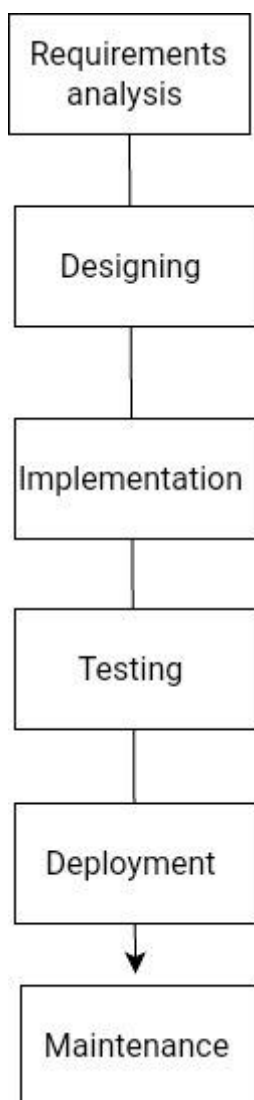


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## Assignment – 1

Q1 ,2),3) what is sdlc/SDLC phases/phases of waterfall model with basic introduction.

ANS SDLC is a process used to design,develop and test high quality software which meets customers requirements



## Requirement analysis

Business analyst and project manager set up a meeting with client to gather all the needs of the customer about the build.

## DESIGN

SRS is the reference for the product to be developed, based on the requirements defined in srs, more than one architecture is proposed and documented in DDS

## IMPLEMENTATION

In this phase the actual development begins and the programming is built, the implementation of design begins concerning writing code

## TESTING

After the code is generated, it is tested against the requirements of customers to make sure the software works as per user expectations

## DEPLOYMENT

Once the software is certified, the software is ready for the deployment

## MAINTENANCE

The procedure where the care is taken for the developed software.

Q4

## PHASES OF SPIRAL MODEL

The spiral model has 4 phases

1 – Planning

2 – Risk Analysis

3 – Engineering

4 – Review

### PLANNING

In this, the scope of project is determined and a plan is created for the next iteration of spiral

### Risk Analysis

The risk associated with project are identified and evaluated, and if needed the project would be sent back to planning phase

### ENGINEERING

Here the software is developed based on the requirement gathered in previous phase

## REVIEW

The software is evaluated to determine if it meets all the user requirements and it is of high quality

Q5

## WHAT IS SOFTWARE TESTING

It is a process used to identify the correctness, completeness, and quality of developed software

Q6

## WHAT IS AGILE METHODOLOGY

Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product. Agile Methods break the product into small incremental builds.

These builds are provided in iterations.

Each iteration typically lasts from about one to three weeks.

## PROS

- It is realistic approach to software development
- Promotes teamwork and cross training
- Resources requirements are minimum
- Little or no planning required
- Easy to manage
- Gives flexibility to developer

## CONS

- Not suitable for complex dependencies
- More risk of sustainability, maintainability and extensibility
- High individual dependency
- Transfer of technology to new team member maybe quite challenging due to lack of documentation

## Q7

### WHAT IS SRS

\*A software requirements specification (SRS) is a complete description of the behavior of the system to be developed.

\*It includes a set of use cases that describe all of the interactions that the users will have with the software.

\*Use cases are also known as functional requirements. In addition to use cases, the SRS also contains nonfunctional (or supplementary) requirements.

\* This standard describes possible structures, desirable contents, and qualities of a software requirements specification

Q8

WHAT IS OOP

OOP is a programming paradigm based on the concept of object, which can contain data and code. The data is in the form of field and code in form of procedures

Q9 BASIC CONCEPT OF OOP

- Oop is type of programming that is based on object rather than function and procedures
- Individual object are grouped into classes, OOP implement real world entities like

inheritance, polymorphism, etc into programming

- It also allow binding and coding together

Q10

## AGILE MANIFESTO PRINCIPLES

- Satisfying customer through early and continuous delivery of valuable work
- Breaking of big work into small task
- Creating processes that promote sustainable effort
- Maintaining a constant pace for completed work
- Welcoming changing requirements even late in project
- Measuring progress by the amount of completed work
- Continually seeking excellence
- Harnessing change for a competitive advantage

Q11

## WHAT IS INHERITANCE

When the object of one class can acquire the properties of another class is called inheritance

### Q12 WHAT IS OBJECT

Any real world entity is called object eg pen,tws,mobile,etc

### Q13

### WHAT IS POLYMORPHISM

It is the ability to react the same thing in different way

There are two types of inheritance

- Overloading
- Overriding

### Q14

### WHAT IS ABSTRACTION

It means to hide irrelevant data from user, if user play game then there is no need for user to know



the source code of game, the user would just interact with the output/presentation

