Software Testing Assignment

Module–1(Fundamental)

- ## What is SDLC ?

Software Development Life Cycle (SDLC) is a structured process that is used to design, develop, and test high-quality software by planning, implementation, testing, documentation, deployment, and ongoing maintenance and support.

- ## What software testing ?

Software Testing is a process used to identify the correctness, completeness and quality of developed computer software.

- ## What is agile methodology ?

The Agile methodology is a proper way of managing the project with breaking them into smaller phases which is iteration. It basically focus on flexibility of the project which we can change and improve the team work regularly as per requirements.

- ## What is SRS ?

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

- ## What is oops ?

Identifying objects and assigning responsibilities to these objects & objects communicate to other objects by sending messages.

- **Write Basic Concepts of oops**
1) Object
2) Class
3) Abstraction
4) Encapsulation
5) Inheritance
6) Polymorphism

- # What is object ?

  Any entity which has own state and behaviour

  ex: pen,paper etc..

- # What is class ?

  Collection of objects that is called class

  ex: human body

- # What is encapsulation ?

  wrapping up of data or binding of data

  ex: capsule

- # What is inheritance

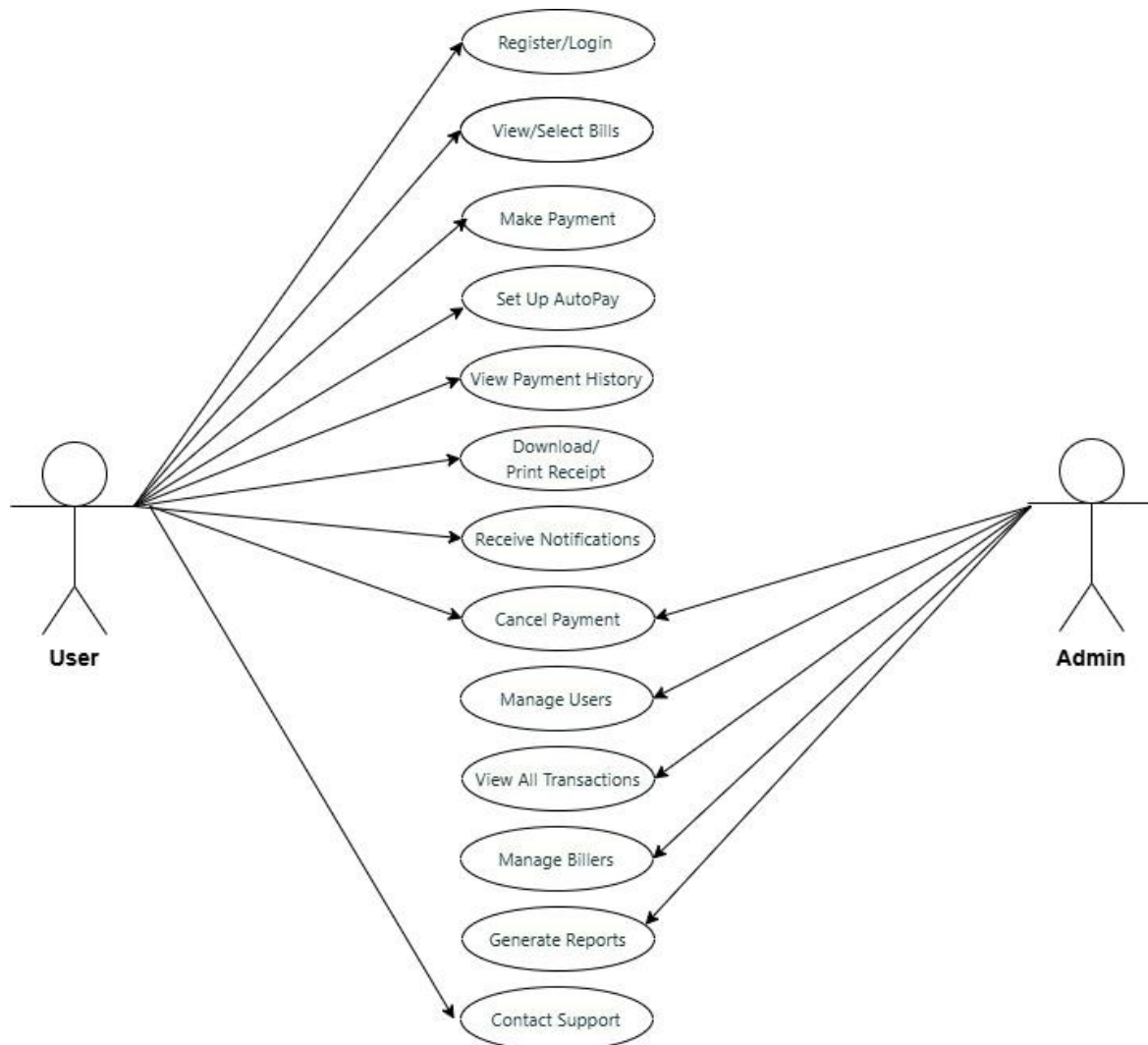 when one object acquire all the properties and behaviour of parent class

