

## Assignment 4

**Ques1:** Explain the role of design concepts in software development. How do abstraction, refinement, and modularity contribute to effective software design?

**Ques2:** Describe the importance of cohesion and coupling in software design. How do these concepts impact the maintainability of software?

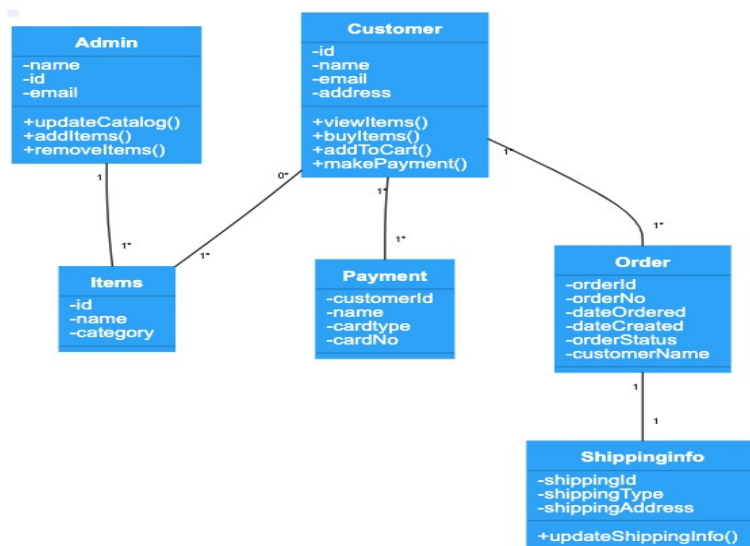
**Ques3:** How do data design, architectural design, and component-level design fit into the overall design model?

**Ques4:** What is software architecture, and why is it critical in the software development process?

**Ques5:** Explain the process of component-level design in software engineering. How do UML diagrams aid in modeling component-level design?

**Ques6:** Create a flowchart for a simple software module using procedural design principles. Explain each step in the process.

**Ques7:** Explain how object-oriented design principles are applied in the below design.



**Ques8:** How does data become information in the context of software systems? Discuss the process and its significance.

**Ques9:** Develop a dataflow diagram (DFD) for an online shopping system. Discuss the levels of DFD and the significance of each level.