

## Assignment-1

### 1)What is SDLC?

**ANS:-** SDLC full form is software development life cycle. SDLC refers to a methodology with clearly define process for creating software. SDLC have different phases.

- 1> Analysis phase
- 2> Design phase
- 3> Implementation phase
- 4> Testing phase
- 5> Maintance phase

### 2) What is Agile methodology?

**ANS:-** Agile model is made up both iterative model and incremental model. It break product in small part.

Small project can be implemented very quickly. For large projects, it is difficult to estimate development time.

Error can be fixed in middle of project. In every iteration you get working on planning, requirement gathering, design, coding, unit testing, acceptance testing.

It is suitable for fixed or changing requirement project and deliver partial working. Agile is mostly used and liked model.

Agile model focus on process adaptability and client satisfaction by deliver of working software product.

### 3) What is SRS?

**ANS:-** SRS full form is software requirement specification.

The production of the requirements stage of the software requirements specifications. The SRS is a specification for a specific software product, program, or set of applications that perform particular functions in a specific environment. It serves several goals depending on who is writing it.

It describe in which language software are developed which database is used, which platform is supported by software.

It describe functional andf nonfunctional requirement. SRS is a blue print of software to be developed.

#### **4) What is oops?**

**ANS:-** Oops full form is object oriented programming .

Object-oriented programming is a compuer programming model that organizes software design around data, or object can be defined as a data field that has unique attributes and behavior.

#### **5) Write basic concept of oops?**

**ANS:-** 1> Class                      3> Encapsulation      5> Inheritance

2> Objects                      4> Polymorphism      6> Abstraction

Polymorphism is two types 1> Overriding 2> Overloading

#### **6) what is object?**

**ANS:-** An object can be defined as a data field that has unique attributes and behavior. object is real word entity. When object is created memory allocated.

#### **7) What is class?**

**ANS:-** Class is collection of object or logical entity. Every class will be having variables and methods.

#### **8) what is encaptulation?**

**ANS:-** binding variable and method under single entity.

#### **9) what is inheritance?**

**ANS:-** acquiring the properties of one class to another class. Child class can acquire properties of perent class.

Five types of inheritance.

1> single inheritance 2> multilevel inheritance 3> multiple inheritance 4> hierarchical inheritance 5> hybrid inheritance

#### **10) What is polymorphism?**

**ANS:-** Polymorphism Is performing same task or method in different way.

Two types of Polymorphism

- 1> runtime Polymorphism
- 2> compiletime Polymorphism

### **11) What is RDBMS?**

**ANS:-** RDBMS full form is relational database management system.

The software used to store, manage, query and retrieve data stored in a relational database is called relational database management system.

It contain several tables and each table has primary key and all table are very well organized so it can be accessed easily in RDBMS.

RDBMS is provide bridge between user and application and database.

### **12) what is SQL?**

**ANS:-** SQL full form is structure query language.

SQL is language of database it provide database creation, deletion, fetching row and modifying row.