  ex: father-son
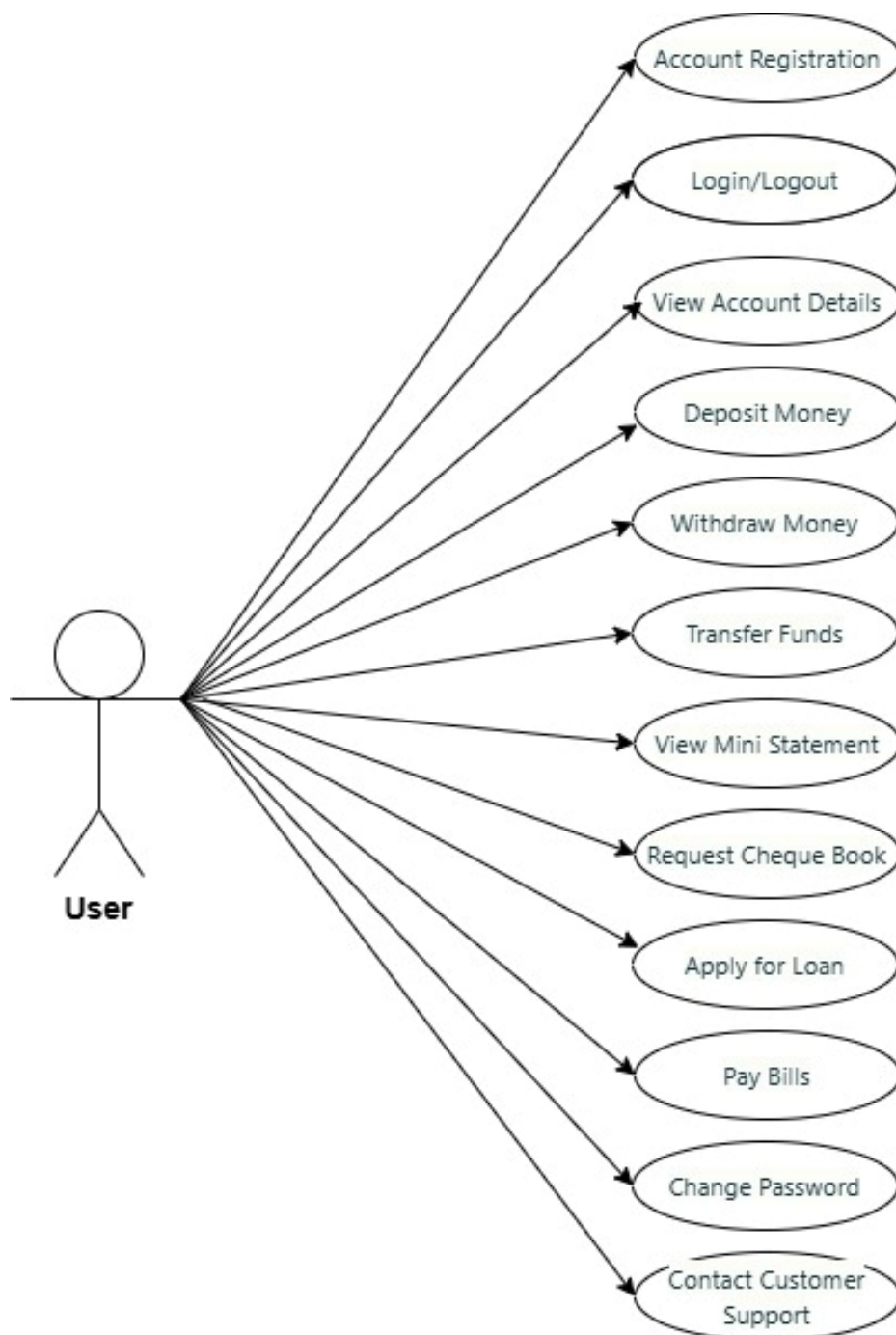
- # What is polymorphism

