

# BSc (Hons) in Information Technology Year 2

# **Assignment 02**

# IT2020 - Software Engineering

**Semester 1, 2018** 

#### **Instructions:**

- 1. This assignment is to be done with the same group as per the OOP grouping.
- 2. This assignment has two parts.
- 3. Test case document Two members should contribute for the test document
- 4. Design pattern document Other two members should contribute for design pattern document
- 5. Late submission will be penalized by 10% reduction per day.
- 6. Assignment deadline will be published on course web.
- 7. Follow the link on course web for assignment submission Separate Links will be available for each batch. Make sure you submit it to the correct link.
- 8. "Turnitin" tool will be used to detect plagiarism
- 9. Plagiarism will be penalized.

### **Guidelines:** Entire group should submit one document

#### Part 01: Test case document -2 members should contribute for the test document (50 marks)

- Each member should select a class or a function *(minimum 20 LOC)* they have developed for OOP project. Include the selected code in the assignment.
- For that selected part each member should design test cases to achieve 100 % Statement Coverage and 100% Branch Coverage. For Branch coverage draw control flow graphs as needed.

1. Code selection (minimum 20 LOC)	05 marks
2. Statement coverage	20 marks
3. Branch coverage with Control flow graphs	25 marks

# Part 02: Design Pattern – Other two members should contribute for design pattern document Identify one design pattern each for the OOP Project.

1.	. Identification of design patterns and justification explanation	25 marks
2.	. Justification with providing class diagram with appropriate methods	25 marks

<sup>\*\*</sup>Compulsory: Please indicate the Student ID for the each part the group member has completed.