



B.Sc. in Computer Science and Engineering
School of Science and Technology
Bangladesh Open University

CSE22P5 Information System Analysis and Design Lab

Lab Report – IX

Submitted By:

Name : **MOJAHIDUL ALAM**
Student ID : **20-0-52-801-021**
Course Code: CSE22P5
Course Title : Information System
Analysis and Design Lab

Signature :

Submitted To:

SAMRAT KUMAR DEY
Lecturer (Computer Science)
School of Science and Technology
Bangladesh Open University

Signature :

Date of Submission: 13 May 24

Table of Contents

Cover Page	1
Table of Contents.....	2
Experiment No.....	3
Date.....	3
Title	3
Context	3
Objective	3
Theory	3
i. Use Case Diagram	3
ii. Actor	3
iii. Boundary.....	3
iv. Use Case	3
v. Extend	3
Required Tools and Softwares	4
i. Sketch Pen & Pad	4
ii. Wondershare EdrawMax.....	4
iii. MS Word.....	4
Execution	4
i. Sketching The Diagram Using Sketch Pen & Pad.....	4
ii. Drawing The Diagram Using Wondershare EdrawMax	4
iii. Formatting The Report Using MS Word	4
Output	5
Appendix.....	6
References	7
i. Books.....	7
ii. Websites	7

Experiment No: IX.

Date: 11 May 24.

Title: Use Case Diagram which depicts the Hotel Management System.

Context:

You have to draw a Use Case Diagram depicting the Hotel Management System. The diagram illustrates the interactions between various actors and the functionalities they perform within the system. Select actors and use cases compatible to the system according to your imagination.

Objective:

- Draw a Use Case Diagram for the Hotel Management System.
- Identify actors' interactions and system functionalities.
- Choose suitable actors and use cases.
- Improve skills in system modeling and representation.
- Develop abilities in conceptualizing and visualizing systems.

Theory: The key points required for the Use Case Diagram are –

- i. **Use Case Diagram:-** A use case diagram is a graphical depiction of a user's possible interactions with a system.
- ii. **Actor:-** Actors represent the external entities (such as users or systems) that interact with the system being modeled. They are depicted as stick figures or labeled rectangles outside the system boundary.
- iii. **Boundary:-** The system boundary represents the scope of the system being modeled. It separates the system from its external environment and encloses all the use cases.
- iv. **Use Case:-** A use case represents a specific functionality or behavior that the system provides to its actors. It describes a sequence of actions that accomplish a goal for a user. Use cases are depicted as ovals within the system boundary.
- v. **Extend:-** Extend relationship signifies that one use case may optionally extend the behavior of another use case under certain conditions. It is

used when additional behavior may be optionally added to a base use case.

Required Tools and Softwares:

- Sketch Pen & Pad (for sketching the model)
- Wondershare EdrawMax (for designing the diagram)
- MS Word (for writing and furnishing)

Execution:

☐ **Sketching The Diagram Using Sketch Pen & Pad**

- Understand system requirements.
- Identify actors.
- Consider use case and association carefully.
- Design layout on pad allocating space for each component appropriately.
- Arrows and labels to represent information clearly.
- Carry out refinements before implementation in software.

