Module-1(Fundamental)

(A). 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.

(B). what is software testing?

- Software testing is a process for used identify the correctness, completeness, quality of developed computer software.

(C) 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 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.

(D). 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.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.

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.

(E) What is SRS ?

- Software Requirement Specification:

- SRS is a complete destcription of an application which is to be developed.

- SRS contains use case diagram that describes all the interaction user will have with the software application.

FRS,BRS,FRD

(F) What is OOPS

- Object Oriented Programming is way of writing the programs is organized way, provides security, redundancy etc.

- Object are like a black box where data are hidden.

(G)Write Basic Concepts of OOPS

1. CLASS

2.OBJECT

3.INHERITANCE

4.POLYMORPHISM

1.Over Ridding

2.Over Loading

5.ENCAPSULATION

6.ABJTRACTION

(H) What is Object

- Object gives the permission to asses functionality of class.

(I) What is Class

- Class is a collection of data member and member function.

INT a=10, INT b=20

(J) What is encapsulation

- The process wrapping the data in a single unit. To secure the data from out side word.

(K)What is Inheritance

- Making a class from an existing class. Deriving the attribute of some other class.

(L) What is Polymorphism

- One name multiple from

  Type:- Over riding

  Sum (int a, int b)

  Sum (int a, int b)

- same name of function with same parameter but definition will be different.

  Over loading

1. Function over loading:- Same function name but different parameter
   Sum (int a, int b)
   Sum (int u)
2. Constructor over loading:- Same constructor name but different parameter.
3. Operator over loading:- Using the operator to add the object instead of variable operands.

6. Abstraction : Hiding details and showing only essential information.

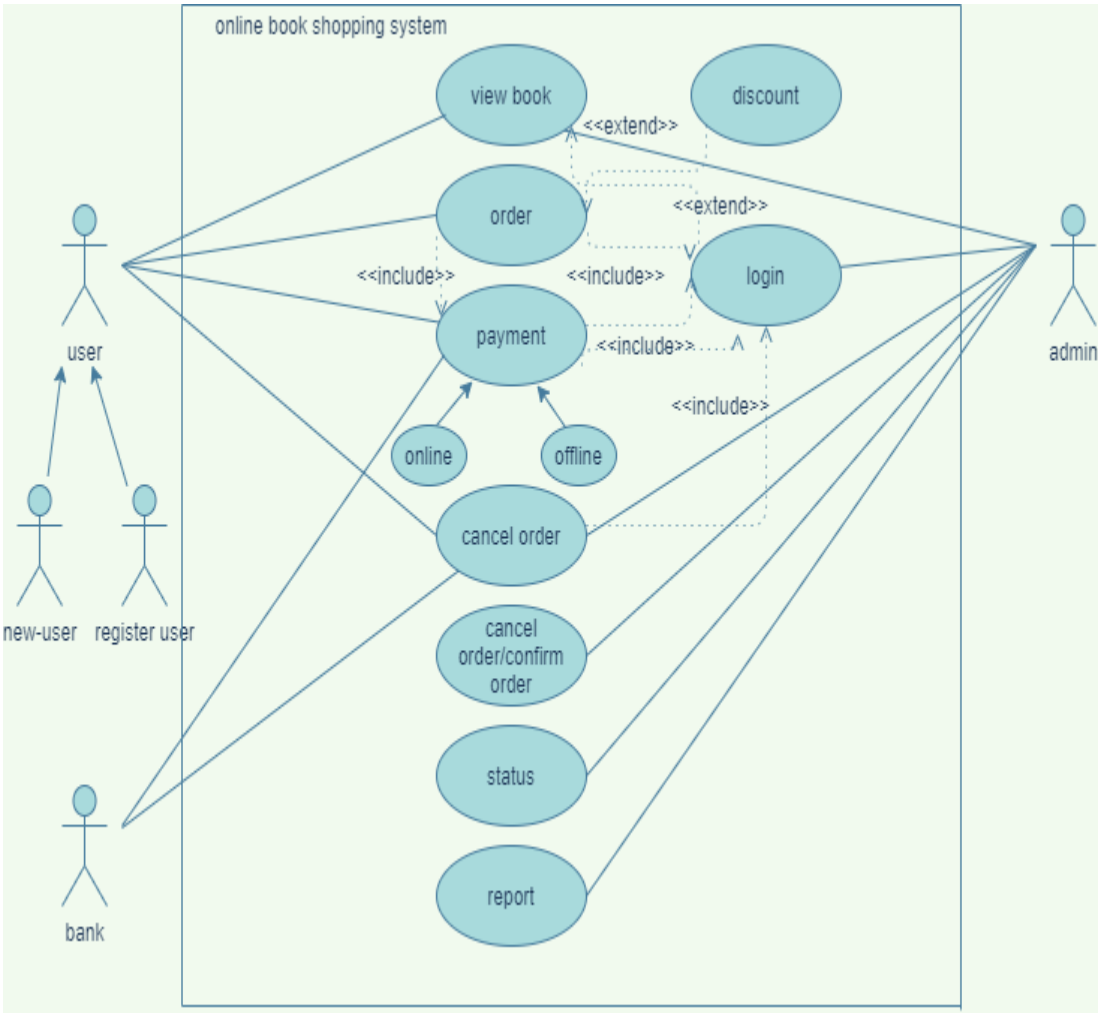
(M). Explain Phases of the waterfall model ?
- requirement collection ,analysis, design, implementation, testing, maintenance.

