#### What is SDLC?

SDLC stands for Software Development Life Cycle. SDLC is development process that consist planning, implementation, documentation, testing, deployment, maintenance.

## What is software testing?

Software testing is a process used to identify errors, bugs in a program or application. Also, software testing is a process used to identify the correctness, completeness and quality of computer software.

## What is agile methodology?

Agile methodology is a combination of iterative & incremental process model with focus on process adaptability & customer satisfaction by rapid delivery of software product.

Agile model break into smaller incremental builds.

#### What is SRS?

SRS stand for software requirement specification. SRS is a complete description of the behaviour of the system ti be developed. It includes sets of use cases that describe all interaction that user have with the software.

#### What is OOPS?

Oops is object oriented programming. Oop is focus on object/data rather than process.

### Write basic concept of oop?

It has 6 concepts of OOP :-object, class, encapsulation, inheritance, polymorphism, abstraction.

### What is object?

Object is part/instance/example representative of class.

### What is class?

It is a blueprint for an object.

### What is encapsulation?

Encapsulation is wrapping up of data into a single unit.

#### What is inheritance?

Inheritance is ability to adapt the behaviour of parent class to child class.

Here two or more class are in parent-child relation.

## What is polymorphism?

Polymorphism is having many form/types. And ability to represent in different way.

### Write SDLC phases with basic introduction.

There is 6 SDLC phases as given: requirement gathering, analysis, design, implementation, testing, maintenance. Their basic introduction as below:

Requirement gathering: it is a document that require what customer needs. Requirement has two types which is Functional & non-functional.

Analysis: this phase defines the requirement of the system, and how these requirement will be accomplished.

Design: the design phase is for specifying software & system design requirement.

Implementation: in this phase developer start build their system by writing code. In this phase we have to build what exactly has been requested.

Testing: in this phase testing team has start to verify that application is working accordingly as per client need.

Maintenance: it is the process of optimizing software as well as repair defects.

## **Explain phases of waterfall model?**

- **1.**Requirement collection: this phase is to understand the exact requirement of customer.
- **2.**Analysis: it defines overall software architecture design document.
- **3.**Design: this phase need detailed design document to understand system, software architecture.
- **4.**implementation: this phase is coding phase that based on design specification.

**5.**Testing: in this phase software is tested to ensure software is free from bugs.

**6.**maintenance: this phase involves fixing any issue after the deployment of software.

## Write phases of spiral model.

There are four phases in spiral model: Planning, risk analysis, engineering, customer evaluation.

# Write agile manifesto principles.

Individual & interaction, over processes & tools,

Working software over comprehensive documentation.

Customer collaboration over contract negotiation

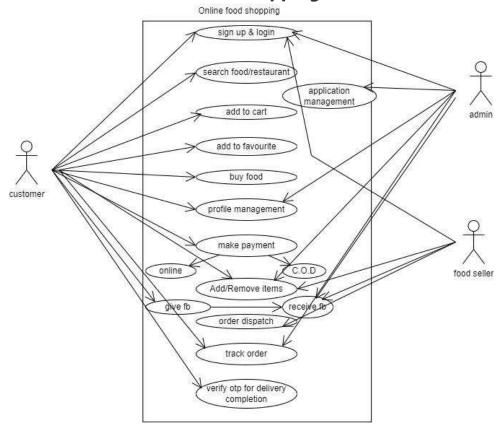
Responding to change over following a plan.

# Explain working methodology of agile model also write pros & cons

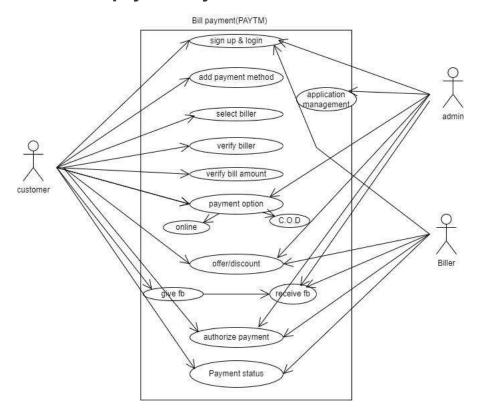
Agile model is a combination of iterative & incremental process model that focus on process adaptability & customer satisfaction by delivery of working software.

Agile model break product into small incremental builds.

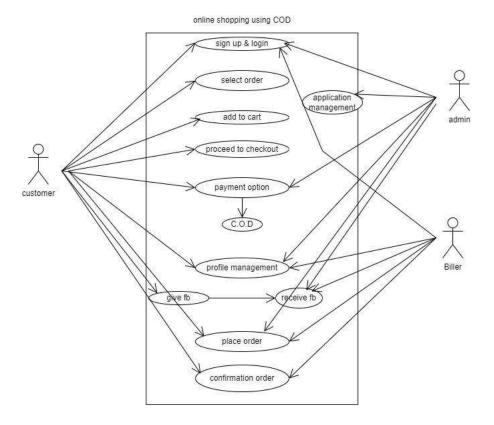
# Draw usecase online food shopping



# Online bill payment system(PAYTM)



# Usecase on online shopping using COD



# Usecase on online shopping product using payment gateway

