Software engineering assignment

Software Engineering Assignment Questions

1. Software Development Life Cycle (SDLC)

 Explain the different phases of the Software Development Life Cycle. Provide examples of activities in each phase.

2. Agile Methodology

 Describe the Agile methodology. How does it differ from the Waterfall model? Highlight its advantages and challenges.

3. Software Design

What are the principles of good software design? Explain with examples.

4. UML Diagrams

Draw and explain the purpose of any two UML diagrams: Use Case Diagram, Class Diagram, or Sequence
Diagram.

5. Software Testing

O Differentiate between black-box testing and white-box testing. Provide examples of scenarios where each is used.

6. Software Maintenance

What are the types of software maintenance? Explain how each type is applied in real-world projects.

7. Requirement Engineering

 Explain the process of requirement engineering. How do you ensure that the requirements are clear and complete?

8. Version Control Systems

 Discuss the importance of version control systems in software development. Compare Git and SVN in terms of features and usability.

9. Risk Management

What are the common risks in software engineering projects? Describe strategies to mitigate these risks.

10. Software Quality Assurance

 Explain the importance of Software Quality Assurance (SQA). What are the key activities involved in ensuring quality during software development?

Instructions for Submission:
Provide detailed answers to each question.
Include diagrams wherever necessary.
Submit the assignment as a PDF by the given deadline.