### **13) Write SQL commands?**

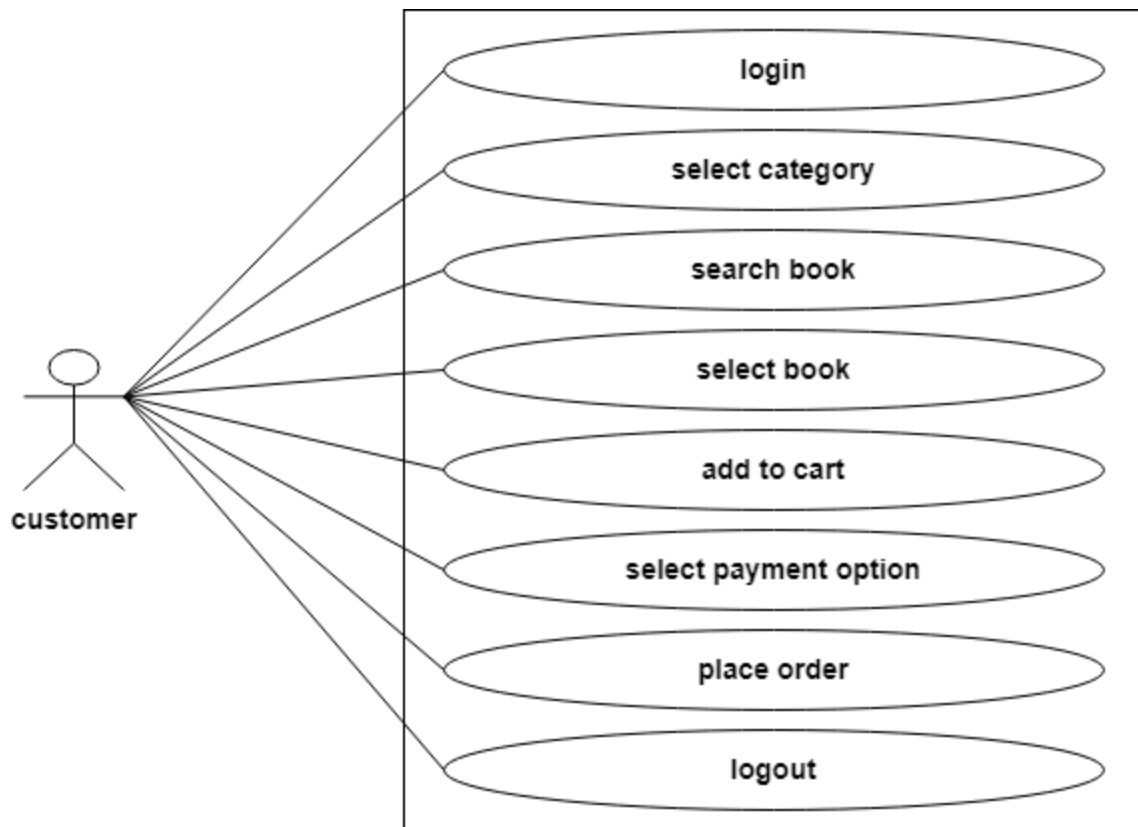
**ANS:-** 1> DDL= Data Definition Language

2> DML=Data Manipulation Language

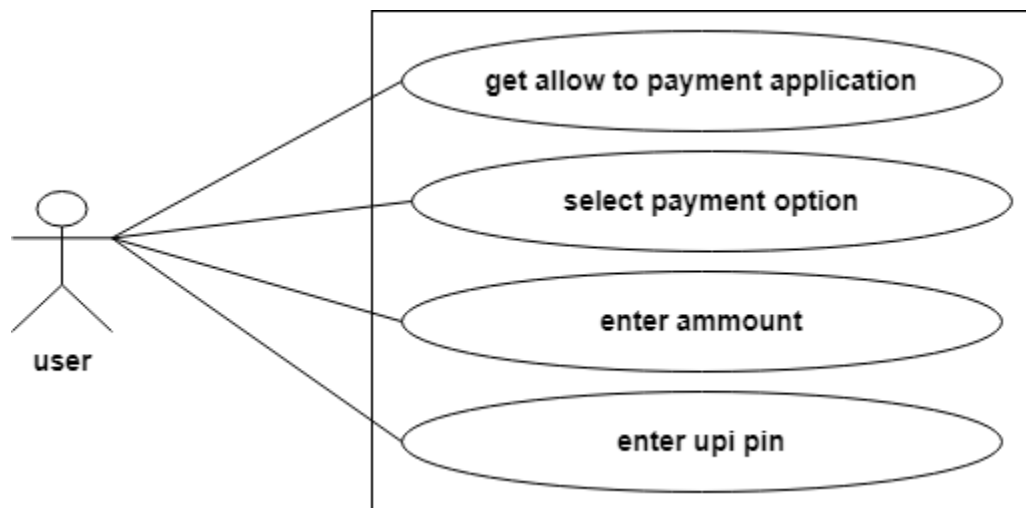
3> DCL=Data Control Language

4> DQL=Data Query Language

**14)Draw Usecase online bookshoping**



**15) Draw Usecase on online bill payment system ( paytm)**



## **16) Write SDLC phases with basic introduction?**

**ANS:-** 1> analysis phase:- this phase specialist collect requirements from customer to find solution of their needs.

2> design phase:- this phase design architecture document of all plans ex implementation plan, testing plan.

3>implementation phase:- this phase the development team start coding according to document and critical error, performance and quality issue can be done.

4> testing phase:- this phase testing team will start testing according to the test plan regression testing, unit testing, internal testing, application testing, stress testing is done in this phase.

