

CM-2603 Data Science Group Project

Analysis & Modeling - User Stories, Use Case Analysis

Week 05 | Prasan Yapa | Sriyan Fernando

Learning Outcomes

- Covers LO1 for Module
- On completion of this lecture, students are expected to be able to:
 - Map user stories to use case diagrams

CONTENT

- What is User Story?
- Tips for Writing Good User Stories
- What is Use Case Diagram?
- How to Draw a Use Case Diagram?

What is User Story?

- It is a general explanation of a software feature written from the perspective of the end **user** or customer.
- The purpose of user story is to how a piece of work will deliver to particular value back to the customer.
- If you don't know who the users and customers are and why they would want to use the product, then you should not write any user stories.

Tips for Writing Good User Stories

- Users Come First
- Use Personas to Discover the Right Stories
- Create Stories Collaboratively
- Start with Epics
- Refine the Stories until They are Ready
- Keep your Stories Visible and Accessible
- Keep your Stories Visible and Accessible

What is Use Case Diagram?

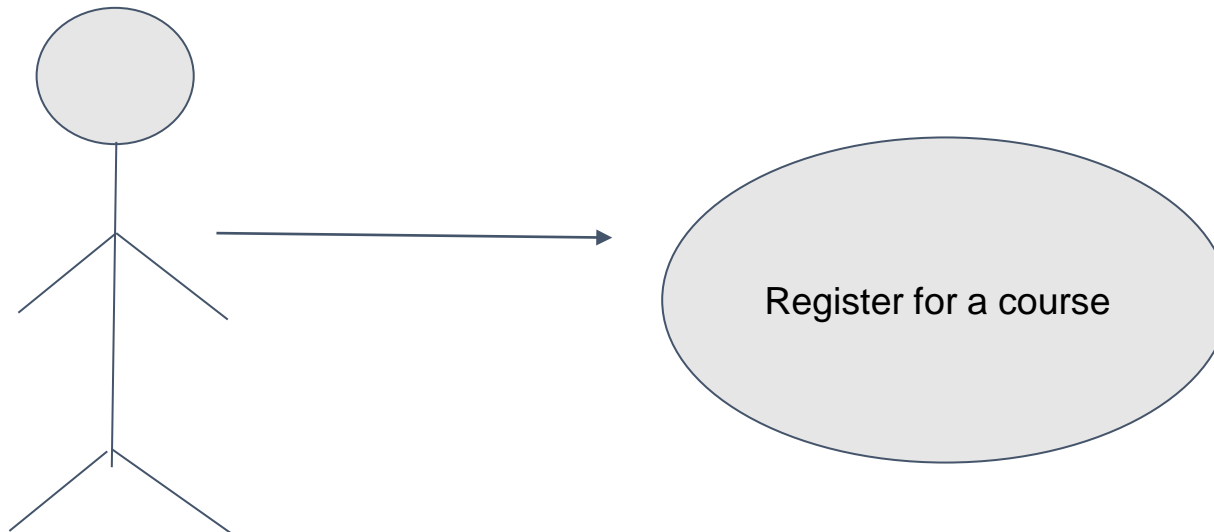
- It is a behavior **diagram** and visualizes the observable interactions between **actors** and the **system** under development.
- **System:** What is being described?
- **Actor:** Who is using the system?
- **Use Case:** What are the actors doing?

How to Draw a Use Case Diagram?

- Identify the Actors(role of users) of the system.
- For each category of the users, identify all roles played by the users relevant to the system.
- Identify what are the users required the system to be performed to achieve these goals.
- Create use cases for every goal
- Structure the use cases (eg : <<Include>>, <<Extend>>)

Example 1:

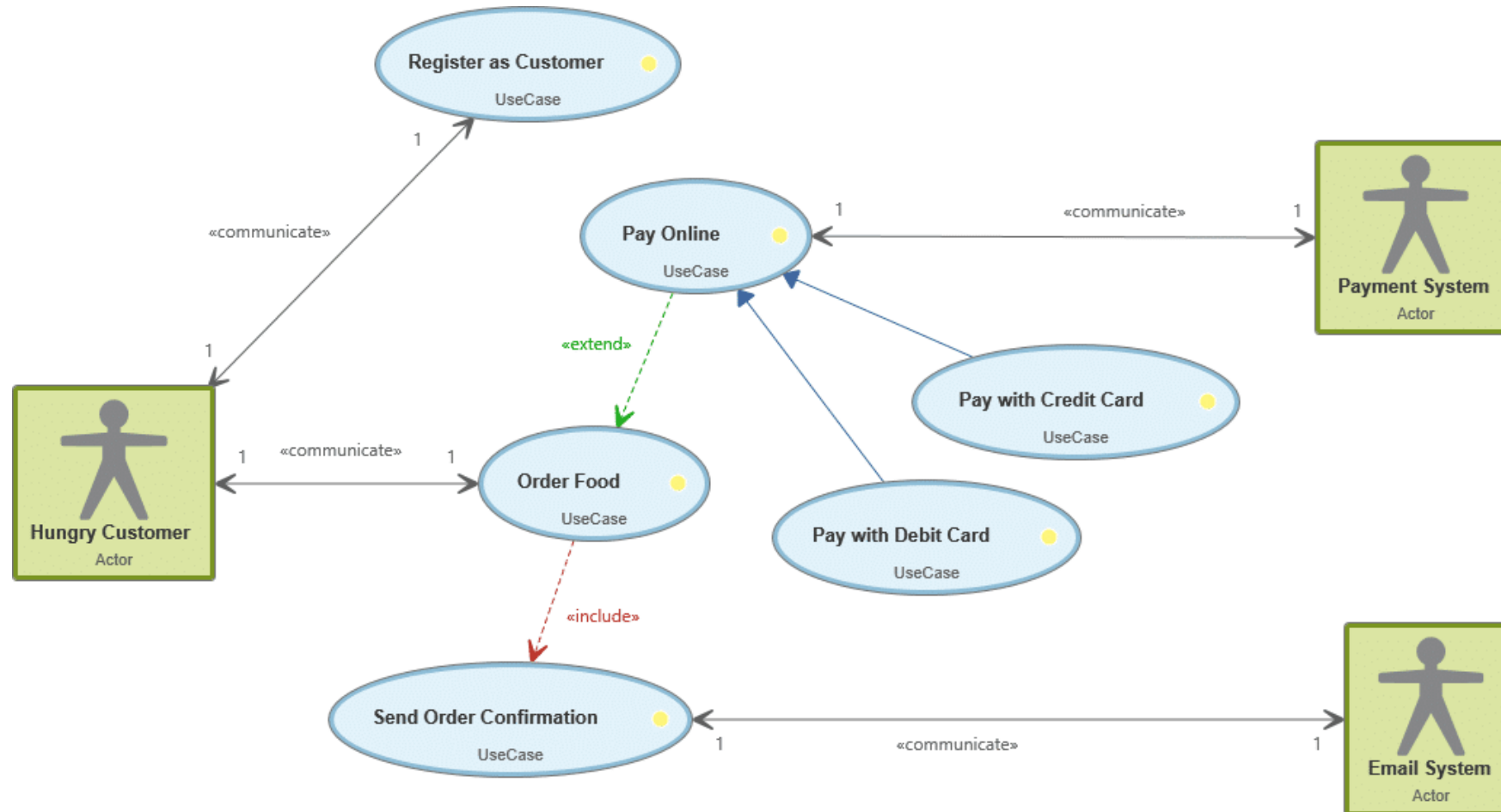
- User Story : As a **student** , I should be able to **register for a course**.
- Use Case Diagram : **Actor => Student , Use Case => Register for a course**



Example 2: Prepare a use case diagram for the following user stories

- User Story 1 : As a user I should be able to register as a customer.
- User Story 2: As a user I should be able to order food.
- User Story 3 : As a user I should receive order confirmation once I place an order.
- User Story 4 : As a user I should be able to pay online for an order with a credit card.
- User Story 5 : As a user I should be able to pay online for an order with a debit card.

Sample Answer:



Reading

- <https://online.visual-paradigm.com/diagrams/tutorials/use-case-diagram-tutorial/>