

National University of Computer & Emerging Sciences, Karachi

Spring 2024 Project Max. Marks: 08



Course Code: SE-4001 Course Title: Software Re-Engineering

Question: Analyze and explore state-of-the-art legacy system which need maintenance in order to get up-to date:

- Line of code range must be from 1500-2000 LOC
- Classes range from 12-15.
- It must be an Object-oriented project.
- Project may be of any nature; desktop-based application, web-based application etc.
- Any programming language is admissible.
- Optional includes Project may be deployed on GitHub and may have associated data base.
- Deliverable includes the problem **Code**, **description** of project, **stated technologies** in the project, **stakeholders** involved in the project, **scope**, and features of the project.
- Create to-the-point functionality (functional requirements).
- Create the user stories (use case descriptions & use case diagrams) based on stated functional requirements.
- GUIs based on user stories.
- Create a labeled domain model and system sequence diagram as a part of high-level design diagrams.
- Refine the high-level design models to create the class diagram and sequence diagram.
- Highlight the replicated code, cohesion and coupling issues in your code (if any).
- Restructure the system at least to the level of abstraction. E.g., appropriate naming convention of the classes and methods. Alignment of this information in all analysis and design artifacts.
- Important instruction: There should be a nexus among these artifacts as discussed in the class.

Proposal Submission deadline: 18th February, 2024, 11:59 PM

Project submission deadline will be announced later

