Assignment 1(module 1)

1. WHAT IS SDLC?

SDLC is Software Development Life Cycle is imposed on development of product that defines on process of planning, implementation, analysis, testing, documentation, deployment, ongoing maintenance and support.

2. WHAT IS SOFTWARE TESTING?

Software testing is process of used to identifying correctness, completeness and quality of software development computer software.

3. WHAT IS AGILE MODEL?

Agile model is combination of interactive and incremental process model with focus on process adaptability and customer satisfaction of rapid delivery of working software product.

4. WHAT IS SRS?

SRS is Software Requirement Specification is complete description of behavior of the system to be developed. This document that describes what the software will do and how will be expected to perform.

5. WHAT IS OOPS?

OOPS is object-oriented programming is a computer programming model that organizes software design around data or objects, rather than function and logic.

6. WHAT IS BASIC CONCEPTS OF OOPS?

I. Class
II. Object
III. Encapsulation
IV. Inheritance
V. Polymorphism
VI. Abstraction

7. WHAT IS OBJECT?

Object is a instances of class. Using new keyword and construction through create class.

8. WHAT IS ENCAPSULATION?

Encapsulation is wrapping up to data into single unit.

9. WHAT IS INHERITANCE?

Inheritance is properties of parent class extends into child class.

10. WHAT IS POLYMORPHISM ?

Polymorphism is ability to take one name having many forms.

11. WRITE SDLC PHASES AND BASIC INTRODUCTION.

Phases are:

- Requirements gathering /collection
- Analysing
- Design
- Implementation
- Testing
- Maintenance

1. Requirements gathering/ collection

In requirements will be changed. Although requirements may be documented in written form, they may be incomplete, unambiguous, or even incorrect.

Three types of problems can arise:

Lack of clarity

Requirement confusion

Requirement amalgamation

There are two types of requirements:

Functional requirements: are describe services or functions.

Nonfunctional requirements: are constraints on the system or system development process.

2. Analysis

The analysis phase defines the requirements of the system, independent of how these requirements will be accomplished. The delivery result at the end of this phase is requirement document. This analysis represents the “what” phase.

3. Design

This is design architecture document. The design team can now expand upon the information establish the requirement document.

4. Implementation

After designing developer implementation the code and remove the critical error. The implementation phase deals with issues of quality, performance, baseline, libraries and debugging.

5. Testing

Testing is process of enhancing and optimizing deployed software as well as fixing defects. Testing is configuration and version management, reengineering, redesigning and refactoring. Testing is updating all analysis, designing, and user documentation.

6. Maintenance

Maintenance is process of changing a system after it has been deployed.

Corrective maintenance: identifying and repairing defects

adaptive maintenance: adaptive the existing solution to the new platforms.

Perfective maintenance: implementation the new on decides the utility and value of software

12. EXPLAIN PHASE OF WATERFALL MODEL.

The Waterfall Model has six phases which are:

1. Requirements: The first phase involves gathering requirements from stakeholders and analysing them to understand the scope and objectives of the project.

2. Design: Once the requirements are understood, the design phase begins. This involves creating a detailed design document that outlines the software architecture, user interface, and system components.

3. Development: The Development phase include implementation involves coding the software based on the design specifications. This phase also includes unit testing to ensure that each component of the software is working as expected.

4. Testing: In the testing phase, the software is tested as a whole to ensure that it meets the requirements and is free from defects.

5. Deployment: Once the software has been tested and approved, it is deployed to the production environment.

6. Maintenance: The final phase of the Waterfall Model is maintenance, which involves fixing any issues that arise after the software has been deployed and ensuring that it continues to meet the requirements over time.

13. WRITE PHASE OF SPIRAL MODEL.

There are 4 types of phases

- Planning
- Risk analysis
- Engineering
- Customer evolution

14. WRITE AGILE MENIFESTO

There are **4 types manifesto**

- Individual interaction
- Customer collaboration
- Working software
- Respond to change

15. WRITE AGILE MODEL ADVANTAGES AND DISADVANTAGES

Advantages

- Very reliable
- Resource requirements are minimum
- Suitable for fix and changing requirements
- Delivers early partial working solution
- Good models for changing steadily
- Little or no planning require
- Easy to manage
- Flexible for developers
- Reduce the total development time the whole project.
- Face to face communication among team member leading a better collaboration and understanding of project goals.

