

## **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.

Ex. -test case preparation, review test case, test data

### 4.implementation

-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.

Ex. -Did 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 evaluation.

## 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

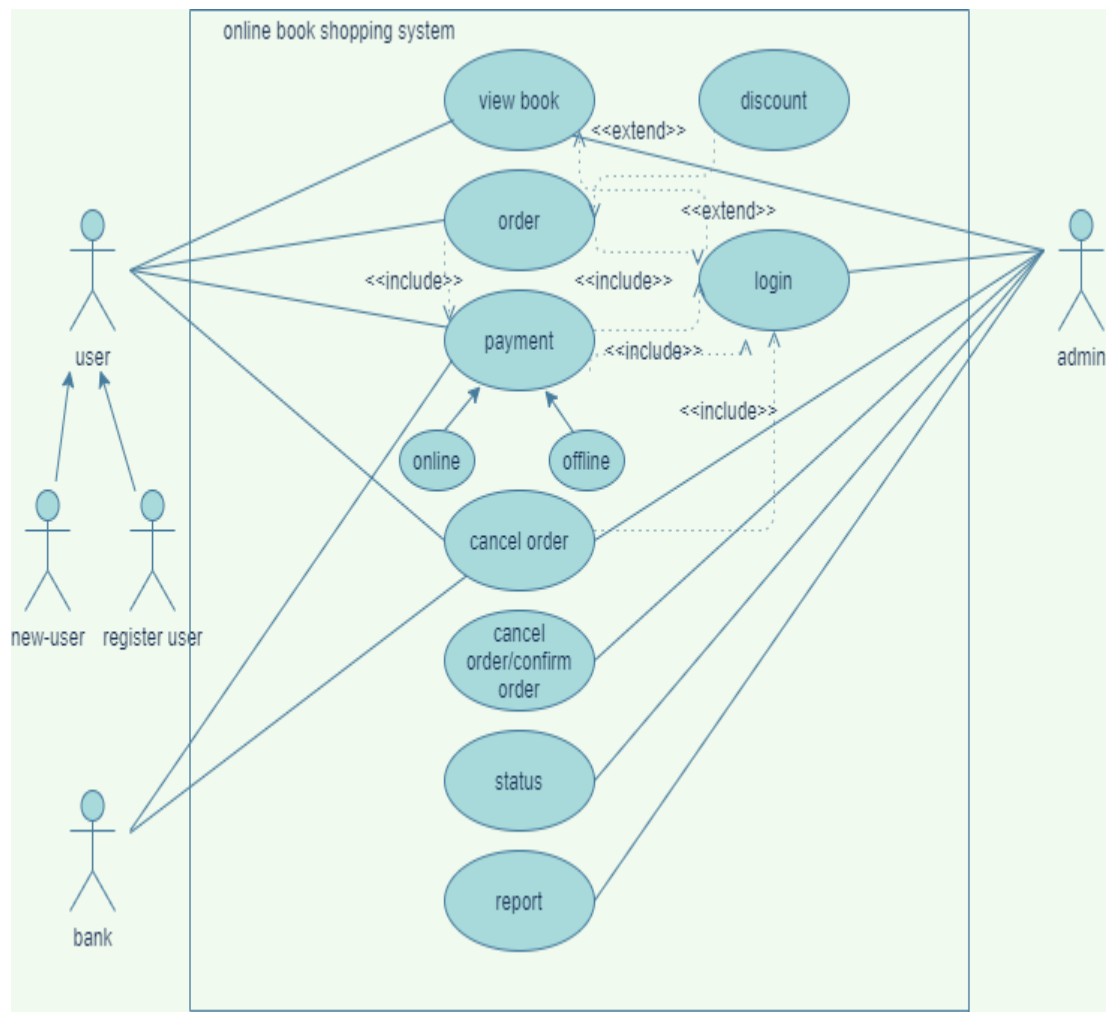
-less time