(N). Write phases of spiral model ?
- planning, risk analysis, engineering, customer evalutation.

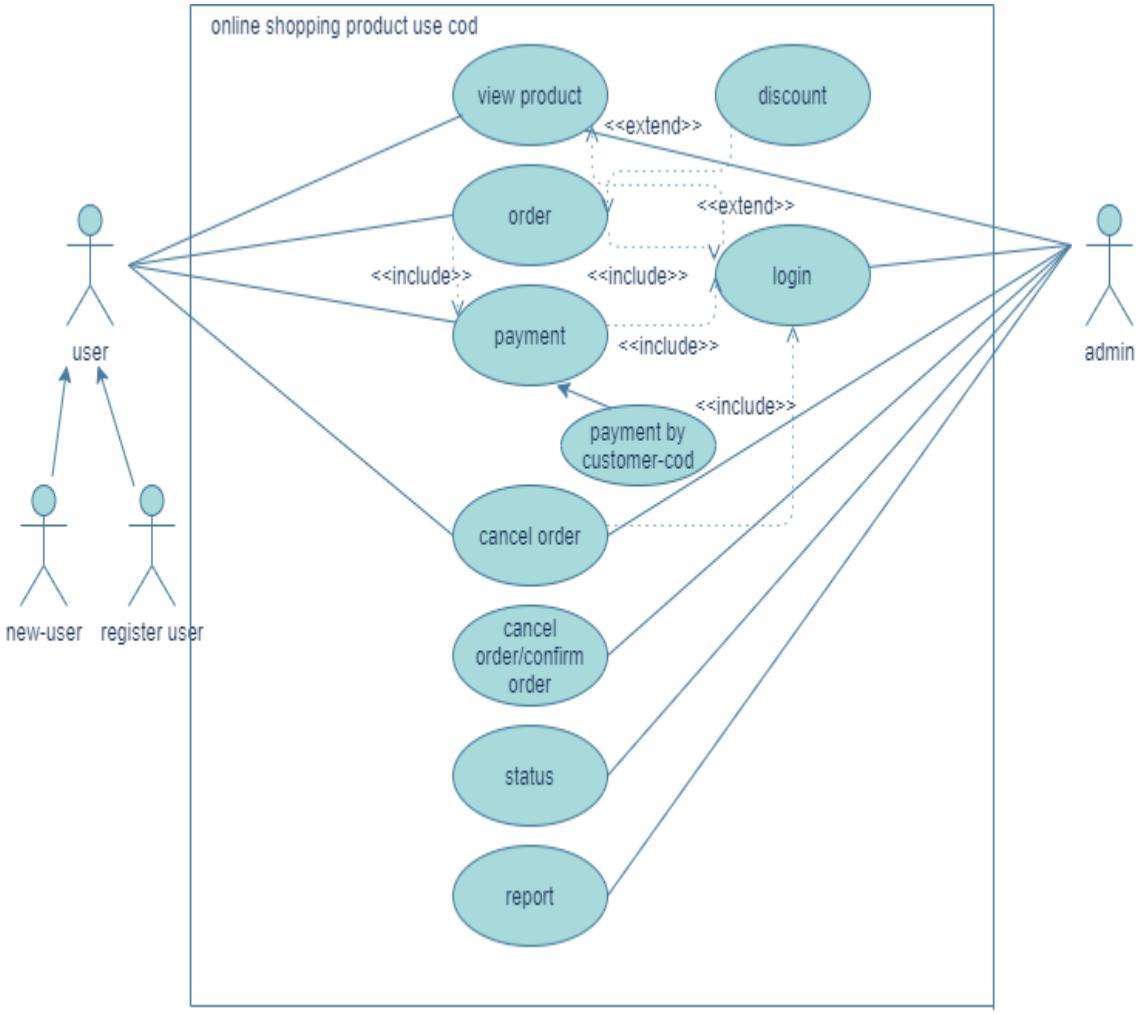
(O). Write agile manifesto principles?
- Every iteration involves cross functional teams working simultaneously on various areas like planning, requirements analysis, design, coding, unit testing, and acceptance testing.