Disadvantages

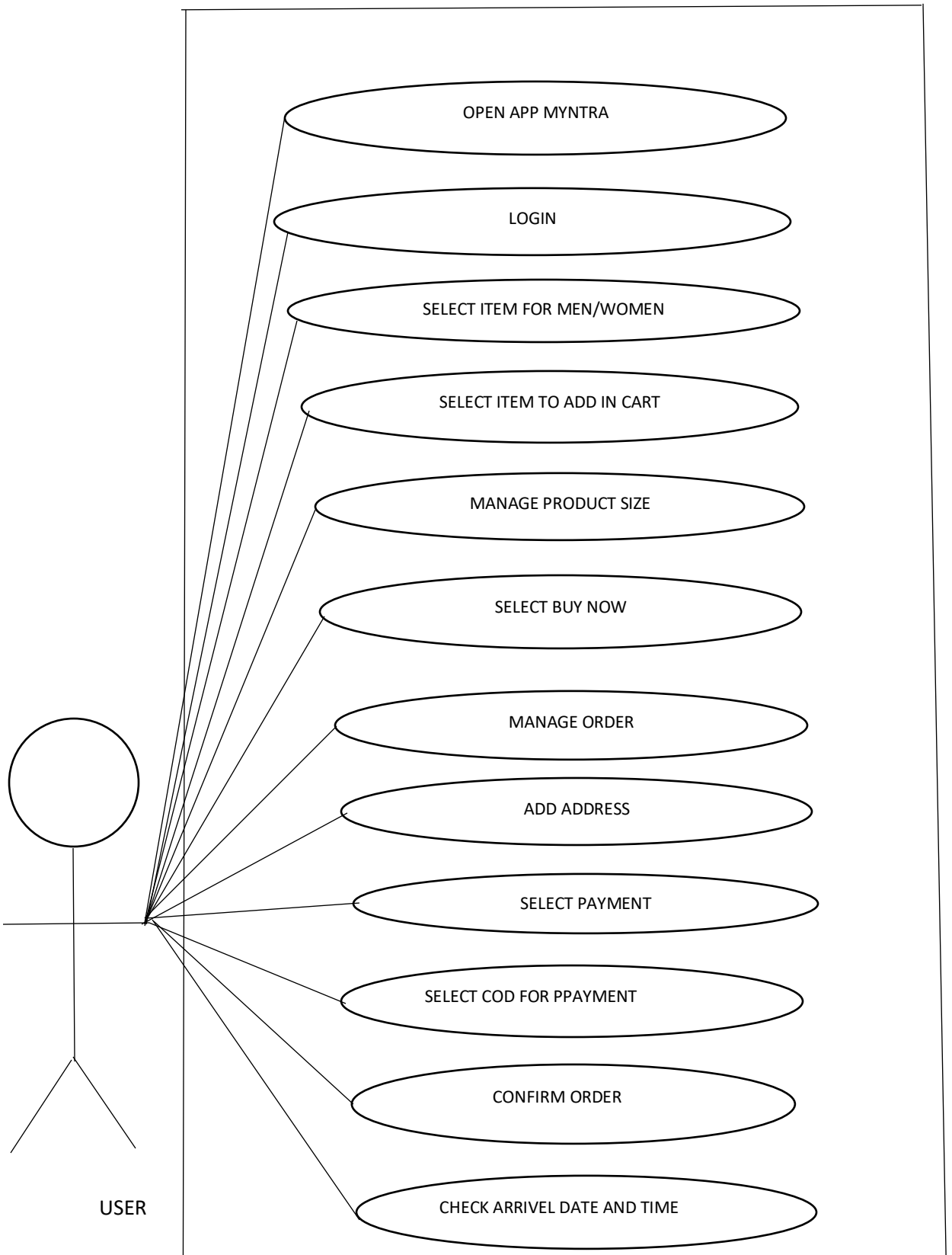
- The lack of formal documents create confusion and important decision taken during different phases can be misinterpreted at any time by different team member.