-adaptability

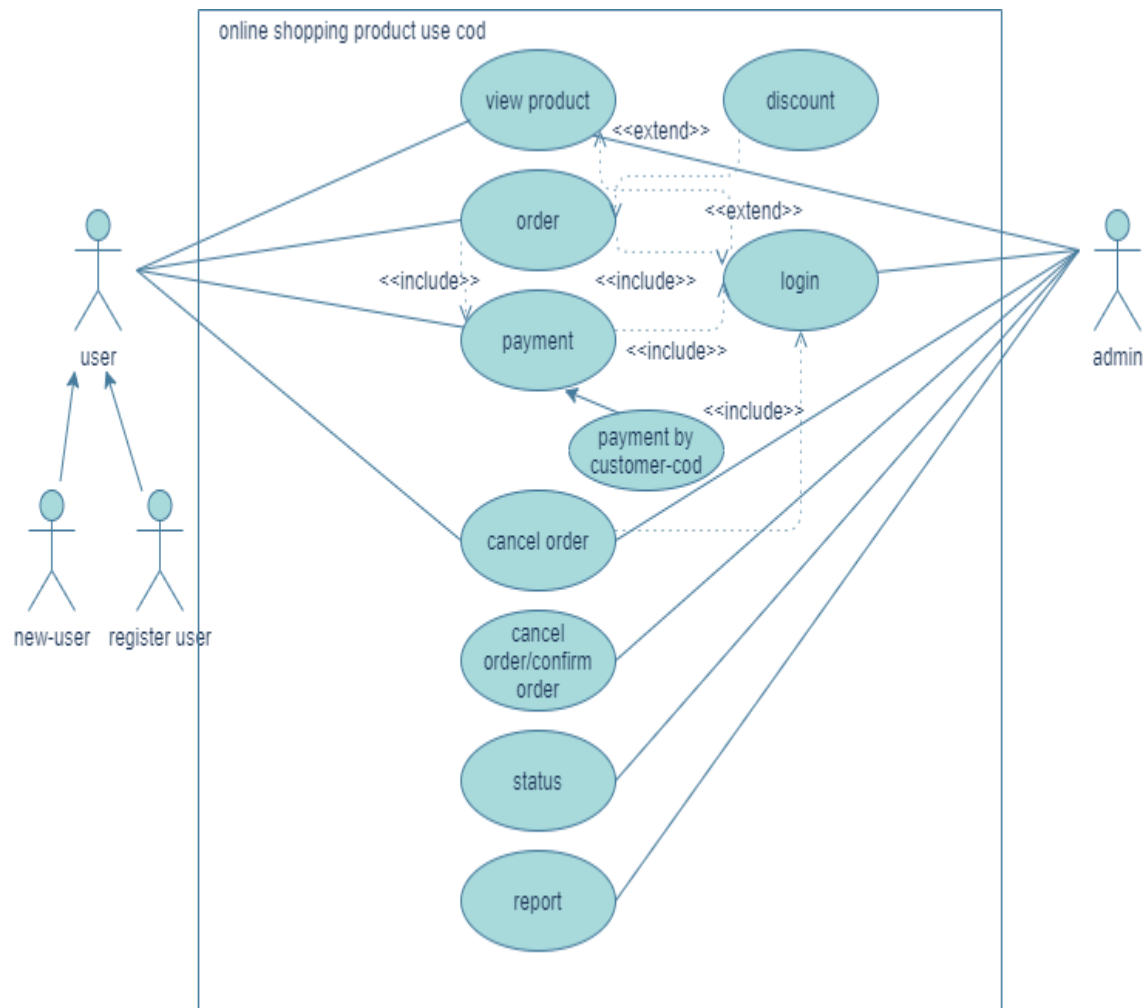
Cons:-less documentation

-maintenance problem

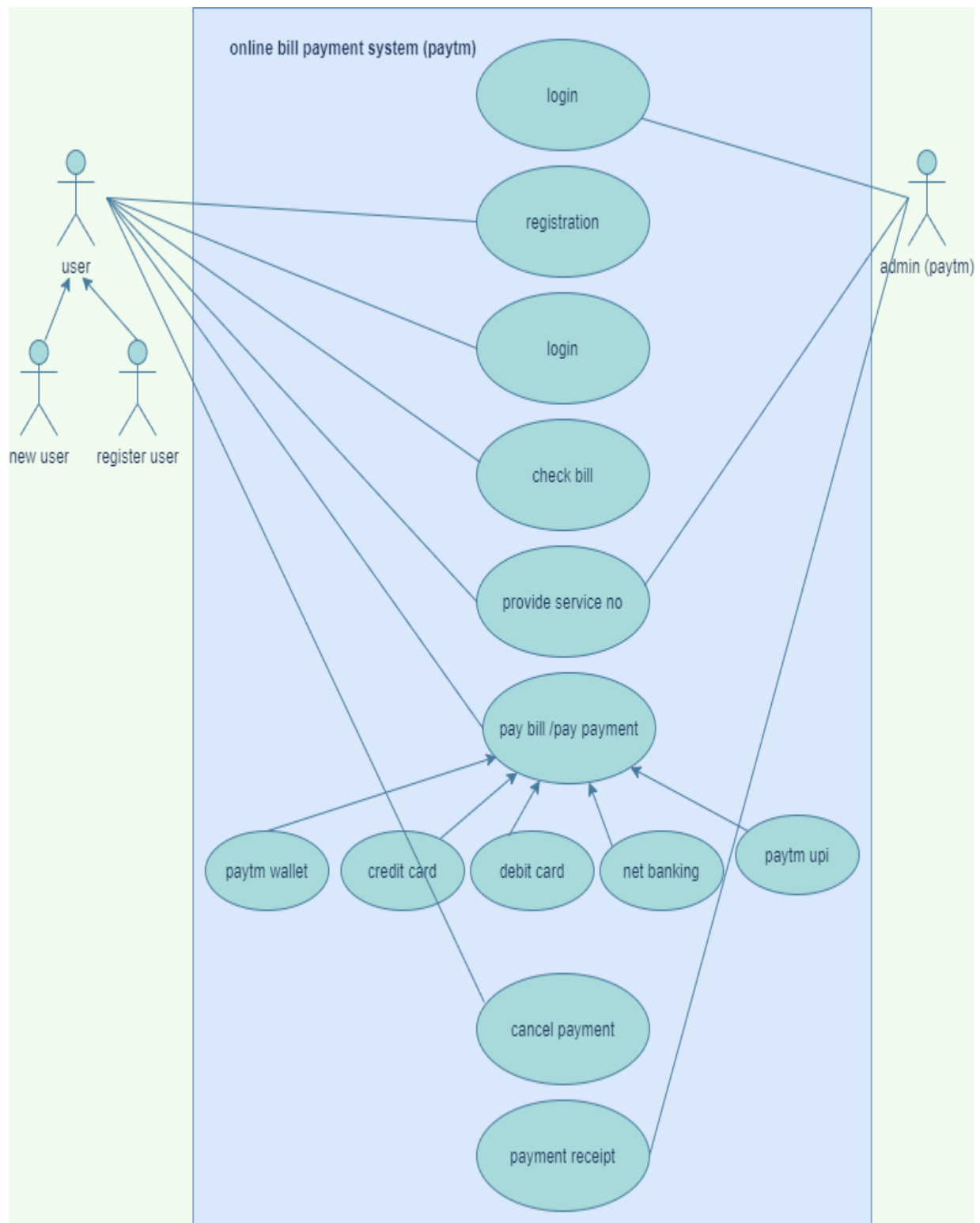
## 9). Draw Usecase on Online book shopping.



