

# Software Engineering

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## MODULE:

### SE – Overview of It Industry

#### 1. What is software? What is software engineering?

Software is set of instructions, programs used to Operate computers and execute specific task.

Software is a collection of programs.

Software engineering:

Software engineering is the process of developing, designing, maintaining and testing computer programs.

Software engineering is build a code to solve Specific task

#### 2. Explain types of software.

There is a two main types of software is:

- System software
- Application software

System software:

System software written in low level assembly language or machine code.

System software runs independently.

Necessary for the system function.

Application software:

Application software written in higher level assembly language like python or java script.

Needs system software to run.

Not necessary for the system function.

### 3. What is SDLC? Explain each phase of SDLC

SDLC stands for software development life cycle.

Phase of SDLC:

- Planning
- Analysis
- Design
- Implementation
- Testing
- Maintenance

Planning: the first step of SDLC it is planning process.

Analysis: the second step of SDLC  
It is switch to the research and analysis.

Design: third step of SDLC for development project and designing.

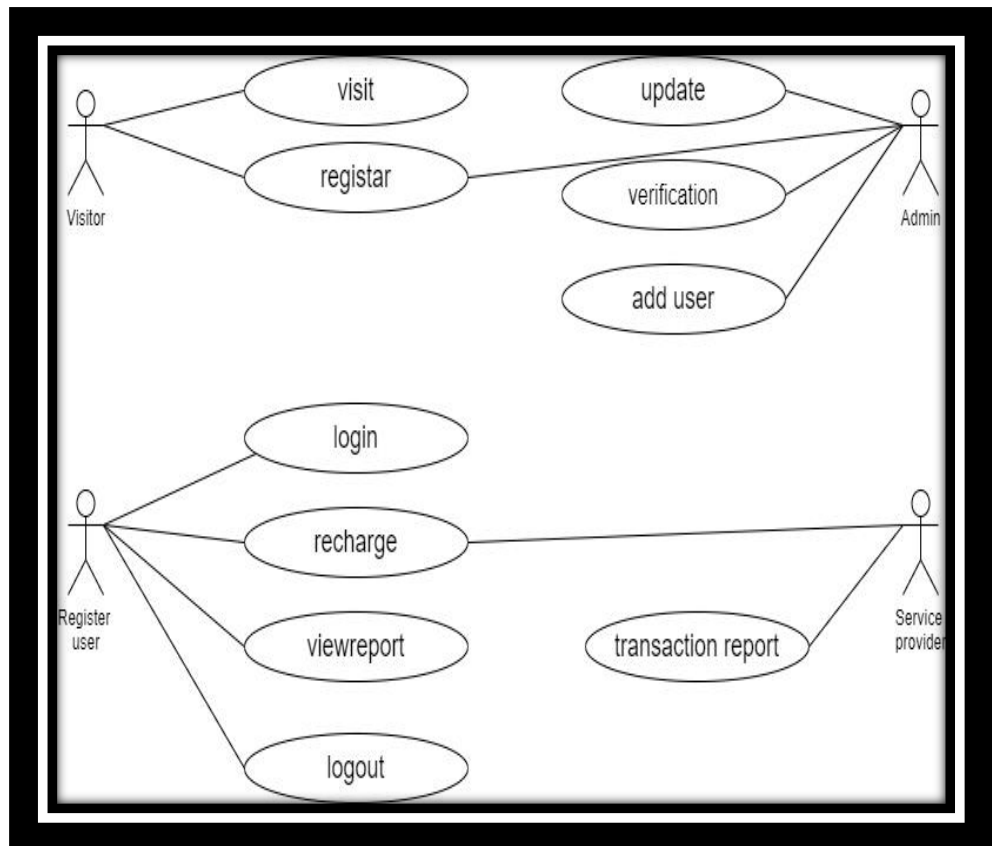
Implementation: it is fourth step of SDLC  
For implementation process.

Testing: fifth step of SDLC where developers test their programming.

Maintenance: the maintenance step in SDLC is ongoing process for upgrades, repairs and maintain.

#### 4. What is Use case Diagram? Create a use-case on bill payment on paytm.

Use case diagram is a visual representation of the interactions between users and a system.

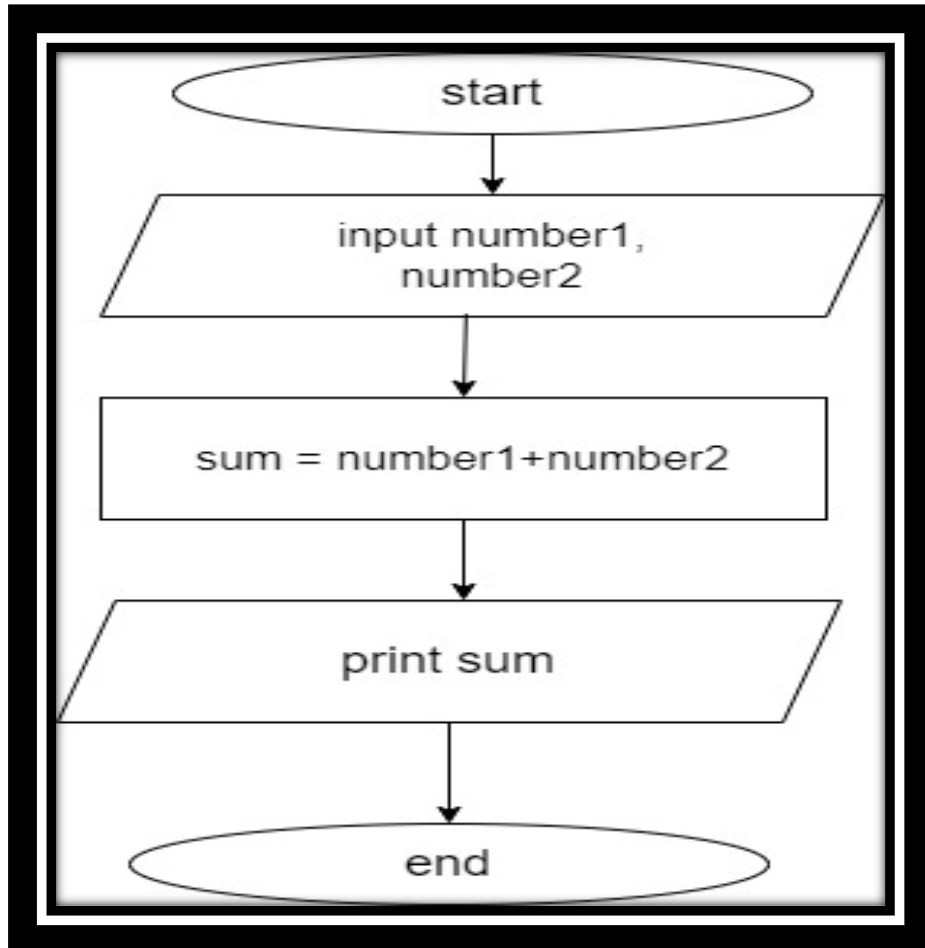


## Use Case Diagram Payment Of Paytm

5. What is Flow chart? Create a flowchart to make addition of two numbers.

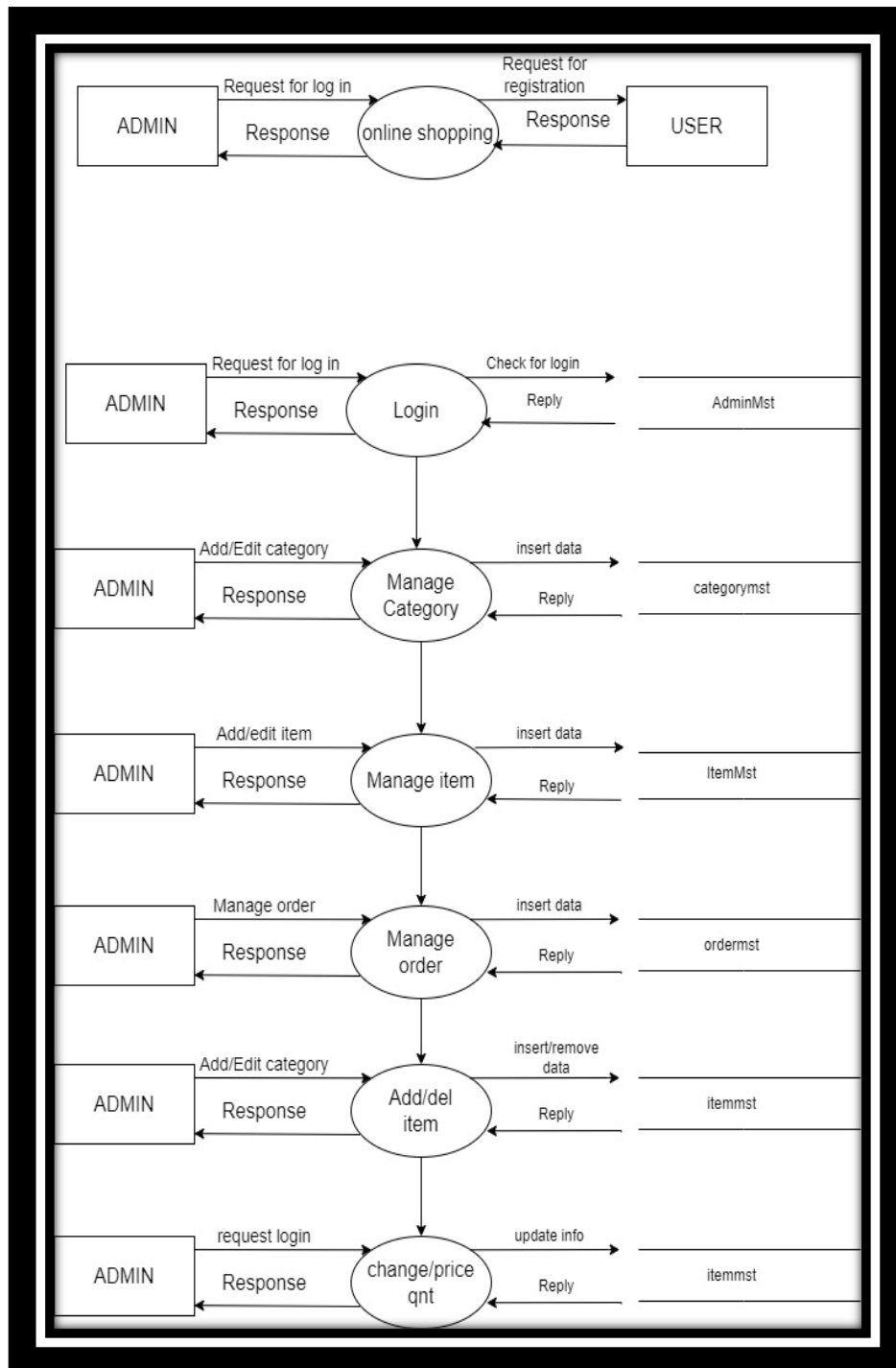
Flowchart are nothing but the graphical representation of the data or the algorithm for a better understanding of the code visually. It displays step-by-

step solutions to a problem, algorithm, or process.



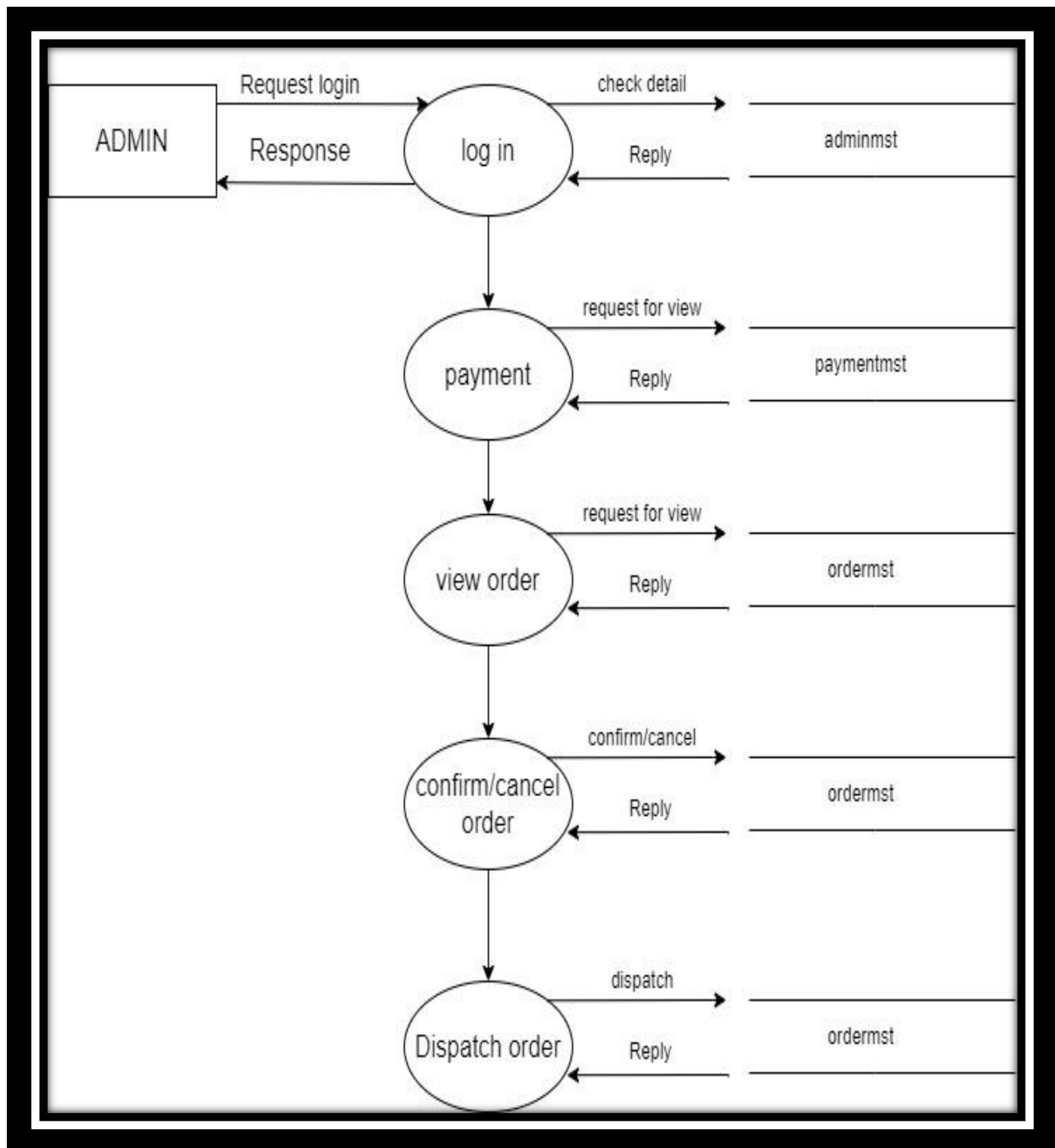
## 6. What is DFD? Create a DFD diagram on Flipkart

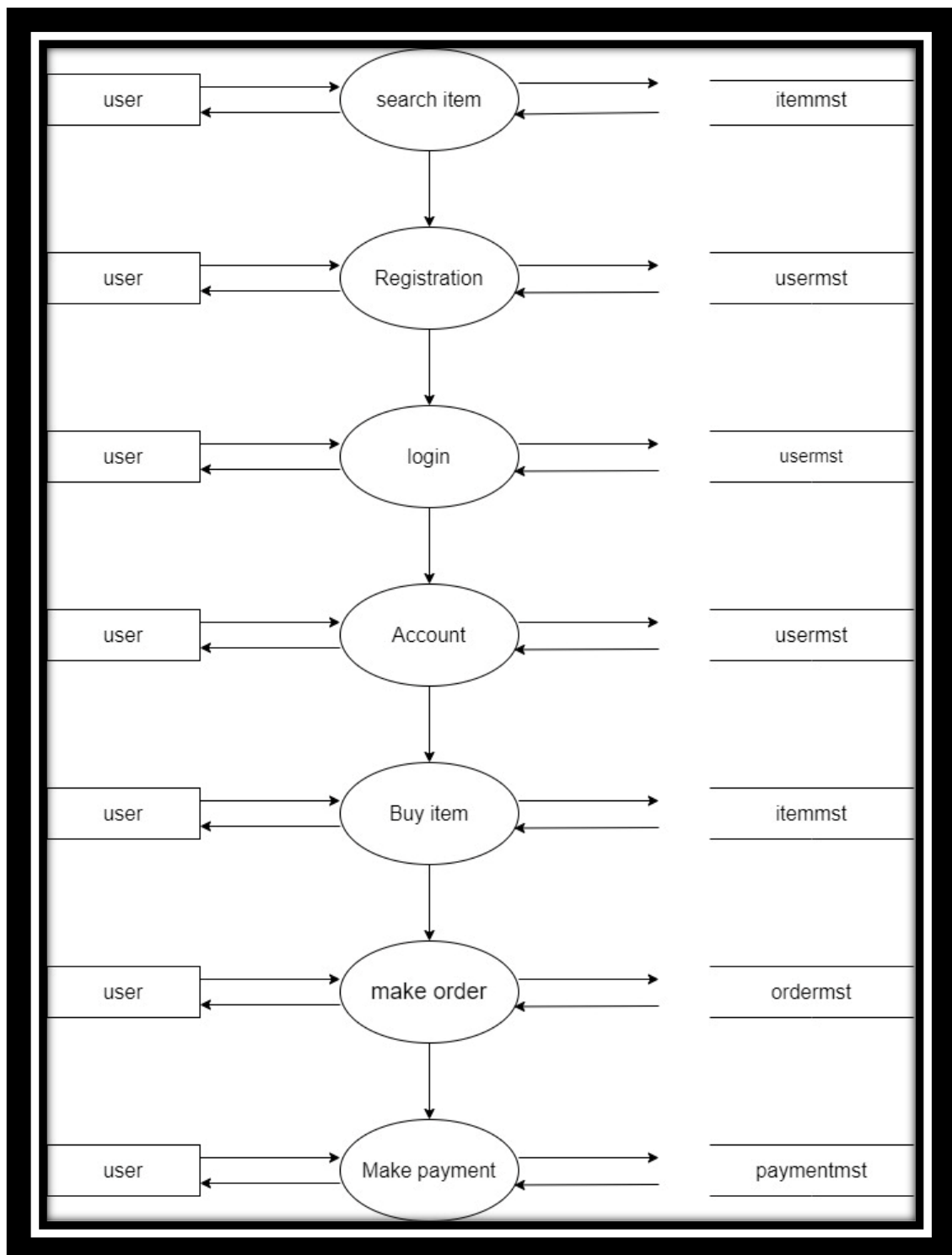
Data flow diagram (DFD) is a visual representation of how data flows through a system. We can use a DFD to analyse existing systems or create new ones.



Admin side DFD

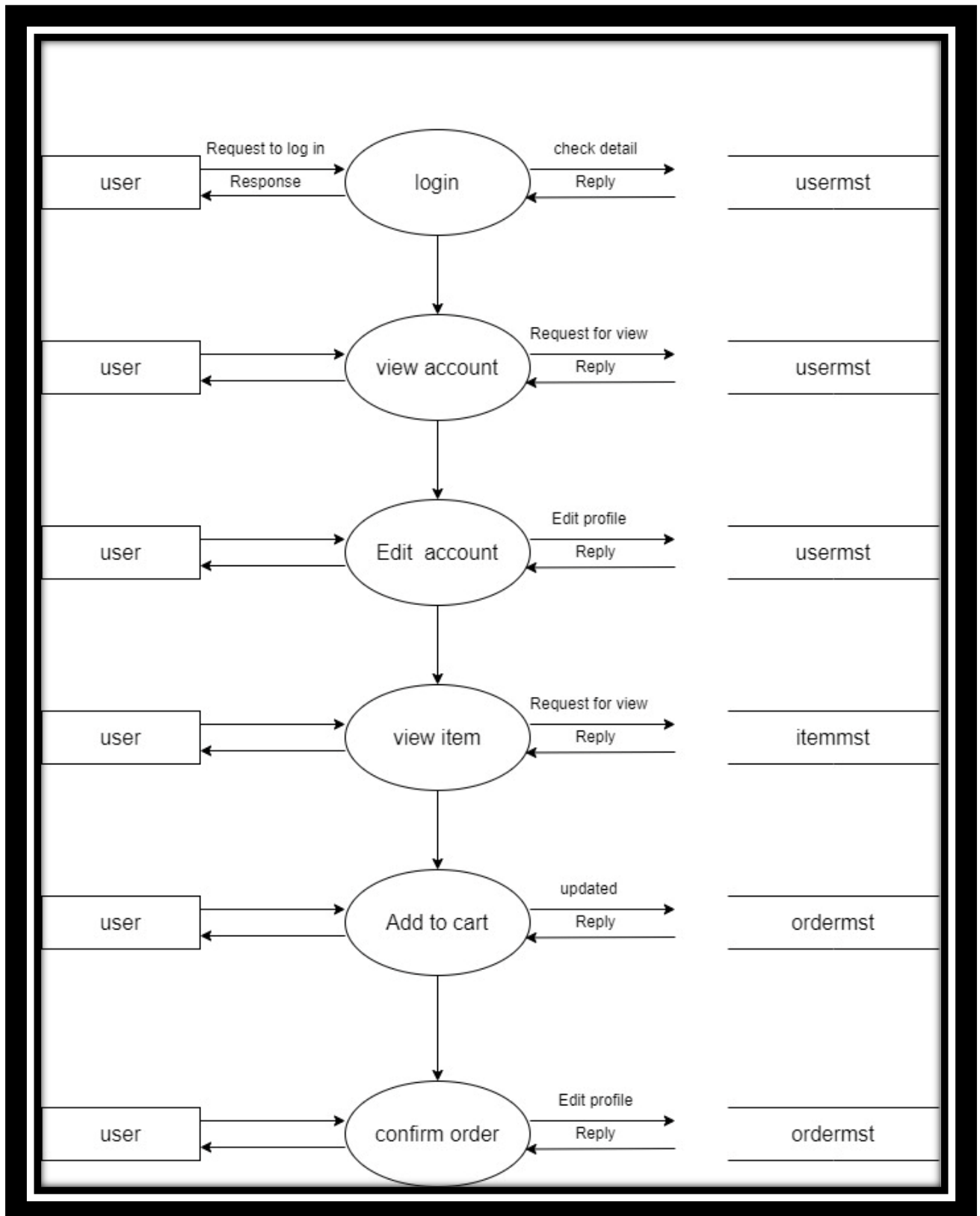
## Admin side DFD





User side DFD





User side DFD