

## **Programming Project Requirements:**

**Intermediate Project Design needs to be submitted by Nov 18.**

### **Intermediate Project Design:**

The design should be a rough draft of a document that should contain:

1. An outline of the basic architecture of your system, such as main data structures, main components of the algorithm, design of the user-interface for input/output, etc.
2. An outline of how you plan to experiment with your system. This should include how you will prepare input data to test the time and space complexity of your system, as well as inputs that will be useful in demonstrating your system. While I will give you guidance in specifying the basic requirements of your project, I urge you to be ambitious and creative in your design. You may wish to read up about your topic in more detail, and may even plan to implement and experiment with several competing algorithms. Initiative shown by you at this stage will be rewarded.

### **Final Project Demonstration:**

Once the project is completed, the following is expected of you:

1. A demonstration of your project, in which you show the various features of your system, such as its correctness, efficiency, etc. You should be prepared to answer detailed questions on the system design and implementation during this demo. We will also examine your code to check for code quality, code documentation, etc.
2. You should also hand in a completed project report, which is essentially a polished version of the project design document, but should also include some experimental results, e.g. charts of running time versus input size, etc.
3. You should also turn in your code and associated documentation (e.g. README files) so that everything can be backed up for future reference