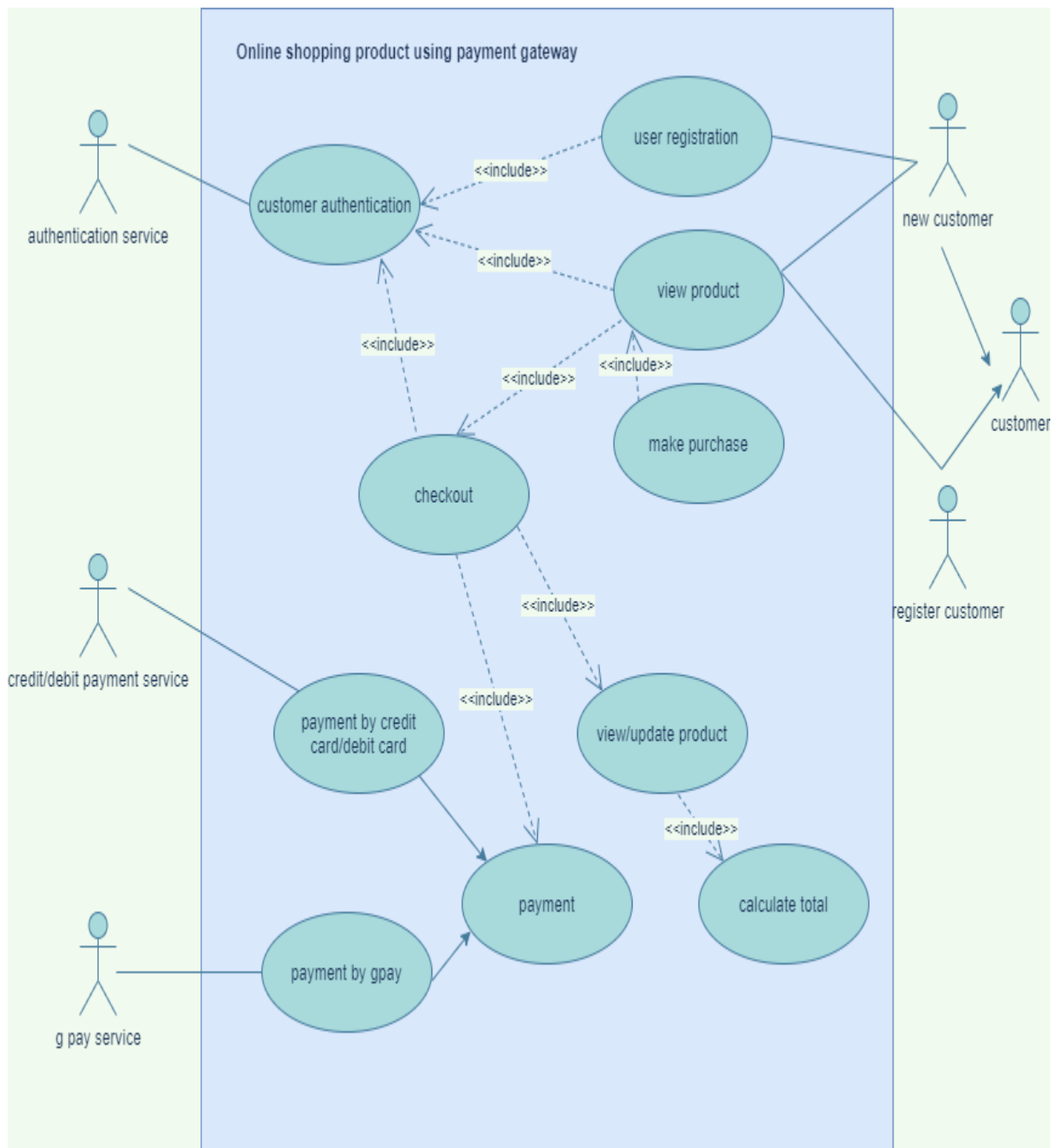
10). Draw usecase on Online shopping product using COD.



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



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



13). What is SRS ?

=> A software requirements specification (SRS) is a complete description of an application which is to be developed.

14). What is oops ?

=> OOPs (Object-Oriented Programming System) is way of writing the programs in organized way, provide security, redundancy etc.

15). Write Basic Concepts of oops ?

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

16). What is object ?

=> object gives the permission to access functionality of class. Ex. Chair, pen, keyboard, table, car.

17). What is class?

=> class is collection of data member and member function. Ex. 1). class- food:- lunch-an object of food, dinner-an object of food; 2). class- wild animal:- tiger-an object of wild animal, lion-an object of wild animal.

18). What is encapsulation?

=> the process of wrapping the data in a single unit to secure data from outside the world.

19). What is inheritance?

=> hiding details and showing only essential information.

20). What is polymorphism?

=> one name multiple form.