#### Q15 WHAT IS CLASS

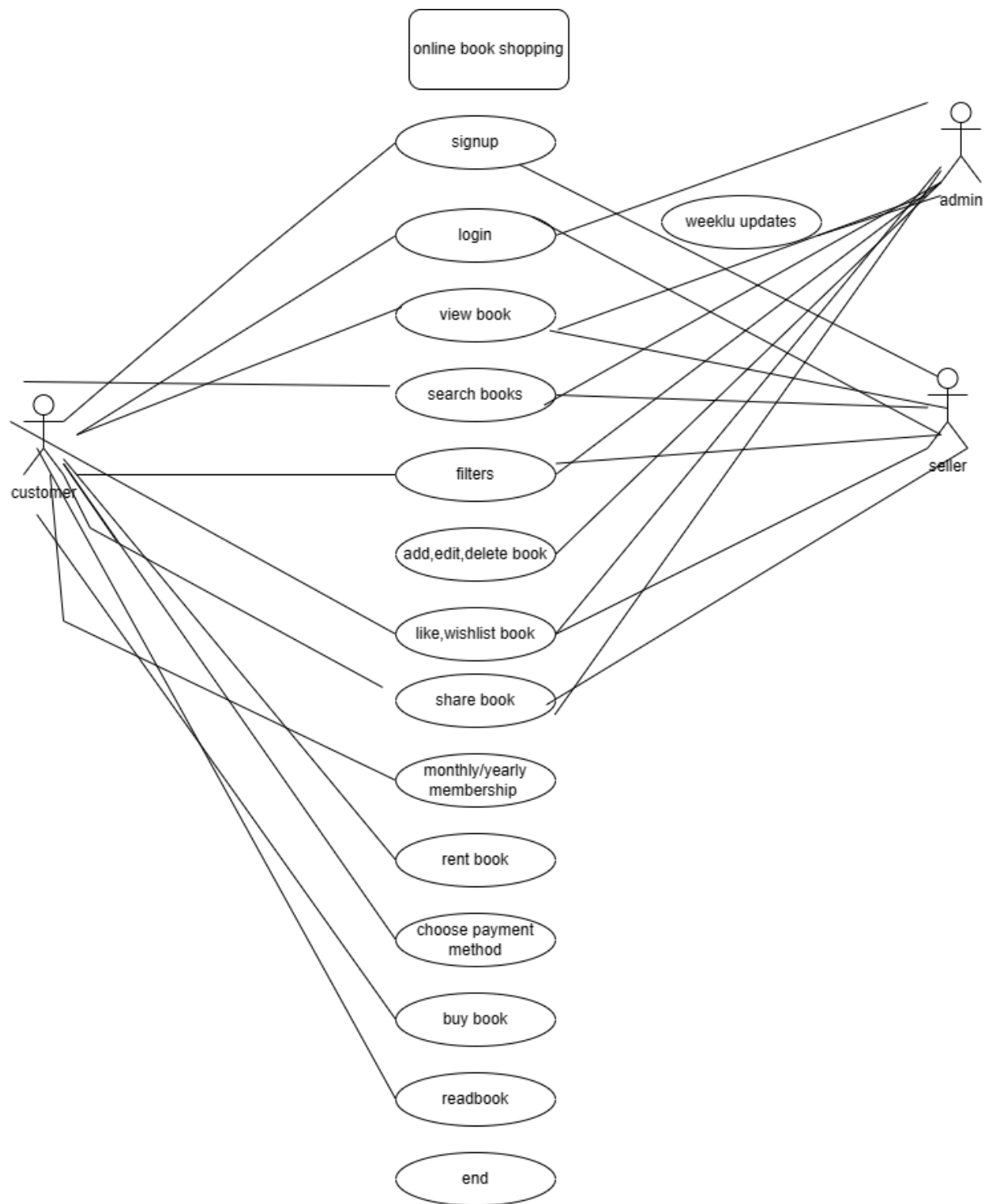
It is a blueprint of object which defines some properties and behaviour

#### Q16

##### ENCAPSULATION

It means wrapping of data in a single unit

#### Q17 ONLINE BOOK SHOPPING SITE USECASES



# Q18 USE CASE ON ONLINE SHOPPING PRODUCT



# ONLINE SHOPPING SITE WITH GATEWAY



# Bill payment paytm