(P). 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

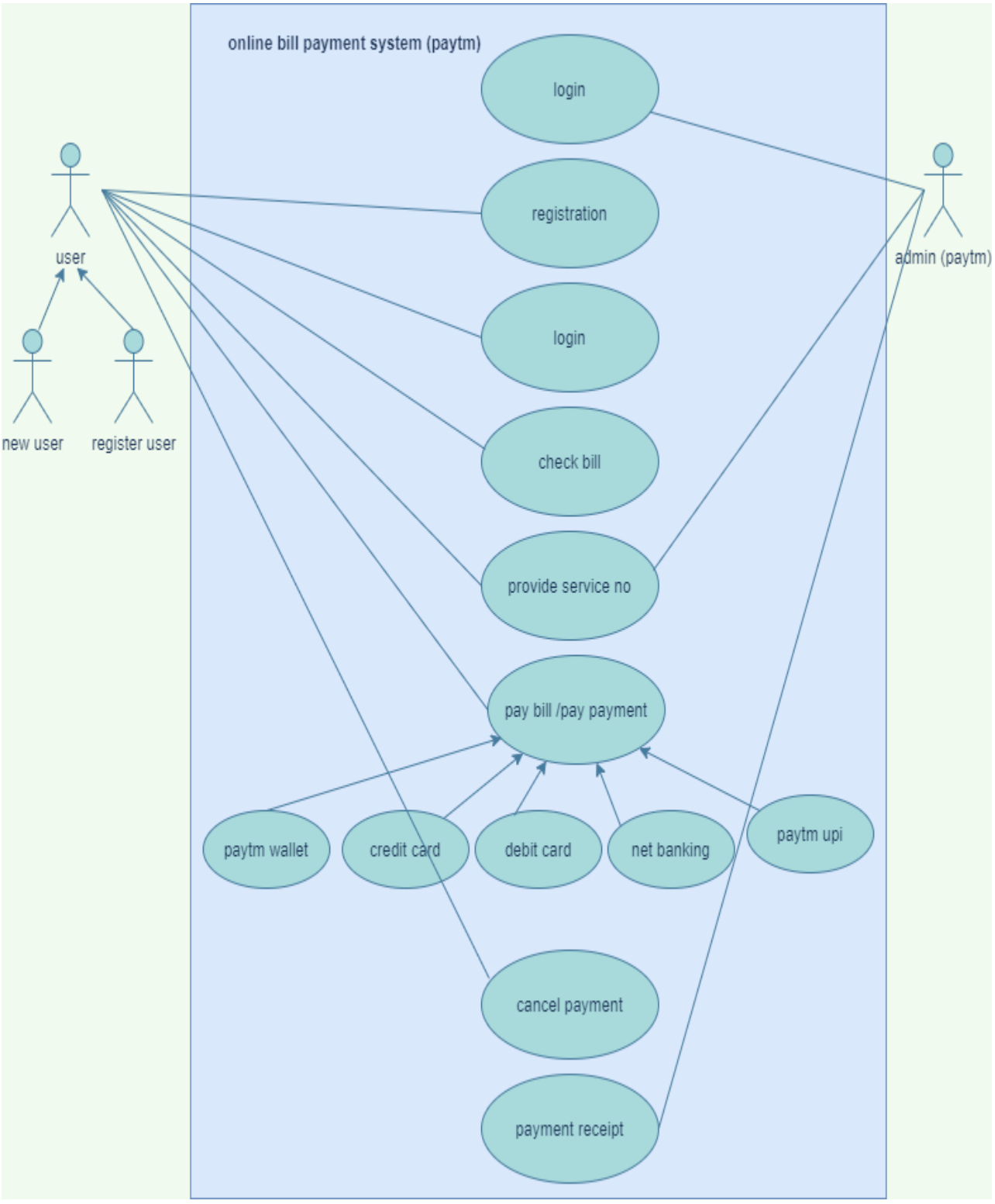
(Q). Draw Usecase on Online book shopping.