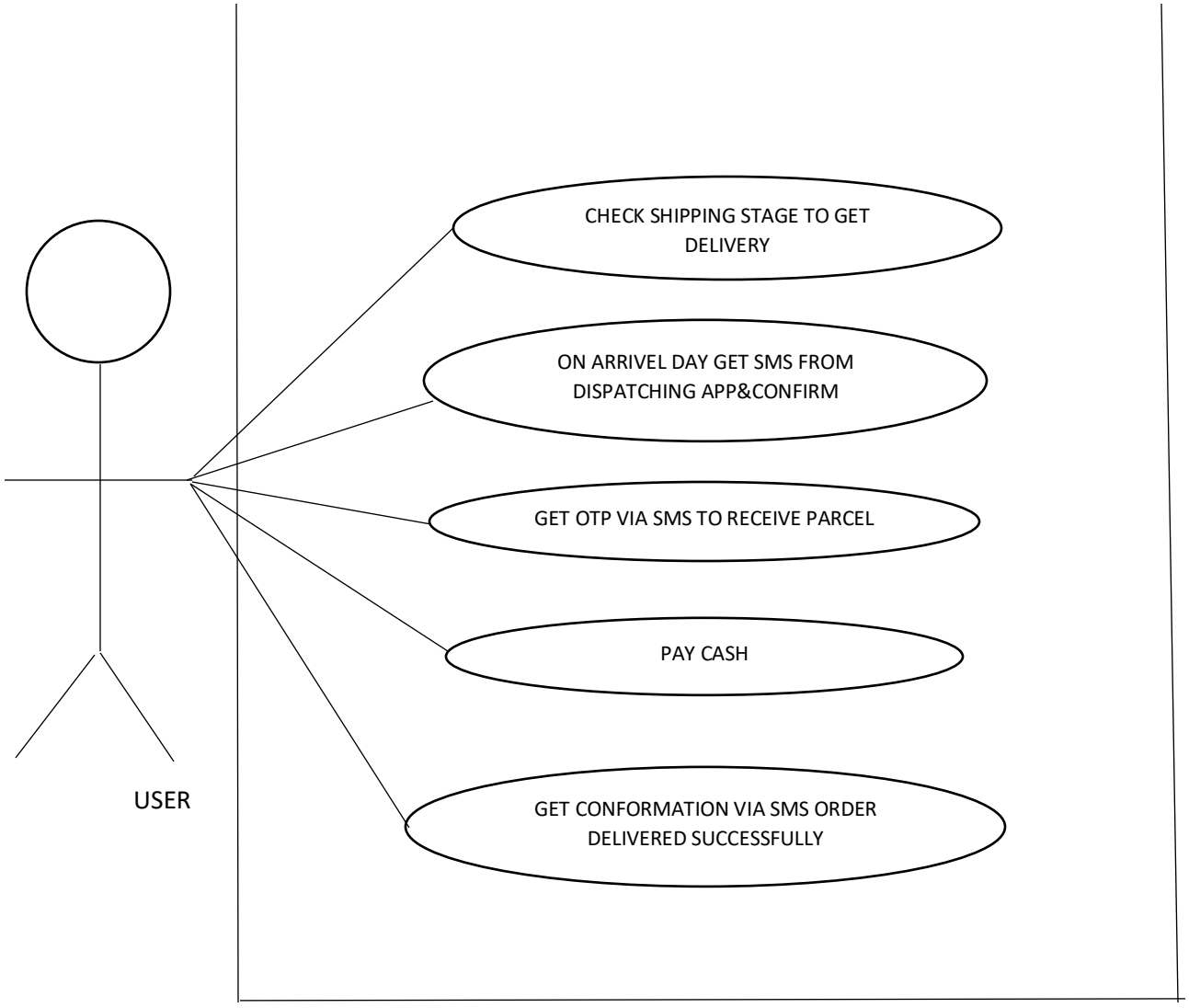
- Not suitable for handling complex dependency
- Agile model depends highly customer interactives. If customer is not clear, then the developers team can be driven in the wrong direction.
- Due to absence of proper documentation when the project completes and the developers are assign to another project, maintenance od developed project can be become a problem.
- There is very high individual dependency, since there is a minimum documentation generated.

16. WHAT IS CLASS?

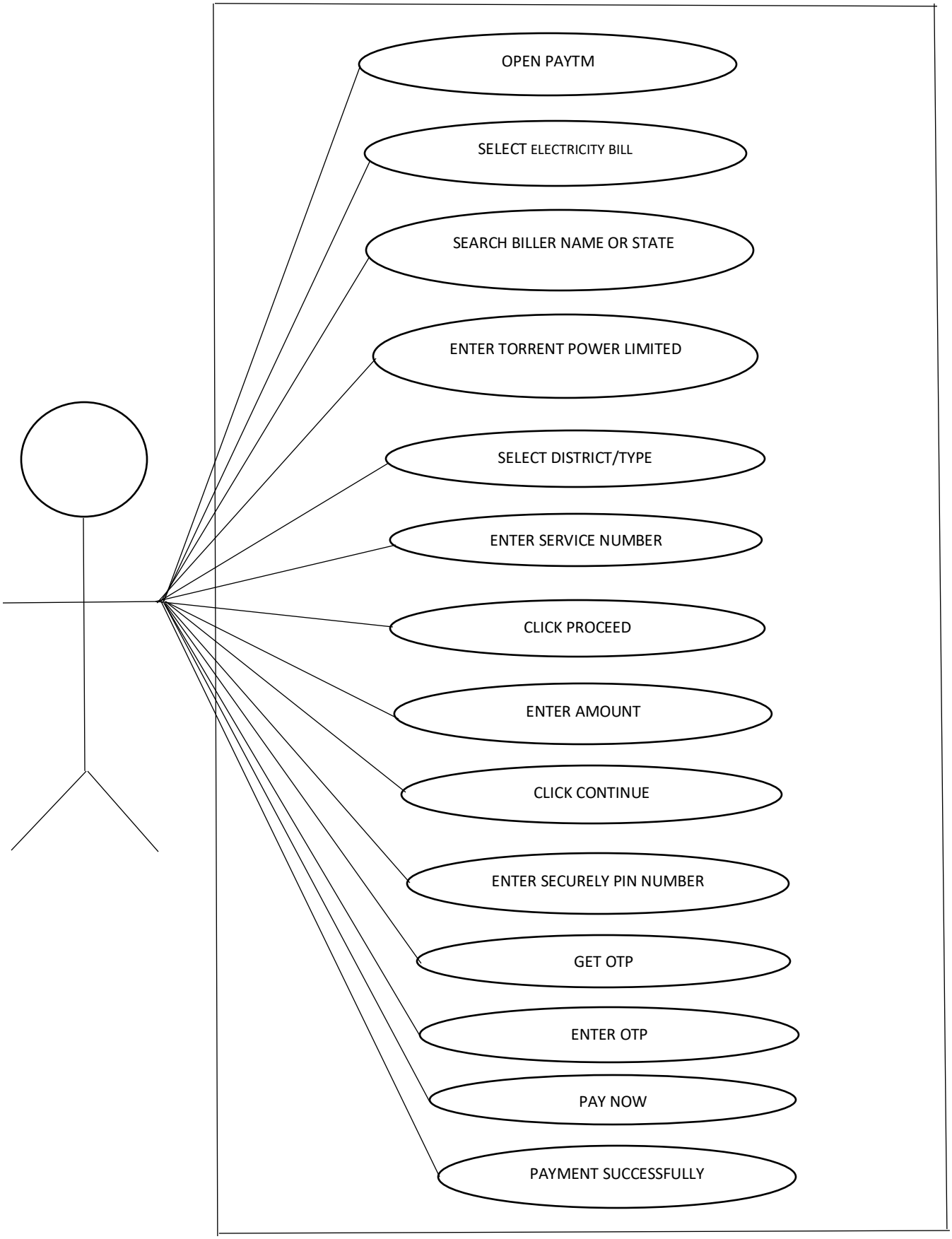
Class is a collection of data member(variables) and member function (process and method).

