## **Module-1(Fundamental)**

- 1). what is SDLC?
- => SDLC is a series of steps or phases provides model of development. It is a life cycle management for piece of software or application.
- 2). what is software testing?
- => Software testing is a process for used identify the correctness, completeness, quality of developed computer software.
- 3) what is agile mythology?
- => It is combination of iterative and incremental model.
- => it divides the software into small incremental builds, the build are provide in iteration, that means the big projects divided in to small iteration.
- => each iteration last about one to four weeks.
- => each iterations involves all the team members working simultaneously on area like planning req., Analysis, design, coding, unit testing and acceptance testing.
- => at the end of the iteration the working product is displayed to the customer or the important stack holder and it is released in the market.
- => after the release we check for the feedback of deployed software.
- => if any enhancement is needed in the projects its done and its re-released.
- 4). write SDLC phases with basic introduction?
- =>1.requiredment gathering
- -customer needs
- -requirement from stack holder, client, customer, ceo
- -IMPROMENT in current software
- Ex.- Login, login with face book or google etc.
- -loading time should be less.
- -add/remove to from cart
- 2. planning/analysis
- -details of computer programming languages and environment, machines, packages, application architecture layering, memory size, algorithms, data structure, global type definition, interface and many other engineering details are established.

Ex risk the project					
-cost if project					
-time for completion.					
-test plan, test tool, resources roles and responsibility, test estimation and cost, training.					
3.design					
-design architecture document.					
-implementation plan.					
-critical priority analysis					
-performance analysis					
-test plan.					
Extest case preparation, review test case, test data					
4.implemantation					
-in the implementation phase, the builds the components either from scratch or by composition.					
-implementation code,					
-critical error removal					
5.testing					
-we test the build to check for defects.					
- we report the defect and get it fixed.					
-we re-test the build until it fulfil customer req.					
ExDid we get the o/p					
-did the project meet customer req.					
-system should run on all the condition.					
-if any important is needed.					
6.deployment.					
-project live then it will become a product.					
Ex. –website, mobile application-android-play store- ios-app store					

#### 7. maintenance

- -corrective maintenance: identify and repairing defects.
- -adaptive maintenance: adapting the existing solution to the new platform
- -perfective maintenance: implement ting the new req.
- 5). Explain Phases of the waterfall model?
- => requirement collection ,analysis, design, implementation, testing, maintenance.
- 6). Write phases of spiral model?
- => planning, risk analysis, engineering, customer evalutation.
- 7). Write agile manifesto principles?
- => Every iteration involves cross functional teams working simultaneously on various areas like planning, requirements analysis, design, coding, unit testing, and acceptance testing.
- 8). Explain working methodology of agile model and also write pros and cons. ?
- => pros:- frequently delivery
- -face to face communication with customer
- -less time
- -adaptability

Cons:-less documentation

-maintenance problem

#### 9). What is SRS?

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

# 10). What is oops?

=> OOPs (Object-Oriented Programming System). Object means a real-world entity such as a pen, chair, table, computer, watch, etc. Object-Oriented Programming is a methodology or paradigm to design a program using classes and objects. It simplifies software development and maintenance by providing some concepts: Object.

#### 11). Write Basic Concepts of oops?

=> object, class, encapsulation, inheritance, polymorphism – overloading – overriding, abstraction.

### 12). What is object?

=> any entity that has state and behavior is known as object. Ex. Chair, pen, keyboard, table, car.

### 13). What is class?

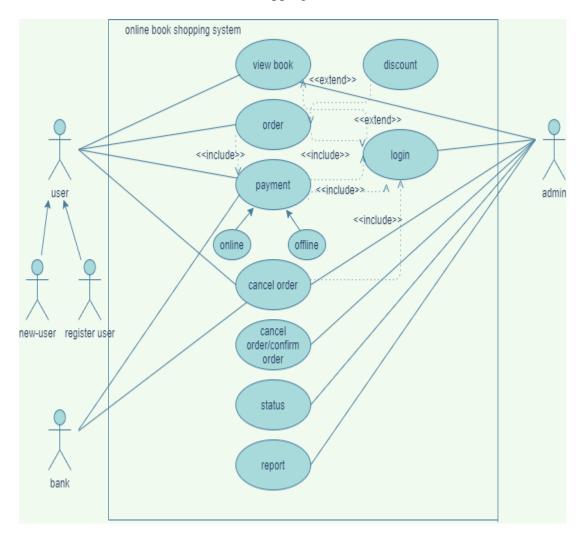
=> class in structure or blueprint.

