Course Outline for CSE-300

Part A

1. Course Code: CSE-300

2. Course Title: Software Development Project (Sessional)

3. Course Type: Core Course

4.Level/ Term: Level: 3   Term: II

5. Academic Session: 2020-21

6. Course Teacher: Animesh Chandra Roy, Assistant Professor, Dept. of CSE, CUET
                          Md. Billal Hossain, Lecturer, Dept. of CSE, CUET

7. Prerequisite(s):
- Basic Programming Knowledge (C/C++)
- OOP Concept
- Data Structure
- Algorithms Design and Analysis

8. Credits: 0.75 (3 hours of lab work per week)

9. Contact Hours: 3/2 hours of lab work per week

10. Total Marks: 75

11. Rational of the Course:

In this course, Students will collaborate on building a realistic piece of software, applications concerning with technical complexity (e.g., performance constraints, changing requirements) using optimal algorithms. This course is important for the students as it will help them to work on a team project and will give a glimpse of how to build a real-world application. This is a required course for all the students enrolling B. Sc. Engg. in CSE program. The catalogue description of the course is

Course Content:

Sessional based on the following topics:

Data Processing; Algorithm based project implementation; Multimedia Application: Animation, Learning Apps, DVD Apps; Network/Internet Application: Yahoo, Skype, PC^2, Email-client; Mobile Apps; OS: Android/IOS/Windows.

12. Course Objectives:
(a) Familiarization with real life software/applications
(b) To learn in depth about the analysis and design procedure of a software
(c) To implement project in such a way that is suitable for practical applications

13. Course Learning Outcomes (CLOs) and Mapping of CLOs with Program Learning Outcomes (PLOs)

a) CLOs

No.	Course Learning Outcomes (CLOs)	Bloom's Level (Optional)
CLO1	Implement any simple idea/algorithms	C4
CLO2	Basic knowledge of analyzing and designing a software system	C5, P7
CLO3	Design and Implement projects that is suitable for end users	C5, P7

b) Mapping of CLOs with PLOs

No.	CLOs	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
1	CLO1	X											
2	CLO2		X										
3	CLO3			X									

Part B

14. Course plan specifying content, CLOs, co-curricular activities (if any), teaching learning and assessment strategy mapped with CLOs

<div align="center">Course Plan</div>

	Topic	Teaching-Learning Methodology	Assessment Method	Corresponding CLOs
Week-01	Course overview	• Recap previously learned courses: Object-Oriented Programming, Data Structure, Algorithms Design and Analysis • Learn about software design procedure	Lab Performance	• CLO-1
Week -02	Project topic selection	• Get idea about various projects • Know about Windows/Android applications • Select topics that is suitable for practical implementation	Report	• CLO-2
Week -03	Design and analysis of individual projects	• Collect required information for the project • Select appropriate tools / framework / environment for implementing the project	Lab Performance Report	• CLO-2
Week -04	Monitoring improvement of project	• Find out the limitations/bugs in the project • Improve project quality	Lab Performance Report	• CLO-3
Week -05	Final Project Submission		Lab Performance Report	• CLO-3

Week -06	Presentation and evaluation of the project		Presentation Report	• CLO-3

Part C

15. Assessment and Evaluation

1) Assessment Strategy

Quizzes	15%
Viva-voce	15%
Class performance including reports	60%
Attendance	10%
Total	100%

2) Marks distribution:
   a) Continuous Assessment: 70%
   b) Summative: 30%
3) Make-up Procedures:
   • Course teacher may arrange for makeup lab schedule if necessary.

Part D

16. Learning Materials

Textbook(s):

Reference: Various online resources depending on the project that the student is interested in.