☐ **Drawing the diagram using Wondershare EdrawMax**

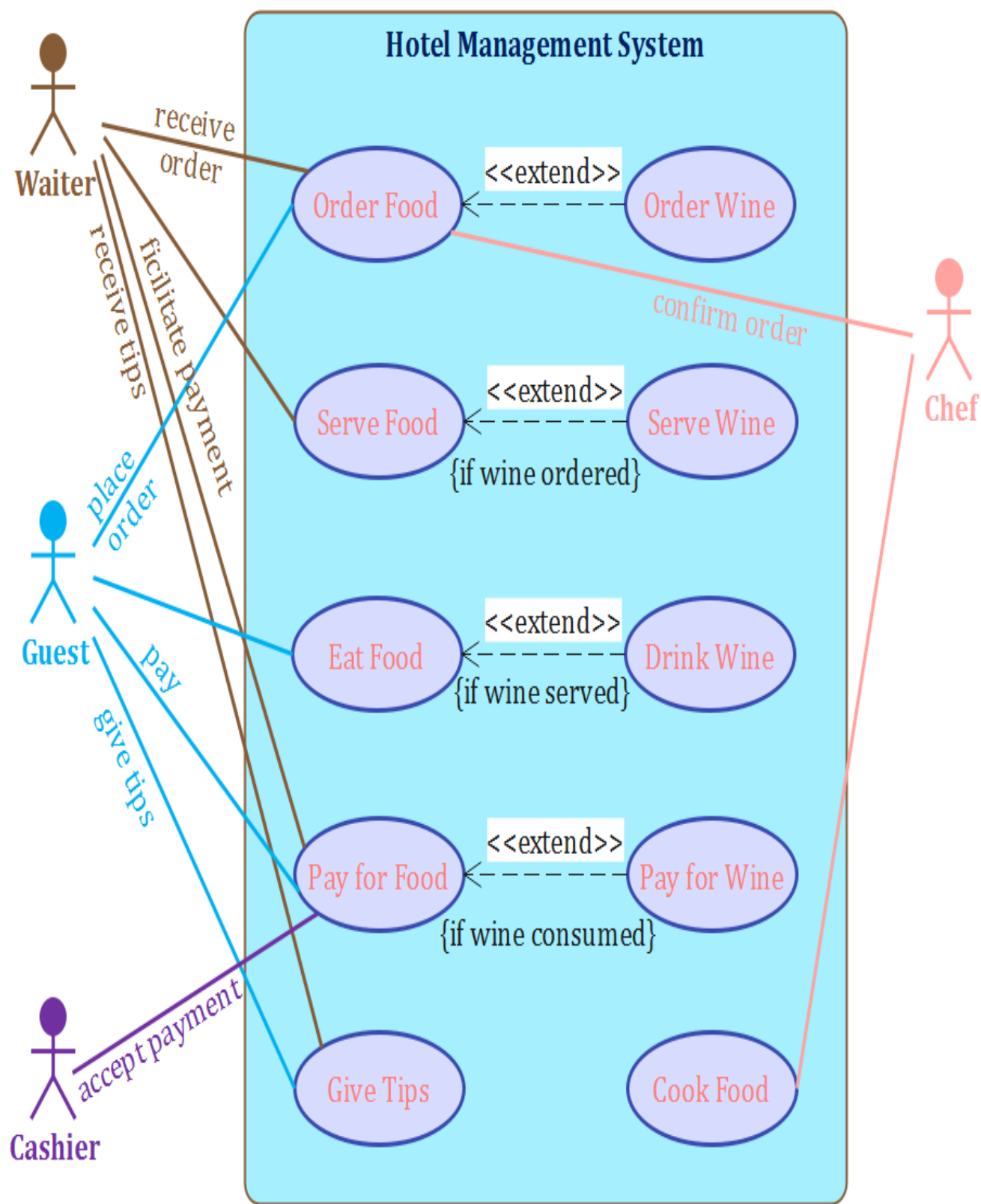
- Launch Wondershare EdrawMax and create a new Use Case Drawing.
- Use symbols and connectors to represent all functionalities.
- Arrange sections logically and add labels & texts for clarity.
- Review and revise as needed.

