



1. Learning Objectives:

- To be able to develop a project in the Java programming language
- To be able to use object-oriented principles in the project

2. Prerequisites: Knowledge of Java Programming Language

3. Guidelines for Project

- Group size: 3-4 Persons per group
- An internal guide (i.e. Regular Faculty member) will be allocated to each Group.
- The project should be free from plagiarism of any kind.
- **Project should not be copied from earlier batches or downloaded from Internet. It should be ones' own creation.**
- Should use Object-oriented principles
- Project must use files to store data.
- Use of any of the linear or non linear data structure is essential.
- Project should be developed for solving a specific type of problem
- A proper documentation (optional) of the project, giving a clear description of the problem being solved may be provided. The documentation should also include description of the algorithms used in the problem solving, UML Diagrams and a description about the responsibility of all the classes that have been developed.
- It is encouraged to include a description of the iterations during the development process, and what was achieved during the iterations. This is not mandatory.
- Code should be self documented and should follow proper coding standards
- Should make proper use of data-structures available from the java.util package
- Proper use of Exception handling feature of the Language should be done
- Use of IDEs like eclipse, intellijIDEA, etc are not prohibited. Students may be encouraged to explore these IDEs on their own.
- **The final project completion should include an executable jar file being submitted for the project.**
- Though too-much significance may not be given to the GUI design, it should be simple and intuitive.

4. Knowledge about the following is expected to be demonstrated.

- Proper knowledge about the purpose of the application
- Object-oriented concepts
 - Exception-handling features of Java platform
 - Proper use of Multi-threading concepts
 - Proper use of Input/Output APIs
- Proper use of data-structures from the java.util package
- Proper use of the basic interfaces like Comparable and Comparator are expected to be known
- Proper use of GUI components and event-handling features



5. Minimum Expectations:

- Application must be developed using basic operations on various Data structures.
- Knowledge of data structures used and their storage representation.
- Knowledge of reason for using a particular data structure.
- Data Storage in files/Database.

6. Evaluation scheme

Evaluation Parameters:

Sr. No	Particulars Weightage
1. Project	50%
2. Code Changes	25%
3. Viva	25%