**Unified Modeling Language (UML)** is a standardized way to visually represent the structure and behavior of a software system. It helps teams plan, analyze, and communicate software design before actual coding starts.

UML diagrams are divided into two main categories:

🔹 **Structural Diagrams** – represent the static part of the system (classes, components, deployment, etc.)

🔸 **Behavioral Diagrams** – represent the dynamic part of the system (interactions, workflows, states, etc.)

In this assignment, I will create the following UML diagrams:

* Use Case Diagram
* Class Diagram
* Activity Diagram
* Sequence Diagram
* State Chart Diagram
* Component Diagram
* Deployment Diagram