#### 14). What is encapsulation?

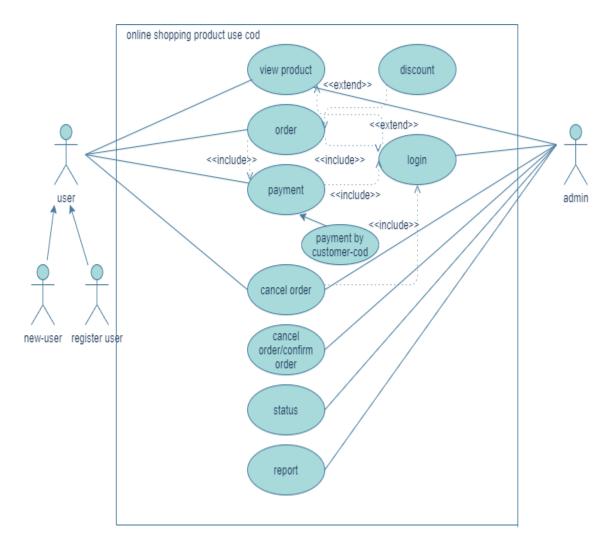
=> binding (or wrapping) code and data together into a single unit is known as encapsulation.

# 15). What is inheritance?

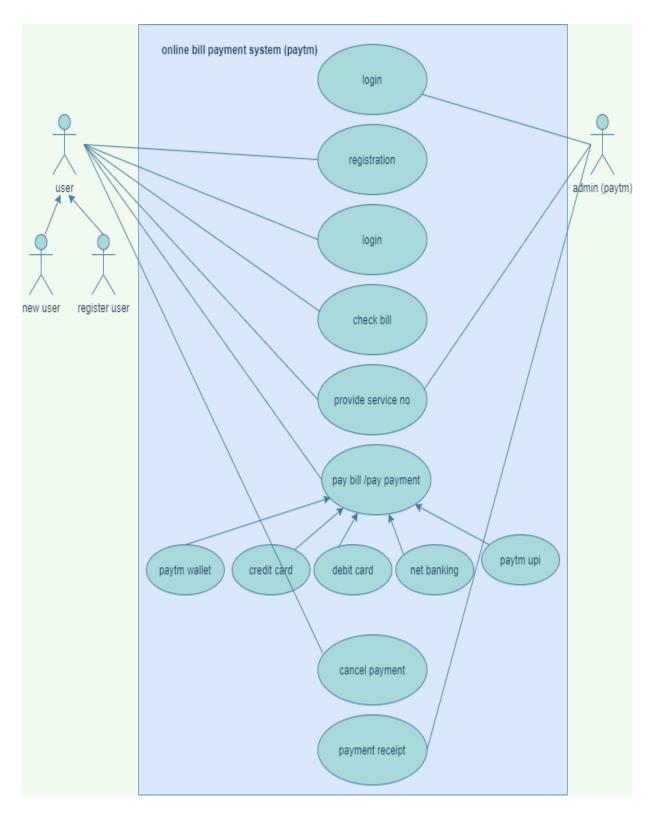
- => when one object acquires all the properties and behaviors of parent object. Known as inheritance. It provide code reusability.
- 16). What is polymorphism?
- => same name different behaviour.
- 17). Draw Usecase on Online book shopping.



18). Draw usecase on Online shopping product using COD.



19). Draw Usecase on online bill payment system (paytm).



20). Draw usecase on Online shopping product using payment gateway.