6> Maintenance Phase:- in this phase after deploying the software services provided. After deployment user found a bug or any defect then software company debug it and fix the issue. There is 3 types of maintenance

1> corrective maintenance 2> adaptive maintenance 3,>perfective maintenance

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

**ANS:-** 1> requirements collection:- this phase involve under standings what need to design and what is function etc.

- 2> system design:- the requirement collection from vfirst phase are studied in this phase and system design help in specifying hardware and system requirement define.
- 3> implementation:- in this phase all coding program implement to document.
- 4> Testing:- this page testing team test all project and find defect and find defect assigned to development team for debugging
- 5> Maintenance:- in this phase company provide service facility after delivery the project.

### **18) Write phases of spiral model?**

**ANS:-** 1> determine objectives and find alternate solutions

2> risk , analysis and resolving

3> develop and test

3> review and planning of next phase

### **19) Write agile manifesto principles?**

**ANS:-** 1> individuals and interactions

2> working software

3> customer collaboration

4> responding to change

### **20) what is join?**

**ANS:-** join is an SQL operation performed to establish connection between two or more database table based on matching columns creating relationship between the tables. Most complex queries in an SQL database management system involve join commands.

### **21) Write type of joins?**

**ANS:-** 1> inner join

2> outer join

### **22) Explain working methodology of agile model and also write pros and cons?**

**ANS:-** Agile model is made up both iterative model and incremental model. It break product in small part.

Agile model focus on process adaptability and client satisfaction by deliver pf working software product. Every iteration take one to three week finish it.

Agile model is most liked and useable model.

In every iteration multiple people are working on planning, requirement gathering, design, coding, unit testing, acceptance testing.

In the end of iteration you get working product and it can displayed to the client. It is easy to manage and give flexibility to developers.

### **Pros**

Agile project task are tested in flight allow for faster delivery and a better project.

Resource requirements are minimum.

Good model for environments that change steadily.

Promotes teamwork and cross training.

Good model for environments that change steadily.

### **Cons**

Changing project requirements may cause problems in other areas of the organizations.

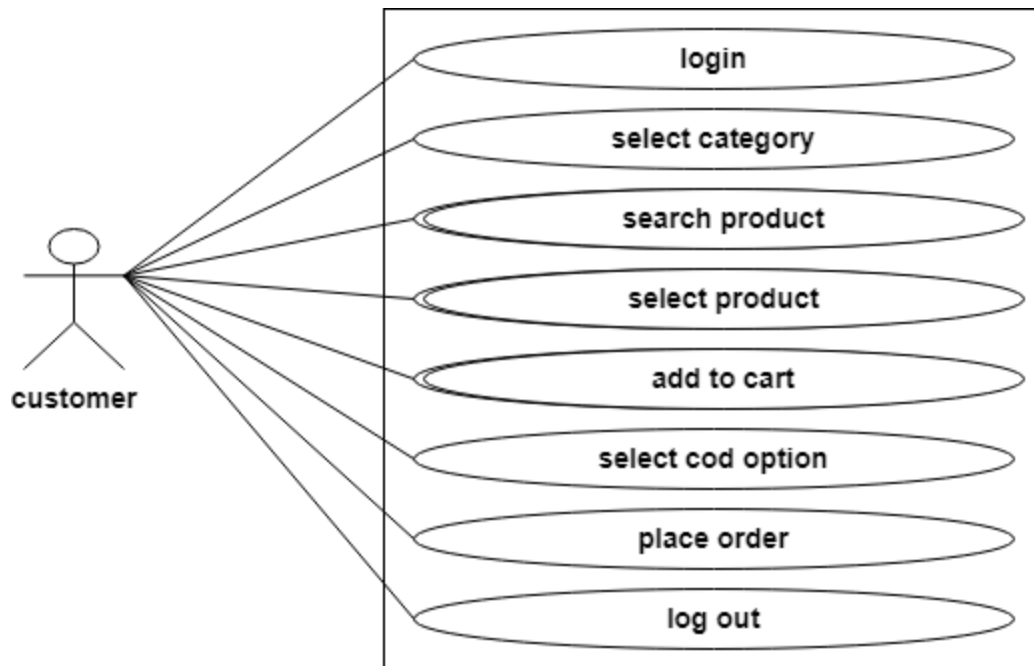
Not suitable for handling complex dependencies.

There is very high individual dependency, since there is minimum documentation generated.

More risk of sustainability, maintainability and extensibility.



**23) Draw usecase on online shopping product usind COD**



**24) Draw usecase on online shoping product using payment**