  many ways to perform anything
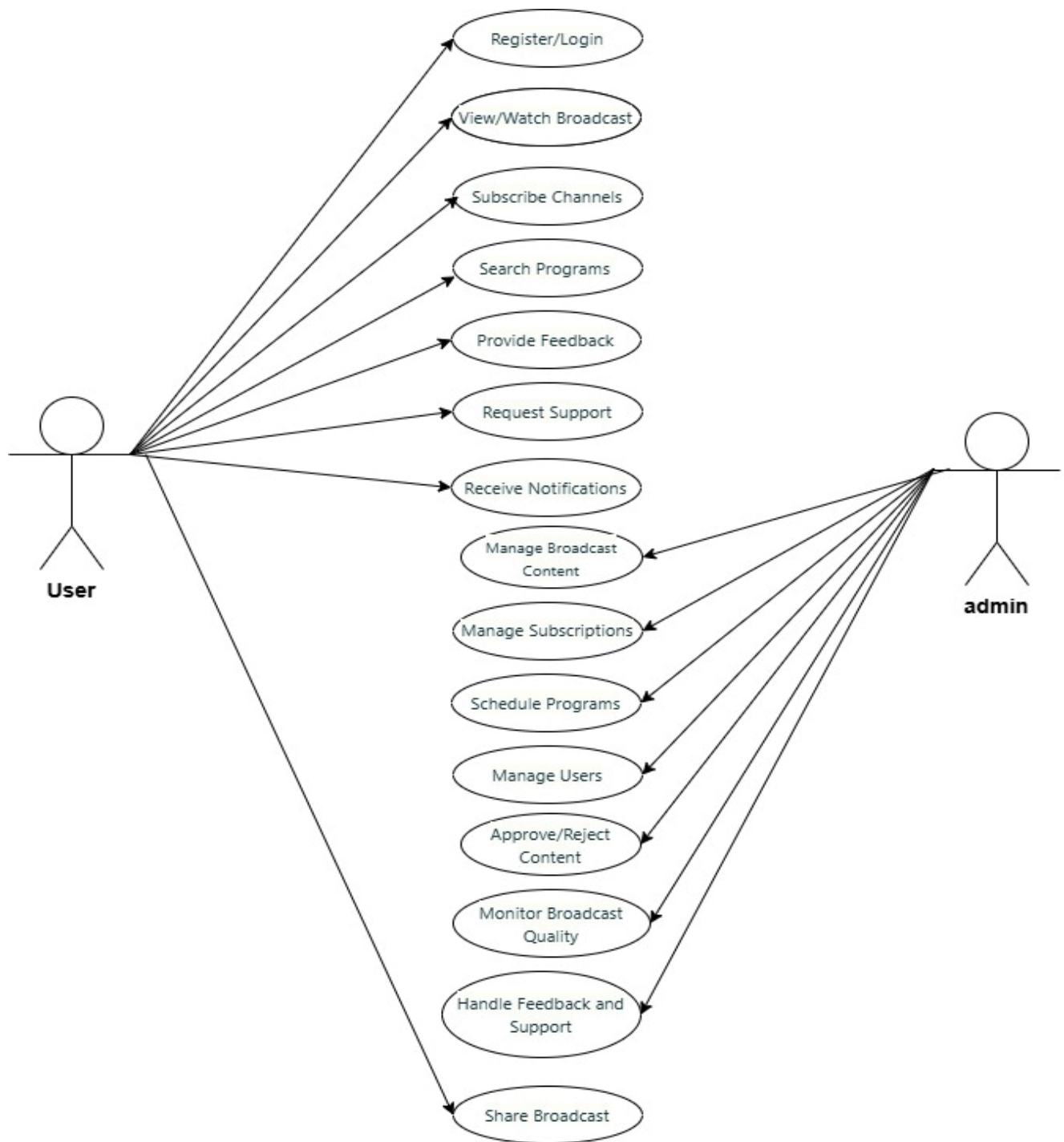
  ex:

  1)method overloading

  2)method overriding

- **Draw Usecase on online bill payment system (paytm).**

- **Draw Usecase on banking system for customers.**

- **Draw Usecase on Broadcasting System.**

- **Write SDLC phases with basic introduction.**

1) Requirement Gathering : i) Functional Requirement - Possible to complete Practically.

ii) Non-Functional Requirement - Impossible to complete

Practically.

:Diagram Format -> Written

:UML(Unified Modeling Language) - i) Usecase Diagram

ii) Activity Diagram

2) Analysis   : i) What? - What to do?, ii) How? - How to do?

3) Design   : i) Web -> HTML,JS,CSS   ii) APP -> XML

4) Implementation   : Coding, MVC Architecture code(Model, View, Controller)

5) Testing   : i) Regression testing ii) Smoke testing

iii) Sanity testing iv) Deploy

6) Maintenance   : i) Corrective maintenance ii) Adaptive maintanance : new

platform iii) Perfactive maintenance

- **Explain Phases of the waterfall model**

The classical software lifecycle models the software development as a step-by-step "Waterfall" between the various development phases.

1) Requirements collection
2) Analysis
3) Design
4) Implementation
5) Testing
6) Maintenance

- **Write phases of spiral model**
  - i)   Risk Analysis
  - ii)   ii) Engineering
  - iii)   iii) Customer evaluation
  - iv)   iv) Planning.

- **Write agile manifesto principles.**

1) Customer satisfaction
2) Changing Requirements,
3) Frequent Delivery,
4) Communicate Regularly
5) Face-to-face communication,
6) Measure work process,
7) Development process,
8) Good Design
9) Measure process,
10)   Support team member,
11)   Continue Seeking result,
12)   Reflect adjust regularly.

- **Explain working methodology of agile model and also write pros and cons.**

Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product.

