EECS 3311 Software Design
Winter 2025
Sections M and Z
Deliverable 2 (Total Marks 100)

Overview

1. Redesign and implement your project using at least six different design patterns.
2. Decompose your system in the form of components and their interactions. You may use a component diagram to show the architecture of your project; Please also justify how your systems are decomposed.
3. Build a Java GUI-based application with finishing all the functionalities of the project, the implementation of your system should at least five design patterns used in your system; You can use csv files to simulate the database.
4. Prepare a report including:
    a. Justification for choosing these six designs patterns.
    b. Updated class diagram (contains the six design patterns), you can use sub-diagrams to illustrate each of the six design patterns.
    c. Component diagram. Justification for component decomposition and interactions
    d. Justification of how each Req can be achieved.
    e. A demo video (at most 20 mins) to illustrate how each requirement can be achieved (with sample data).

Late Penalty

Late submissions will be accepted for up to two days after the due date, with weekends counting as a single day. Submissions late up to 24 hours will incur a penalty of 20%, and submissions up to 48 hours will incur a penalty of 30%. No submissions after 48 hours of the deadline are accepted. The same time windows hold if there is an extension is given by the instructor.

Group Effort

This stage of the project is expected to be a group effort, with each member of the group contributing equally to a reasonable fashion. If it is determined that you are guilty of cheating on the assignment, you could receive a grade of zero with a notice of this offense submitted to the Dean of your home faculty for inclusion in your academic record.

Deliverables

Your submission, as noted above, will be in the form of an archive (e.g. zip) file. Please check eclass regularly for any changes related to the submission process. You are to complete the deliverable by:

1. Providing the required documentation (40 marks)

      a. Justification for choosing these six designs patterns.

      b. Class diagrams (contains six design patterns), you can use sub-diagrams to illustrate each of the six design patterns.

      c. Discussion about how each requirement can be achieved.

      d. Component diagram

      e. Justification for component decomposition and interactions

2. The implementation of a runnable project: (40 marks)

    3. All the requirements should be covered.

    4. All the six design patterns used in your system.

3. Demo video (at most 20 mins) to illustrate how each requirement can be achieve (20 marks)