

## **CSE110: Project Description**

### **Objectives**

Objectives of the term project are as follows:

- a. Students would practice the programming constructs which were taught and demonstrated in the lab to develop a Java-based application.
- b. Students would explore new technology and programming constructs in Java which would be learned by themselves and could successfully apply to develop an application.
- c. Students are expected to work in a team environment.
- d. Students would deliver the design of the system using class diagrams as such they were in a real software developing firm.
- e. Students would prepare a professionally-written report on term project.

### **Scopes of the Project**

Students may choose to develop a Java-based application as their term project from different topics. A few of them has been listed below:

#### *1. Information System Implementation*

- a. Student Information System
- b. Result Processing System
- c. University Information System
- d. Library Management System
- e. Hotel Management System
- f. Hospital Management System
- g. Vehicle Pool Management System
- h. Payroll Management System
- i. Railway/Bus Reservation System
- j. Inventory Management System
- k. Salary Management System
- l. Car Sales System
- m. Departmental Store Management System and so on

\* It would be highly appreciated and encouraged that students would use an underlying Database to build these systems using Java Database Connectivity (JDBC).

#### *2. 2D Game Development*

- a. Image Puzzle
- b. Snake
- c. Breakout
- d. Tetris
- e. Minesweeper and so on

### 3. Tools Development

- a. Development of a simple Chat Engine
- b. Development of a simple Word Processor
- c. Development of a simple Paint Application
- d. Development of a simple Media Player and so on

### What to do next?

- a. *Team Formation*: A team will be formed by maximum three students (two students in only one group). There would be exactly one student in a team from each of the pot as given below:

Pot A	Sumona, Asif, Muktadir, Nazia, Maiyaz, Ashikur, Iram, Salem
Pot B	Fabiha, Sanjida, Tasnia, Sarnali, Sadia, Tumpa, Ornob, Fatin
Pot C	Khalid, Nayeem, Shamima, Kashfia, Israk, Tanveer, Mehedi

- b. *Submission of Concept Note*: After forming teams, each team must submit a concept note that contains a one-page high-level summary about their project along with the name of the team members. **Hardcopy must be submitted by 18 March 2019.**
- c. *Submission of Initial Class Diagram*: Each team must submit a preliminary class diagram, representing all the classes and their interaction within the application. This class diagram can be changed later as required. **Hardcopy must be submitted by 25 March 2019.**
- d. *Preliminary Demonstration of the Application*: Each team must demonstrate the preliminary version (beta version) of their application during the lab on **01 April 2019.**
- e. *Final Demonstration and Report Submission*: Complete code and report must be submitted. **Demonstration and Report submission date will be announced later.**

### Marking Rubrics:

Marking Criteria	Points
1. Appropriate use of Classes and Objects	2
2. Use of concepts such as Association, Inheritance, Abstract class and Interface	2
3. Use of Files	1
4. Use of Graphics such as JavaFX, Swing etc.	1
5. Use of Advanced Concepts such as Generics, Multi-threading, JDBC etc.	1
6. Ability to work in a team	1
7. Report Writing	3
<b>Total</b>	<b>11</b>