**Object Oriented Analysis and Design with Software Engineering Laboratory**

**Subject Code: UE18CS355**

This course focuses on designing an application using Object Oriented Approach and Software Engineering Skills.

As part of the course, students are expected to do a project. The details of how this project must be done and evaluated is as described below:

**Guidelines:**

1: Project team has to identify an application case study ex: e-ticket/Banking/Recruitment System/Trading System

2: Team has to prepare a synopsis to enlist all the features of the chosen application.

3: Prepare a document consisting of requirements, planning, design, implementation and testing details

4: Report consisting of all the relevant documents has to be submitted.

**Project Team:**

The project will be done by a group of 3 students (3 and no more or no less). One or two teams in a class may be an exception with prior approval of the class teacher. Teams must be among students belonging to the same section.

**Laboratory Deliverables and Evaluation Details**

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| Week 1 | * Introduction to lab policies * Finalisation of Team and Title * Exploring the Design Tools (Star UML/Lucidchart/Visual Paradigm) and Libre Office / WPS |
| Week 2 | Requirement Documentation |
| Week 3 | Submit the Requirement Document in the specified format along with Use case model |
| Week 4 | Project Planning |
| Week 5 | Problem set-1 (Related to Software Engineering to be solved individually) |
| Week 6 | Problem set-2 (Related to Object oriented design to be solved individually) |
| Week 7 | Design -1 (Class Diagram, Component Diagram, System Architecture) |
| Week 8 | Design -2 (State Diagram, Activity Diagram, Sequence Diagram,) |
| Week 9 | Prepare Test Cases covering all functionalities |
| Week 10 | Implementation using either C++/Java/any OO language |
| Week 11 | Implementation using either C++/Java/any OO language |
| Week 12 | Implementation using either C++/Java/any OO language |
| Week 13 | Implementation and testing with designed test cases |
| Week 14 | Presentation/Evaluation with the report |
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**Evaluation Policy**

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| **ISA** | | |
| Project | 30 Weekly evaluation |  |
| Problem Sets (1&2) | 20 |  |
| **FSA** | | |
| Project Presentation with report | 20 |  |
| Quiz | 30 |  |