## **Software Testing Assignment**

### Module - 1 (Fundamental)

 The software development lifecycle [SDLC] is the cost-effective and time-efficient process

that development teams use to design and build high-quality software. Testing is executing a

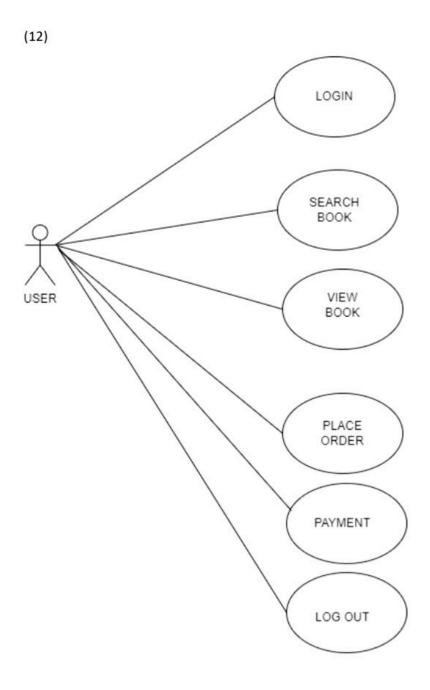
- (2) system in order to identify any gaps, error or missing requirement in contrary to the actual desire or requirements.
- (3) The Agile methodology is a project management approach that involves breaking the project into phases and emphasizes continues collaboration and improvement
- (4) A Software requirements specification is a document that describes what the software will do and how it will be expected to perform.
- (5) Identifying objects and assigning responsibilities to these objects. objects communicate to other objects by sending messages. messages are received by the methods of an object An object is like a black box. The internal details are hidden.
- (6) There are four Fundamental concepts of object-oriented programming- Inheritance, Encapsulation , Polymorphism, and Data abstraction.
- (7) Tangible Things as a car, printer,......

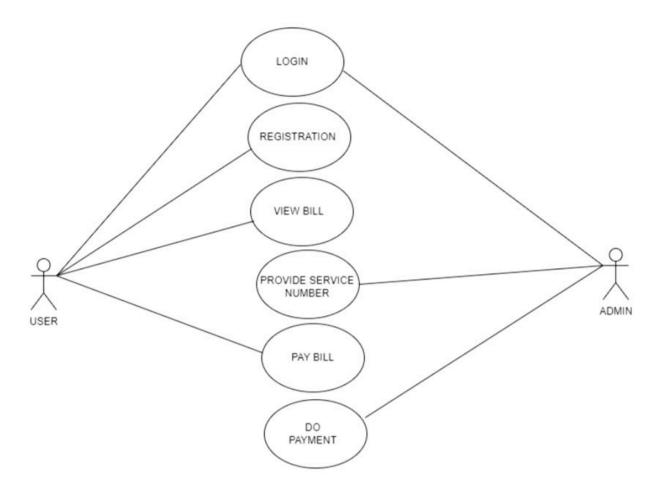
  Roles as a employee, boss......

  Incidents as a flight, overflow.....

  Interactions as a contract, sale...

  Specification as a colour, shape....An object is anything to which a concept applies.
- (8) A class represents an abstraction of the object and abstracts the properties and behaviour of that object.
- (9) Encapsulation is the practice of including in an object everything it needs hidden from other object. The internal state is usually not accessible by other objects.
- (10) Inheritance means that one class inherits the characteristics of another class . this is also called a is a relationship.
- (11) Polymorphism means "having many forms".
  It allows different objects to respond to the same message in different ways, the response specific to the type of object.





# (14) (1) Requirement phase

- (2) Analysis
- (3) maintenance
- (4) testing
- (5) design
- (6) implementation

(15) Requirement collection
Analysis
Design
Implementation
Testing
Maintenance
(16) planning
Initial requirements
Completion
Alpha demo
Customer evaluation
Risk analysis
Risk
Go , no – go decision
Engineering
First prototype
(17) meeting clint requirement
Taking changes
Pull of feedback
Support team work
Face to face talk
Measure progress
Direct on active members
Self organised
Sustainable development process
Technical excellence
Adjust strategies
Monitor the product cycle

(18) agile SDLC model is a combination of iterative and incremental process models with focus on process adaptalibility and customer satisfaction by rapid delivery of working software product.

Agile methods break the products into small incremental builds.

These builds are provided in interaction.

Each iteration typically lasts from about one to three weeks.

### Pros:-

Is avery 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

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 adjustment 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 invidule dependency since there is minimum documentation generated

