

# COMP 112 Final Project Guide Sheet

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## I. Introduction

The final project in computer science COMP 112 is an opportunity to showcase the mastery of the skills you have gained in the course. Students have been drawn to the subject for a variety of reasons. A great benefit of being able to program is that it can be applied to just about any field of study. This provides an opportunity to apply what you have learned to a problem in an area of interest to you. This guide sheet outlines the process in developing your project, as well as provides the criteria that will be used to evaluate it.

The project will consist of four components:

- 1) completing two checkpoints on the development of the project
- 2) writing a python computer program addressing three questions
- 3) giving a mini-presentation in the last week of class
- 4) completing the Python code for your project

**Please refer to the course calendar for due dates of the respective parts.**

## II. Project Component Specifications

### Checkpoints (5% \* 2 = 10%)

In order to provide feedback as you are developing and implementing your project, you will be submitting various updates in the form of worksheets throughout the second half of the semester. The reason for these checkpoints is to provide useful feedback in a timely manner that will appropriately focus the scope of your project and assist you in the development of the actual final product; I may have suggestions for additional resources or alternate ways to achieve your goals. The worksheets will be found on Moodle.

In *Checkpoint 1: Project Proposal* you will propose a topic of study and enumerate three specific questions or goals you will be addressing with your project. You will also describe how you propose to go about achieving this. Again, this will be a good point for me to offer feedback and suggestions to make sure that the project is both sufficiently substantial for a final project, and that it is a tractable project with the resources available.

In *Checkpoint 2: Preliminary Results* you will provide an update of your results on any two of the three topics on which you are working. For example, you might provide your latest code and its output. You will be asked to explain any issues that may have come up, and we will work to revise the project or find the resources needed to make it work.

### **Mini-Presentation (10%)**

During the last week of the course, you will give a brief 3-4 minute presentation online in Moodle. This will provide you with the opportunity to share your accomplishments with your classmates and receive suggestions before the completed project is due. You will engage in peer review in which you will provide and receive feedback from your classmates on your project. You will also receive comments from your instructor.

Your presentation should be a screen recorded demonstration of your project. Please do not share your code, as your reviewers may or may not be working on some version of the same project. Do show us what your program can do so far, and discuss any features you haven't yet implemented that you plan to add in the final version.

These presentations will be online in the form of a Moodle "workshop". Each student will be assigned to view and review 4 students' presentations (assigned randomly) and each student will be reviewed by 4 students in the class. Be honest but fair in your evaluation of your classmates. Your grade will be divided into a portion based on the reviews your project receives (80%) and a portion based on how well you reviewed the other students' projects (20%). To grade how well you reviewed other students' work, Moodle workshops include an evaluation of how well the peer reviewers matched each others' assessments. Evaluations that differ markedly from other evaluations for the same student will receive a lower grade on the "reviewer" portion of the grade.

### **Computer Program (80%)**

The main component of the project is the actual computer program. This must be written in Python and should be turned in as a \*.py file. It should represent efficient code with choices of data structures and flow control appropriate to the problem being solved and commensurate with what you learned in this class. It should of course execute free of errors. It should make use of comments to explain what the program does and to provide signatures.

In addition, please also include:

- Heading with your name, section, and date
- Answer the following 4 questions (brief responses in complete sentences are appropriate).
  1. What were the 3 goals for your project?
  2. Were the goals met?
  3. How does this project illustrate your mastery of Python?
  4. What have you learned from doing this project?

### **Turning in your project**

Everyone must post the code to moodle by the due date.