17. USECASE DIAGRAM FOR ONLINE SHOPPING BY COD.

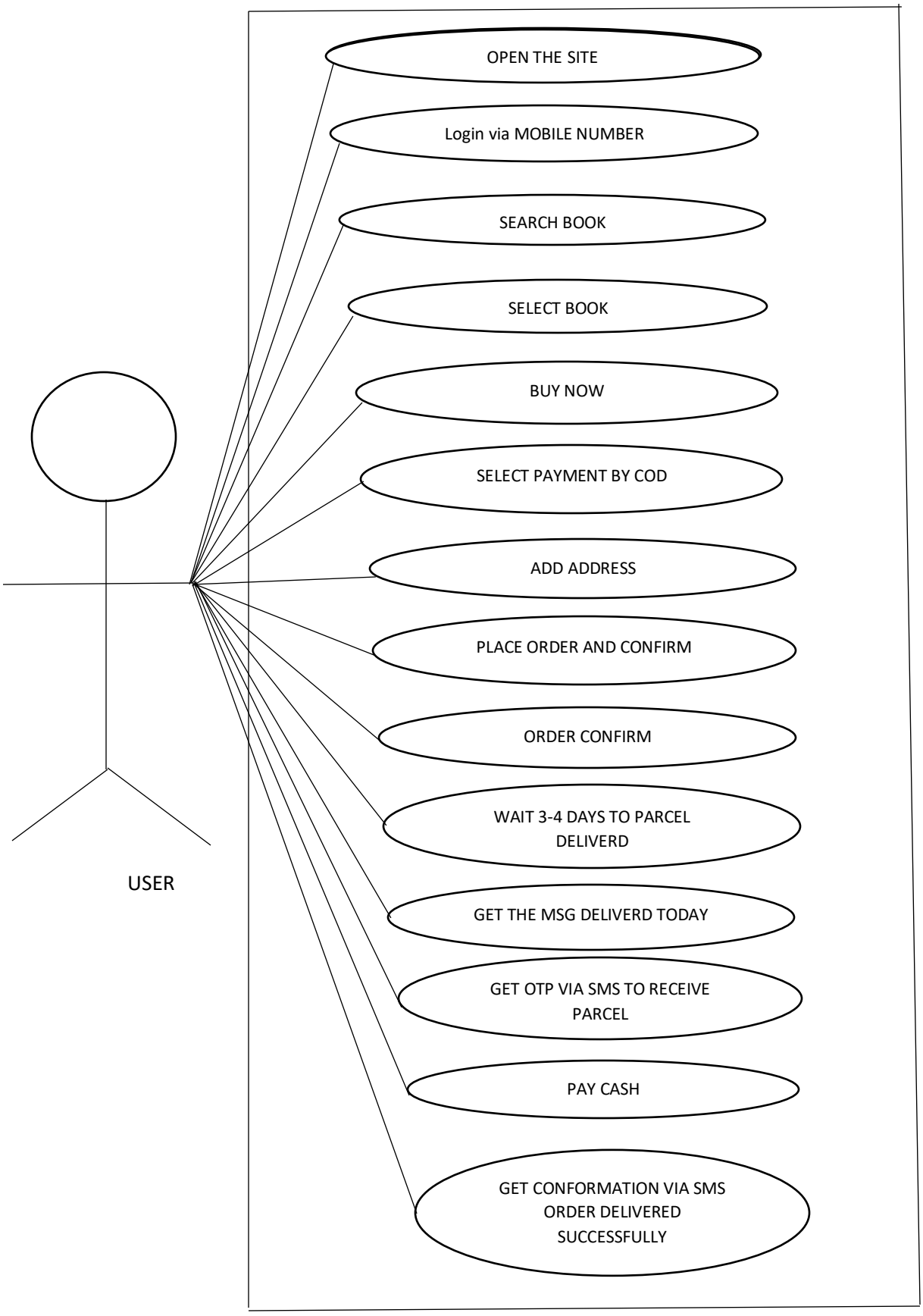



CHECK SHIPPING STAGE TO GET DELIVERY
ON ARRIVEL DAY GET SMS FROM DISPATCHING APP&CONFIRM
GET OTP VIA SMS TO RECEIVE PARCEL
PAY CASH
GET CONFORMATION VIA SMS ORDER DELIVERED SUCCESSFULLY
USER

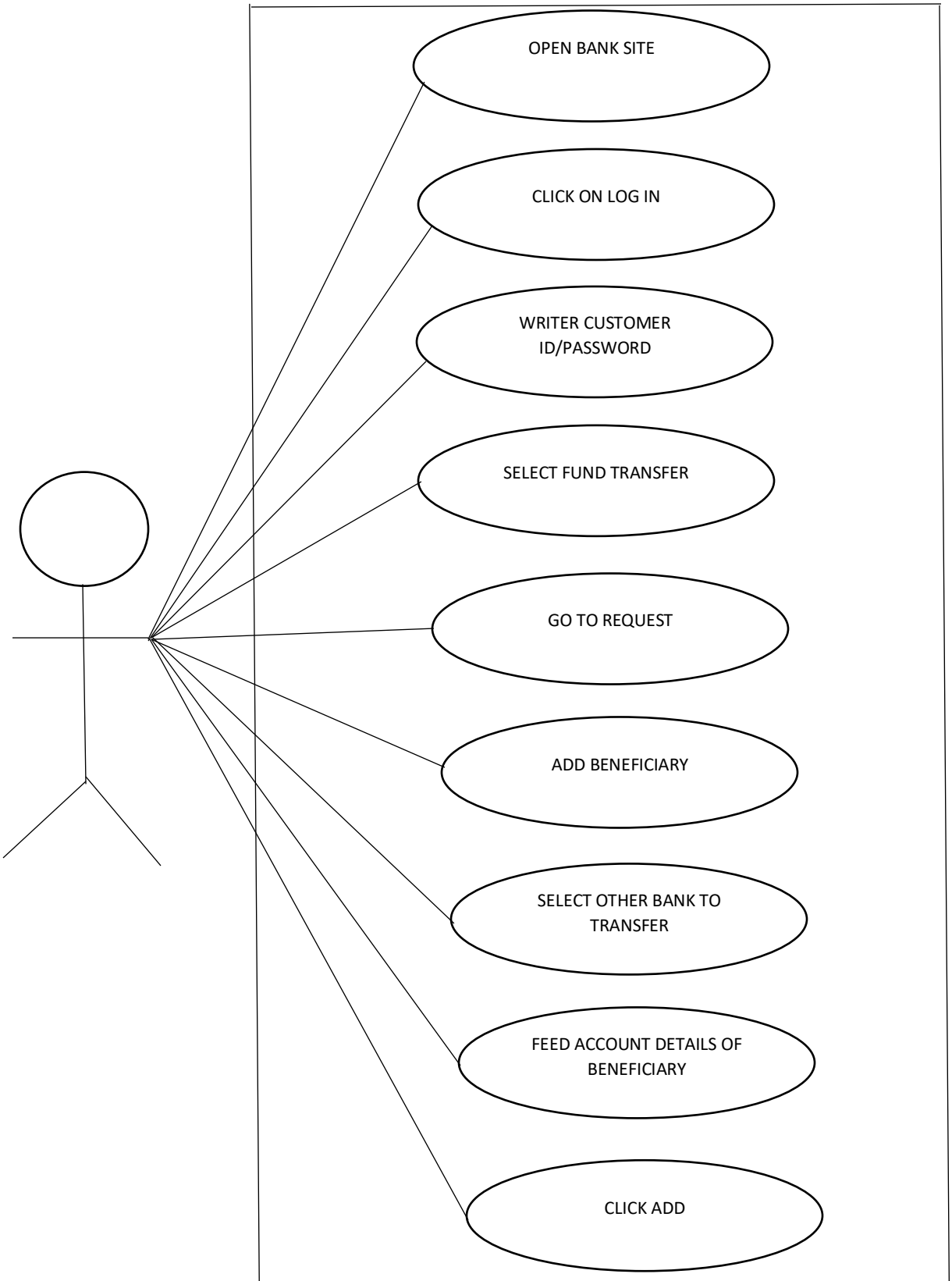
18. USECASE DIAGRAM FOR ELECTRICITY BILL PAYMENT BY PAYTM

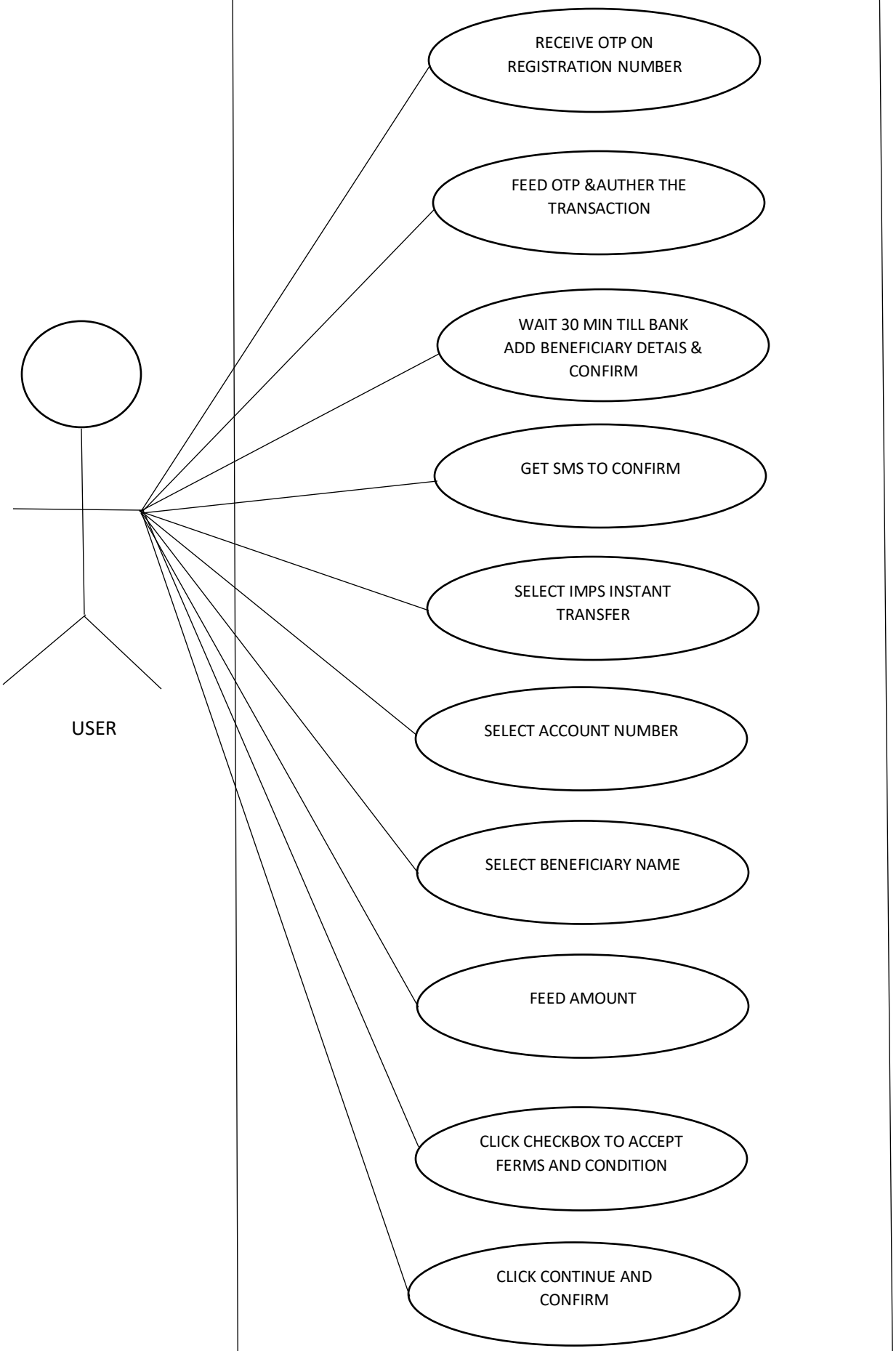


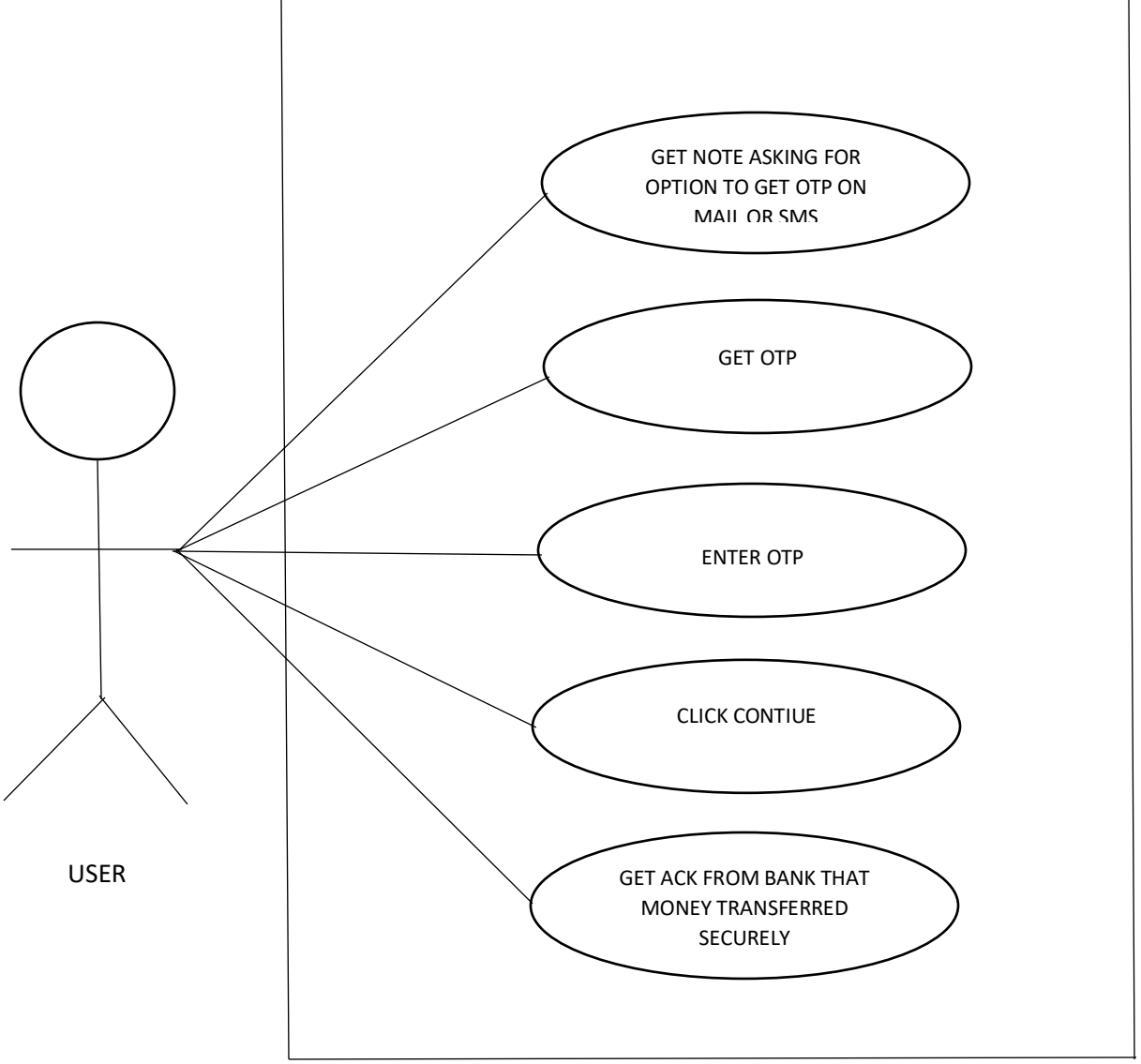
19. USECASE FOR ONLINE BOOK SHOPPING BY COD.



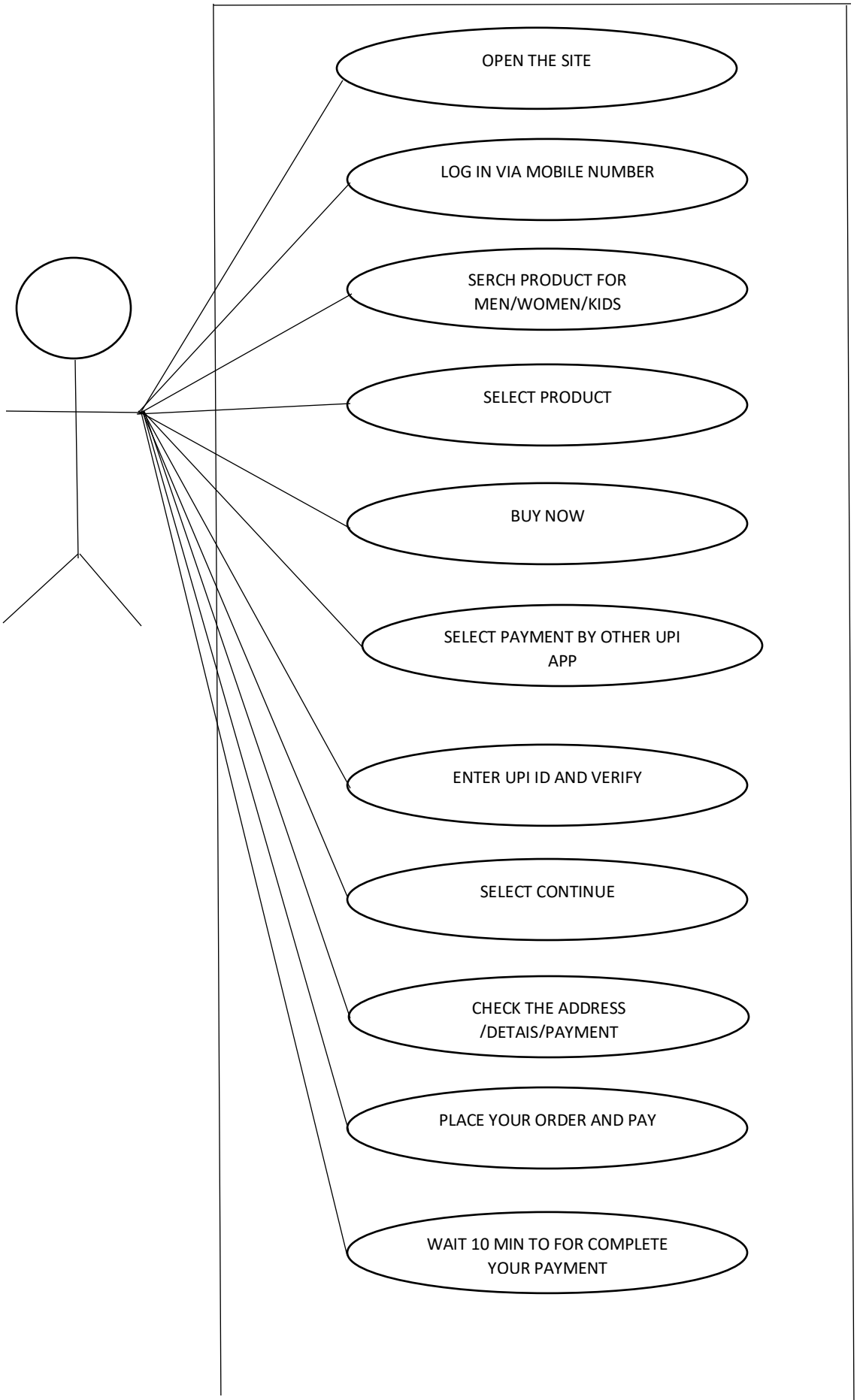
20. DRAW USECASE DIAGRAM OF ONLINE FUND TRANSFER BY USING WEB BROWSER.