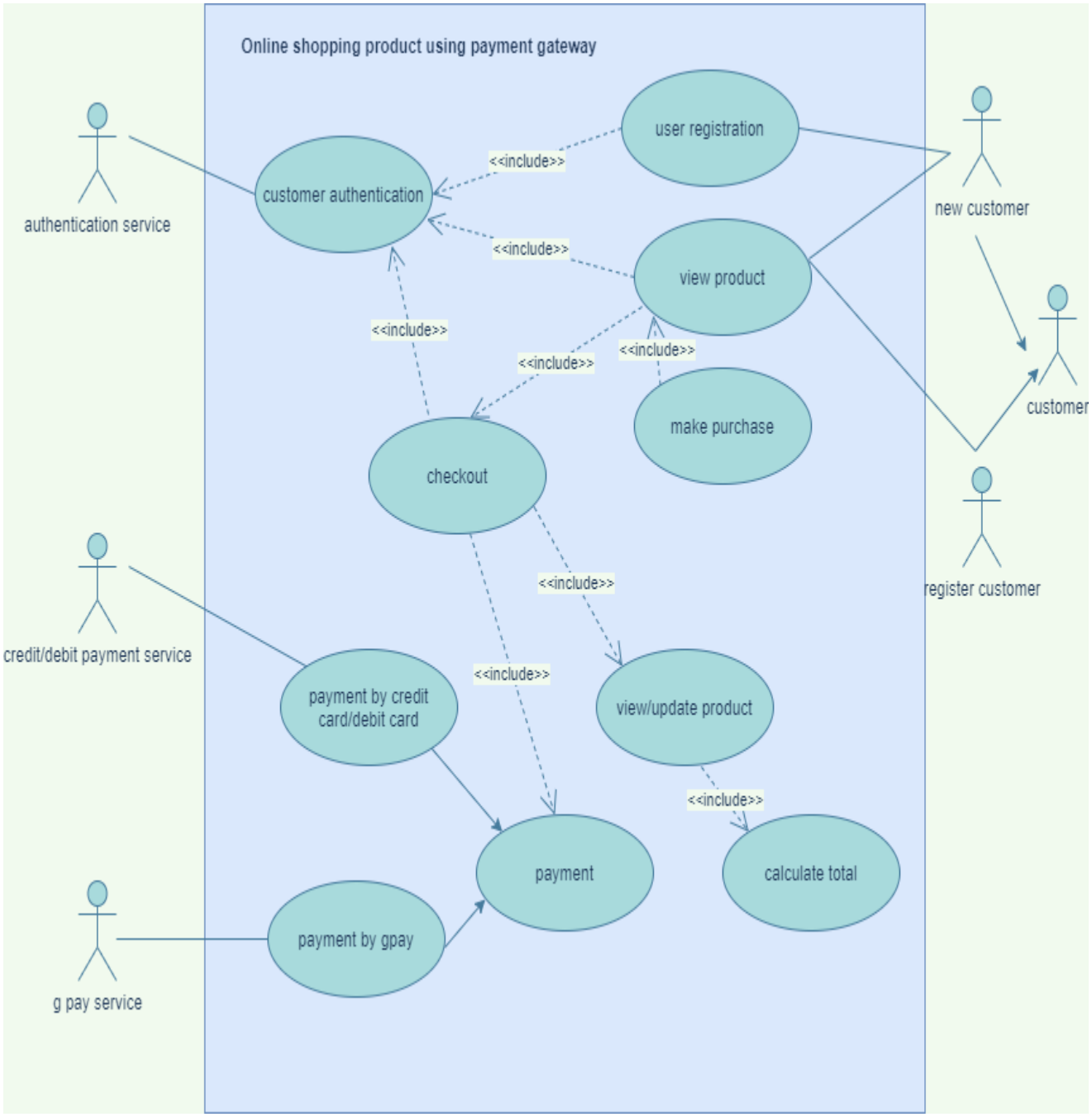
(R). Draw usecase on Online shopping product using COD.



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



(T). Draw usecase on Online shopping product using payment gateway.


Online shopping product using payment gateway
authentication service
customer authentication
user registration
<<include>>
<<include>>
view product
new customer
customer
<<include>>
<<include>>
<<include>>
make purchase
checkout
register customer
credit/debit payment service
<<include>>
payment by credit card/debit card
<<include>>
view/update product
<<include>>
payment
calculate total
payment by gpay
g pay service