# **Instructions for the Project**

NOTE The project report (hard copy as well as soft copy) should necessarily be submitted to the concerned Lab instructor on  $23 - 28^{th}$  November. No extension of the deadline is permitted.

The evaluation will be done in the concerned lab and in two phases.

10 marks from the project will be included in the lab tests (marks division given below) also making the total marks of the project to be 25.

In lab test 1, out of 20 marks 2 marks will be added from the synopsis viva.

In lab test 2, out of 20 marks 8 marks from the final evaluation will be added.

# First phase

Week 10: 23 September - 03 October

**Project Synopsis submission and Evaluation (5 Marks)** 

## **Deliverables for phase 1:**

Project Title
Student details (Name, Enrl. No., Batch)
Problem Statement
Description of Project
Identified Classes
Class Diagram with Relationship
Reference material.

\*\*\*\*\*\* Permissible Group size is minimum 2 members and maximum 4 members.

\*\*\*\*\*\* In extreme cases approval from the faculty in charge is mandatory.

### **Second and Final Phase (35 Marks)**

### Format of Final Project Report

Nine Chapters each based on Increment as described below. In each chapter, give the partial Class Diagram of that Increment level and its C++ or JAVA code of classes definition i.e. Class name, data members and member functions with the access specifier and non-member functions prototype (if any). You are not supposed to provide the codes of any function.

Increment 1- Single Application, Single Class, Single Method

Increment 2 -Single Application, Single Class, Multiple Method

Increment 3- Single Application, Multiple Class, Multiple Method, Simple Relationship (One to one association)

Increment 4 -Single Application, Multiple Class, Multiple Method, Complex Association (one to many, many to many association, more than two classes in association)

Increment 5 -Single Application, Multiple Class, Multiple Method, Aggregation or/ and Composition

Increment 6 -Single Application, Multiple Class, Multiple Method, Inheritance (including Friend Functions)

Increment 7 -Single Application, Multiple Class, Multiple Method, Polymorphism (including Overloading and Overriding)

Increment 8- Apply Templates in at any level of increment(s) above.

Give the complete UML class diagram depicting all the relationships.

Give the complete C++ code of the template class or the template function used.

Increment 9-Apply Exception handling and assertions at any level of increment(s) above.

Give the complete C++ or JAVA code of the exception handling done.

What all to submit at the time of Evaluation:

- 1. Spiral Bound Report
- 2. Soft copy of the Report in a folder bearing name as roll numbers of all group members. E.g. 9103405\_9103421\_9103608

Your project will not be evaluated without hard copy and soft copy of the report. If you miss any one increment zero marks will be awarded.

- The project groups are asked to execute a query dependent upon their final class diagram by the instructor. [This implicitly requires the integration of the classes used by the students].
- Overall final evaluation is dependent upon the query execution by the students also.

Final evaluation of the project...(35 Marks +5 Marks =40 marks mapped to 15 marks of the lab )