Objective

In this checkpoint, you are going to develop a user story where you are going to introduce the needs for your application.

Instructions

- From your user story you are going to extract the:
  - User Story.
  - Use case diagram.
  - Classes diagram.

User Story is *:*

> *an informal, general explanation of a software feature written from the perspective of the end user. Its purpose is to articulate how a software feature will provide value to the customer.*

Why create user stories?

User stories serve a number of key benefits:

- **Stories keep the focus on the user.** A to-do list keeps the team focused on tasks that need to be checked off, but a collection of stories keeps the team focused on solving problems for real users.
- **Stories enable collaboration**. With the end goal defined, the team can work together to decide how best to serve the user and meet that goal.
- **Stories drive creative solutions**. Stories encourage the team to think critically and creatively about how to best solve for an end goal.
- **Stories create momentum**. With each passing story, the development team enjoys a small challenge and a small win, driving momentum.

How to write user stories

Consider the following when writing user stories:

- **Definition of "done"** — The story is generally "done" when the user can complete the outlined task, but make sure to define what that is.
- **Outline subtasks or tasks** — Decide which specific steps need to be completed and who is responsible for each of them.
- **User personas** — For whom? If there are multiple end users, consider making multiple stories.
- **Ordered Steps** — Write a story for each step in a larger process.
- **Listen to feedback** — Talk to your users and capture the problem or need in their words. No need to guess at stories when you can source them from your customers.
- **Time** — Time is a touchy subject. Many development teams avoid discussions of time altogether, relying instead on their estimation frameworks. Since stories should be completable in one sprint, stories that might take weeks or months to complete should be broken up into smaller stories or should be considered their own epic.

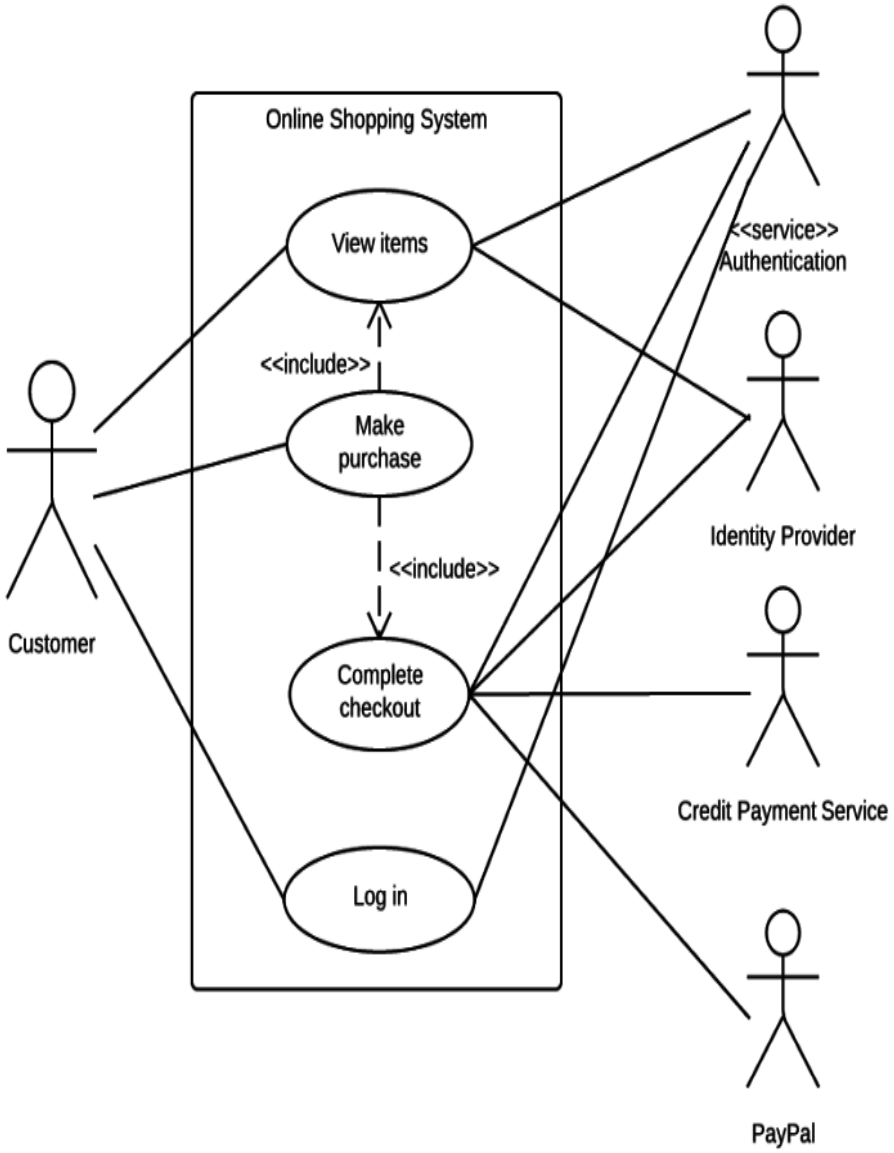
User stories are often expressed in a simple sentence, structured as follows:
"As a [persona], I [want to], [so that]."

