## **Mini-Project Guidelines**

Students are expected to carry out a mini-project in the groups of 3-4 students per group. Students are free to choose their group members. The project is to be implemented using C++ and STL, making use of the Object-Oriented concepts and Data Structures learnt during the course. As far as possible, avoid using interactive inputs and graphical user interfaces. All the test case scenarios to be demonstrated using simple input/output text files which are also to be submitted along with project code.

Here are some ideas for mini-project. However, students can decide to choose a different project other than the one listed below with an approval from the instructor. However, no mini-project is to be repeated among the groups. Students are encouraged to use their imagination and creativity to flesh out the details. More weightage will be given to project completeness and attention to details.

- 1. Simulation of Elevator control system
- 2. Simulation of ATM machine
- 3. Simulation of Railway ticket counter
- 4. Simulation of Traffic Control system
- 5. Simulation of Coffee Vending Machine
- 6. Card game Solitaire
- 7. Dice game Ludo
- 8. Personal diary
- 9. Simple calculator
- 10. Simple spreadsheet

The schedule for mini-project deliverables:

- 20<sup>th</sup> Oct 2022: Project team along with one-page specifications of the problem statement
- 31st Oct 2022: Review of class design and implementation strategy
- 20<sup>th</sup> Nov 2022: Final submission
- 21<sup>st</sup> Nov 2022: Group project presentation