Software Engineering(2160701)

Practical List

Create groups of 3-5 students from your own practical batch and perform following experiments in groups for the system you have registered with your faculties.
Each group should register for different systems. E.g. Bank Management System, Hotel Management System, Online Examination System etc.

Experiment 1

Study the complete Software Development Life Cycle (SDLC) and analyze various activities conducted as a part of various phases. For each SDLC phase, identify the objectives and summaries outcomes.

Experiment 2

Consider yourself as system analyst for the system you want to develop. Gather requirements from all the stakeholders of your system. Document the requirements in the form of questionnaires.

Experiment 3

Analyze your system at a high level and prepare the following UML diagrams for your system.
a. Class Diagram b. Use Case Diagram c. Sequence Diagram d. Activity Diagram e. State Diagram

Experiment 4

Create SRS (Software Requirements Specification) document for your system as per IEEE format. This format is available on our intranet.

Experiment 5

Perform structured analysis(SA) to convert analysis model into Data Flow Diagram (DFD) up to level 2.

Experiment 6

Perform structured design (SD) to convert DFD into structure chart using transform analysis and transaction analysis.

Experiment 7

Discuss which architectural style you are going to use for your system and why? Draw E-R diagram and prepare Database design of your system using normalization.

Experiment 8

Perform detailed design and Implementation of any 3 modules from the modules you have designed.

Experiment 9

Perform testing for the 3 modules you have implemented using black box and white box testing methods.