#### • What is SDLC

-SDLC is a structure imposed on the development of a software product that defines the process for planning, implementation, testing, documentation, deployment, and ongoing maintenance and support. There are a number of different development models. SDLC (software development life cycle)

## • What is software testing?

Software Testing is a process used to identify the correctness, completeness, and quality of developed computer software.

## 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.

#### • What is SRS

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

#### • What is oops

Identifying objects and assigning responsibilities to these objects

## • Write Basic Concepts of oops

Object, Class, Encapsulation, Inheritance, Polymorphism-1 Overriding 2 Overloading, Abstraction

#### What is object

That is both data and function that operate on data are bundled as a unit called as object.

### What is class

A class represents an abstraction of the object and abstracts the properties and behavior of that object.

### • What is encapsulation

Encapsulation is the practice of including in an object everything it needs hidden from other objects. The internal state is usually not accessible by other objects.

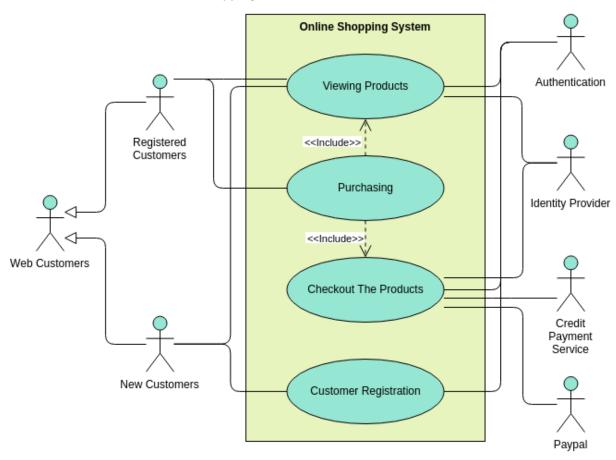
#### • What is inheritance

Inheritance means that one class inherits the characteristics of another class. This is also called a "is a" relationship

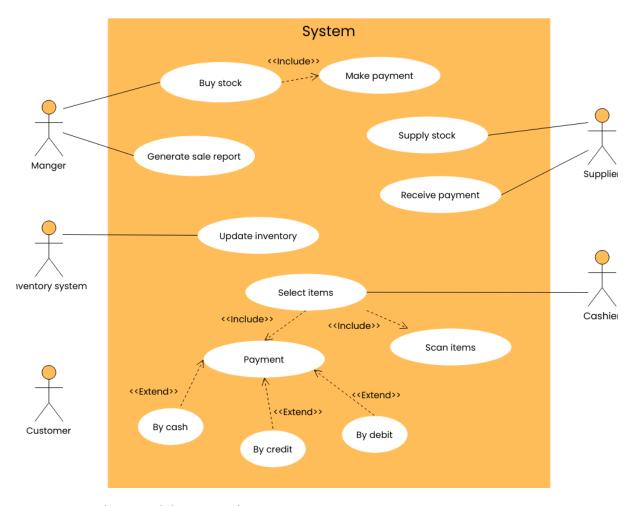
# • What is polymorphism

It allows different objects to respond to the same message in different ways, the response specific to the type of the object.

## • Draw Usecase on Online book shopping



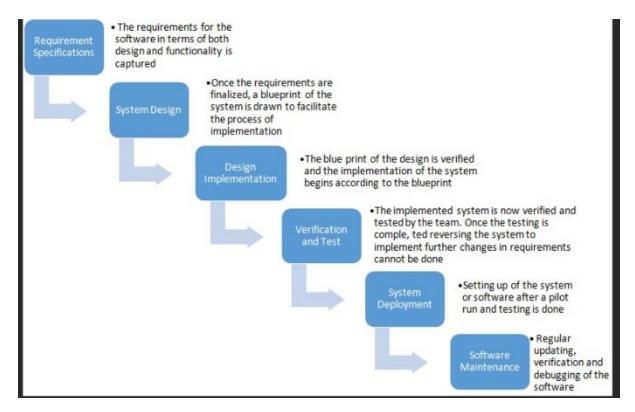
• Draw Usecase on online bill payment system (paytm)



• Write SDLC phases with basic introduction

Requirements Collection/Gathering	Establish Customer Needs
Analysis	Model And Specify the requirements- "What"
Design	Model And Specify a Solution – "Why"
Implementation	Construct a Solution In Software
Testing	Validate the solution against the requirements
Maintenance	Repair defects and adapt the solution to the new requirements

• Explain Phases of the waterfall model



- Write phases of spiral model
- 1.planing
- 2.risk analysis
- 3.evolving system
- 4.customer evaluation
- Write agile manifesto principles
  - 1. Individuals and interactions over processes and tools People should ideally be much more valued than tools or processes because it is clients who set up business expectations, needs, and requirements. Thus, people drive the development process.
  - 2. Working software over comprehensive documentation
  - 3. Customer collaboration over contract negotiation
  - 4. Responding to change over following a plan

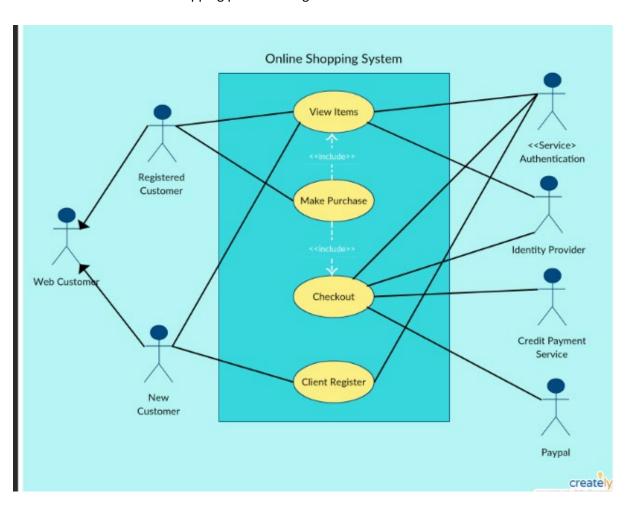
# >Explain working methodology of agile model and also write pros and cons

Is a very realistic approach to software development Promotes teamwork and cross training. Functionality can be developed rapidly and demonstrated. Resource requirements are minimum. Suitable for fixed or changing requirements Delivers early partial working solutions. Good model for environments that change steadily. Minimal rules, documentation easily employed. Enables concurrent development and delivery

within an overall planned context. Little or no planning required Easy to manage Gives flexibility to developers

Cons-Not suitable for handling complex dependencies. More risk of sustainability, maintainability and extensibility. An overall plan, an agile leader and agile PM practice is a must without which it will not work. Strict delivery management dictates the scope, functionality to be delivered, and adjustments to meet the deadlines. Depends heavily on customer interaction, so if customer is not clear, team can be driven in the wrong direction. There is very high individual dependency, since there is minimum documentation generated. Transfer of technology to new team members may be quite challenging due to lack of documentation.

• Draw usecase on Online shopping product using COD.



• Draw usecase on Online shopping product using payment gateway.