☐ **Formatting the Report using MS Word**

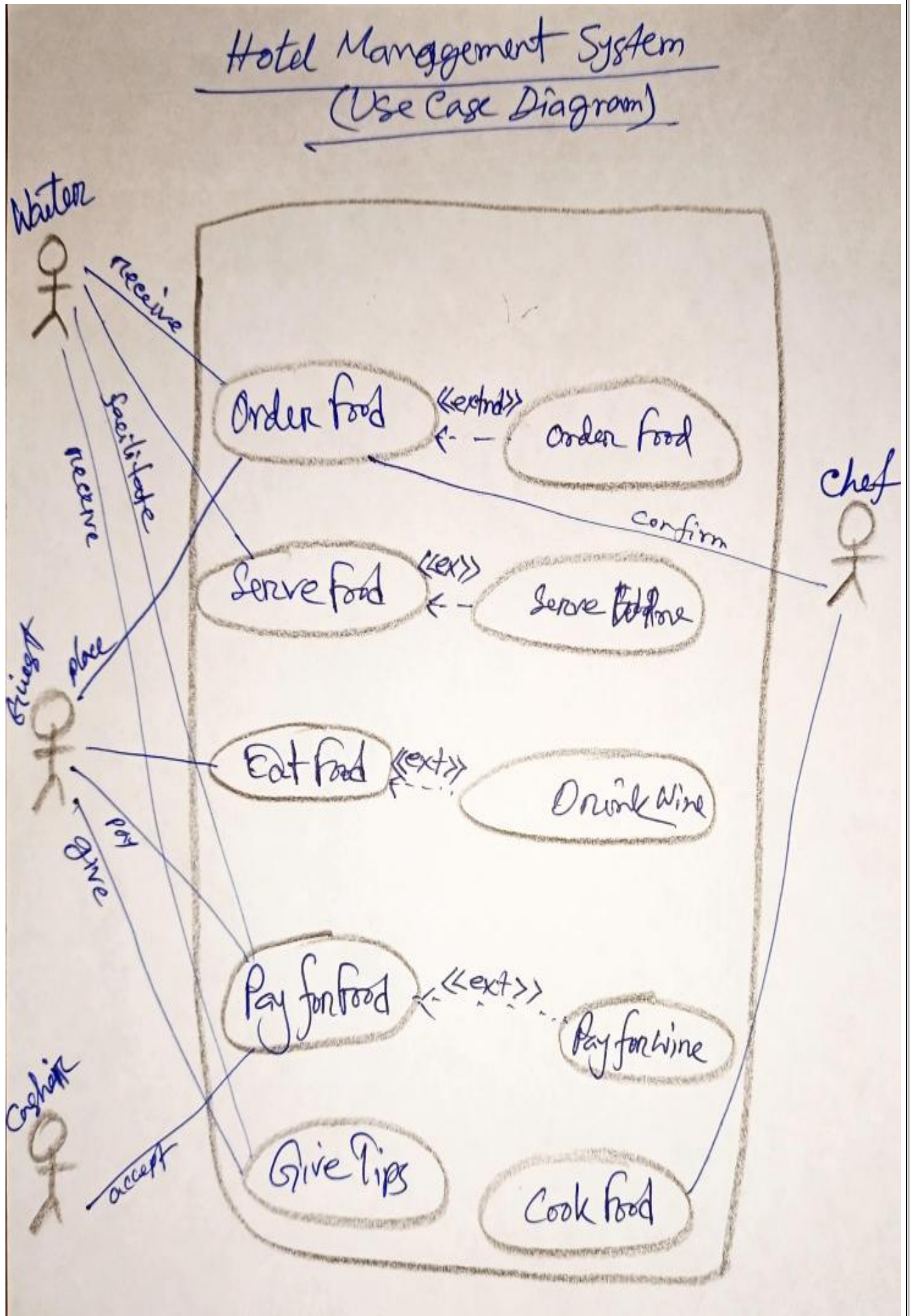
- Open MS Word and create a new document.
- Set up layout and formatting preferences.
- Type content for each section.
- Organize content with appropriate headings and subheadings.
- Insert the use case diagram from Wondershare EdrawMax.
- Review the entire document for coherence and professionalism.

HOTEL MANAGEMENT SYSTEM

(USE CASE DIAGRAM)



Appendix: Screenshot from sketch pad -



References:

- **Book**

Schmuller, Joseph, *SAMS Teach Yourself UML in 24 Hours* (3rd ed.), SAMS

- **URL**

- *Edraw Max User Manual Professional and All-in-one Diagramming Software*

<https://www.edrawsoft.com/guide/edraw-max-user-manualen.pdf>

- *Edraw Max User Guide*

<https://images.edrawsoft.com/guide/edrawmax/edrawmax-usermanual-en.pdf>

