Assignment

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Q1 :- Answer:

The water fall model is an SDLC model that is used for the development of software. The whole process of software development is divided into separate phases and different phases of the waterfall model are

Requirement and Analysis phase
System Design phase
Implementation phase
Testing phase
Deployment Phase
Maintenance phase

Advantages of Waterfall Model

- Best for the small project where requirements are well-defined.

- Disciplined, you must complete one phase before moving to the next phase.

- Simple and easy to understand and use.

Disadvantages of Waterfall Model

- Not good for complex and object-oriented projects.

- Testing period comes quite late in the developmental process.

- Error can be fixed only during the phase.

Q2 :- Answer:

Different stages of SDLC are:

Requirement: where you take requirement from the user about what the software should contain.
Analysis: the requirement from the user and converting into a document.
System Design: design all the features and operations as mentioned in the document.
Implementation: coding all the functions and building the software.
Testing: testing the software before deployment.
Deployment & Maintenance: Deploy the software in the Real World and maintain as user needs.

Q5 :- Answer:

Non-Functional requirement for Bike racing game

- Have a fun story line if contain.

- Must be Compatible for low end devices.

- Have time limit for children under 13.

Non-Functional requirement for online Banking system

- Should have good privacy & Security of the User Data.

- Should not allow same user to create more than one account.

- Should have an age limit of 18 before allowing to have an account.

Q3 :- Answer:
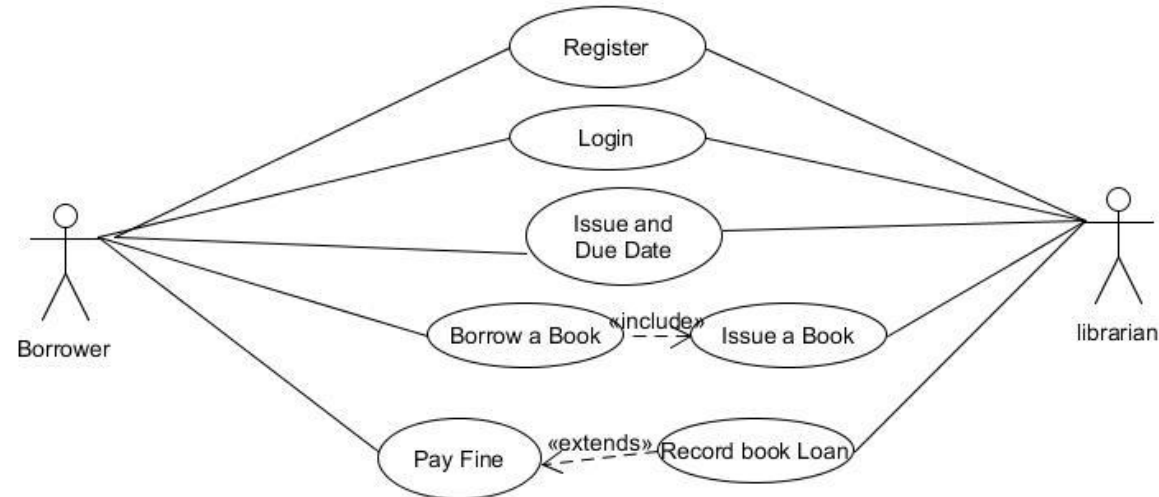
USER-LEVEL REQUIREMENT:
• RECORD A BOOK LOAN

SYSTEM-LEVEL REQUIREMENT:
• Check if the Borrower is logged in or not?
• If logged in and user has the ISBN of the book that user wants to borrow, then search the ISBN in the book stack.
• If found, search that is there any copy available or not?
• If available, retrieve it from the stack and issue it to the user.
• And add the due date to the Record A Book Loan with Borrower ID.

Q4 :- Answer:
Use Case Diagram:

Domain Model: