SOFTWARE ENGINEERING

EXPERIMENT (6): Sketch Sequence and Collaboration diagram for the project.

- **TE COMP B ROLL NO. 02**
- **TE COMP B ROLL NO. 12**
- **TE COMP B ROLL NO. 18**
- **TE COMP B ROLL NO. 25**

TOPIC: CANTEEN MANAGEMENT SYSTEM

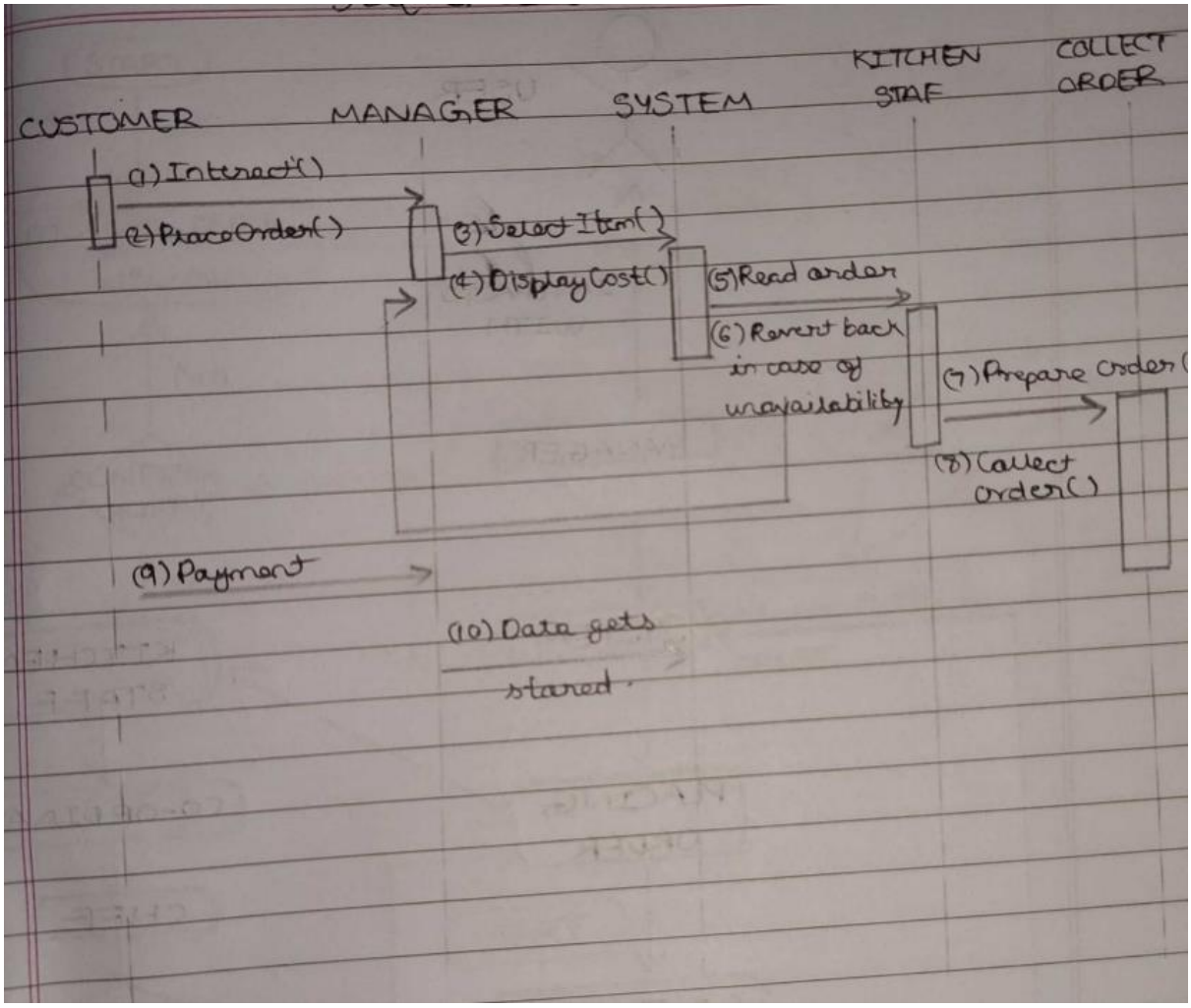
Aim: To sketch sequence and collaboration diagram for the project.

❖ Sequence Diagram:

- A sequence diagram simply depicts interaction between objects in a sequential order i.e. the order in which these interactions take place.
- We can also use the terms event diagrams or event scenarios to refer to a sequence diagram.
- Sequence diagrams describe how and in what order the objects in a system function. These diagrams are widely used by businessmen and software developers to document and understand requirements for new and existing systems.

❖ Uses of Sequence Diagram:

- Used to model and visualize the logic behind a sophisticated function, operation or procedure.
- They are also used to show details of UML use case diagrams.
- Used to understand the detailed functionality of current or future systems.
- Visualize how messages and tasks move between objects or components in a system.



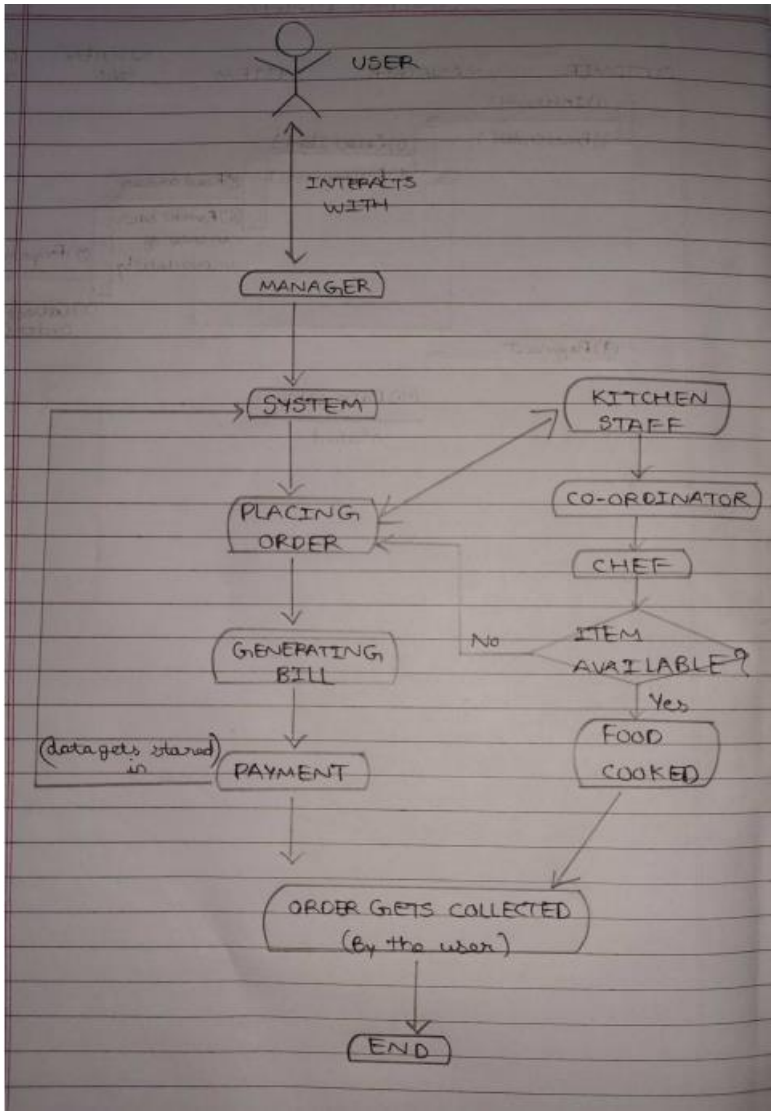
Sequence diagram for Canteen Management System

❖ Collaboration diagram:

- A collaboration diagram, also known as a communication diagram, is an illustration of the relationships and interactions among software objects in the Unified Modeling Language (UML).
- These diagrams can be used to portray the dynamic behavior of a particular use case and define the role of each object.
- Collaboration diagrams are created by first identifying the structural elements required to carry out the functionality of an interaction.
- A model is then built using the relationships between those elements. Several vendors offer software for creating and editing collaboration diagrams.

❖ **When to use:**

- Modeling collaborations, mechanisms or the structural organization within a system design.
- Providing an overview of collaborating objects within an object-oriented system.
- Exhibiting many alternative scenarios for the same use case.
- Demonstrating forward and reverse engineering.
- Capturing the passage of information between objects.
- Visualizing the complex logic behind an operation.



Collaboration Diagram for Canteen Management System