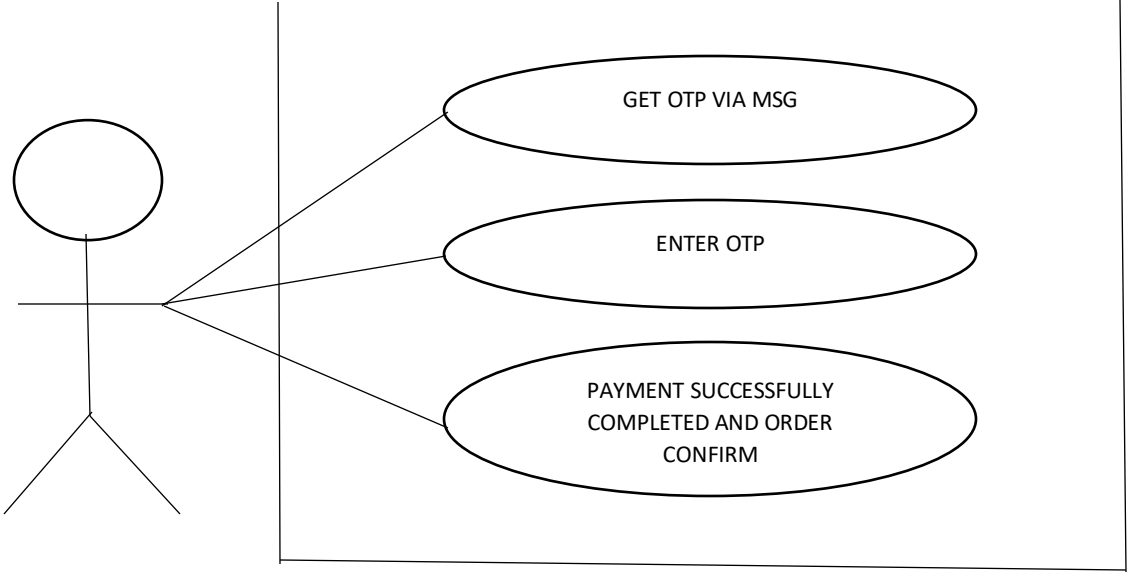



RECEIVE OTP ON REGISTRATION NUMBER
FEED OTP &AUTHER THE TRANSACTION
WAIT 30 MIN TILL BANK ADD BENEFICIARY DETAIS & CONFIRM
GET SMS TO CONFIRM
SELECT IMPS INSTANT TRANSFER
SELECT ACCOUNT NUMBER
SELECT BENEFICIARY NAME
FEED AMOUNT
CLICK CHECKBOX TO ACCEPT FERMS AND CONDITION
CLICK CONTINUE AND CONFIRM
USER


GET NOTE ASKING FOR OPTION TO GET OTP ON MAIL OR SMS
GET OTP
ENTER OTP
CLICK CONTIUE
GET ACK FROM BANK THAT MONEY TRANSFERRED SECURELY
USER

21. DRAW USECASE DIAGRAM OF ONLINE SHOPPING BY PAYMENT GATEWAY.




GET OTP VIA MSG
ENTER OTP
PAYMENT SUCCESSFULLY COMPLETED AND ORDER CONFIRM