For example, user stories might look like:

- As Max, I want to invite my friends, so we can enjoy this service together.
- As Sascha, I want to organize my work, so I can feel more in control.
- As a manager, I want to be able to understand my colleagues progress, so I can better report our sucess and failures.

What is a use case diagram?

A use case diagram can summarize the details of your system's users (also known as actors) and their interactions with the system. To build one, you'll use a set of specialized symbols and connectors



Classes diagram:

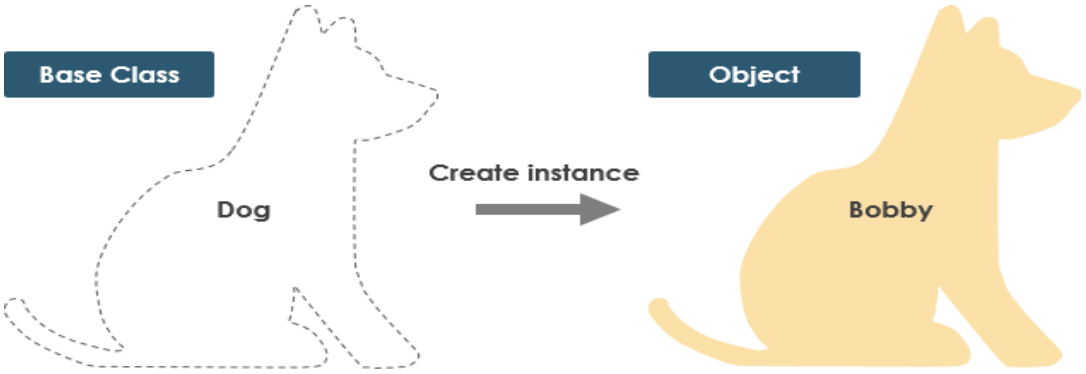
Class diagram is a graphical notation used to construct and visualize object oriented systems. A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's:

- classes,
- their attributes,
- operations (or methods),
- and the relationships among objects.

A Class is a blueprint for an object. Objects and classes go hand in hand. We can't talk about one without talking about the other. And the entire point of Object-Oriented Design is not about objects, it's about classes, because we use classes to create objects. So a class describes what an object will be, but it isn't the object itself.

Example :

A dog has states - color, name, breed as well as behaviors -wagging, barking, eating. An object is an instance of a class.



Properties	Methods
Color	Sit
Eye Color	Lay Down
Height	Shake
Length	Come
Weight	

Property Values	Methods
Color: Yellow	Sit
Eye Color: Brown	Lay Down
Height: 17 in	Shake
Length: 35 in	Come
Weight: 24 pounds	

Class Diagram Example**: GUI**

A class diagram may also have notes attached to classes or relationships: