generate the candidate solutions, and why those techniques were applied. You should not rely on only one technique for this stage.

Note that for this exercise, there will be no attempt to make decisions about which solutions are feasible or preferred. This activity is entirely about problem statements and generating candidate solutions. It is not about determining an implementation or deciding between solutions.

Problem A: It is the night before your biggest test in your most important class. You live in an apartment in a large apartment building. Unfortunately, the people in the apartment above you have decided that this is their night to throw a large, noisy party. What do you do?

Problem B: You live in an apartment with two roommates. One of the roommates has been continuously slacking on doing his/her share of the work around the apartment (doesn't do dishes or clean up, etc.). This has been causing a lot of friction among the three of you, but you have never actually discussed the matter directly. However, all of you realize that something has to change. What do you do?

Problem C: You have a part-time job on campus. The boss is rather demanding, and keeps pushing you to work more hours. However, as the semester wears on, you are finding that you have increasing troubles balancing your course workload, your job, and your other commitments to friends, family, and so on. What do you do?