Agile Methods break the product into small incremental builds. These builds are provided in iterations.
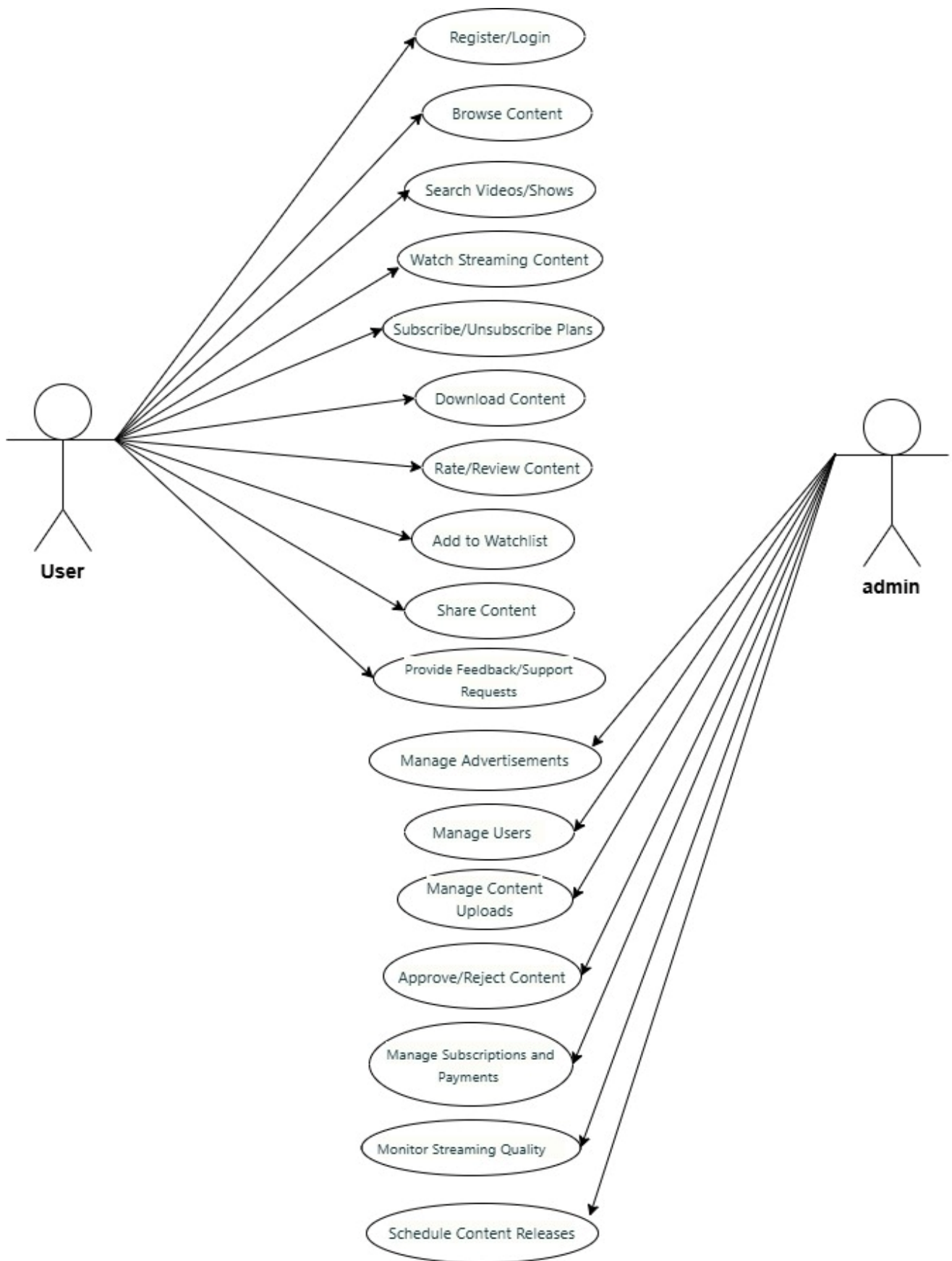
Pros.

o   Functionality can be developed rapidly and demonstrated.
o   Suitable for fixed or changing requirements.
o   Gives flexibility to developers.

Cons.

o   Not suitable for handling complex dependencies.
o   More risk of sustainability, maintainability and extensibility.
o   Depends heavily on customer interaction, so if customer is not clear, team can be driven in the wrong direction.

- **Draw usecase on OTT Platform.**

- **Draw usecase on E-commerce application.**

Register/Login

Browse Products

Search Products

Add Products to Cart

Place Order

Make Payment

Track Order

Write Reviews

Request Return or Refund

Contact Customer Support

Manage Users

Manage Products

Manage Content Uploads

Monitor Transactions

Manage Sellers

Resolve Disputes

Approve/Reject Seller Requests

User

admin

- **Draw usecase on Online shopping product using payment gateway.**