



COURSE: (SL-2002) SOFTWARE DESIGN AND ARCHITECTURE LAB  
LAB TASK # 4

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- Submit the .vpp file and a pdf file containing the screenshot of both class diagrams, write your assumptions (if any) in the pdf file while drawing the diagram.
- Zero marks will be awarded in case of plagiarism
- Submit all files with proper naming. Name\_Roll\_No\_Lab\_Task\_no

**Convert the following descriptions into their respective class diagrams.**

**1. Class Diagram for Banking system**

A bank maintains multiple ATM's. Each ATM can perform multiple transactions (withdraw, check Balance, Amount Transfer). The bank can have multiple customers. Each customer owns one or more debit cards. The bank manages those cards as well. Debit card provides access to the customer's account that customer owns. The account can be a savings or checking account. A single account can perform multiple transactions.

**Note:** Each class must have some attributes and methods. Identify yourself the suitable attributes and methods. Make proper relationship between classes where necessary with proper labels and multiplicity.

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**2. Hospital Management System**

A person can be admitted to a single hospital at a time. While the hospital can have multiple patients a time. The hospital contains many departments, and each department contains many staff members (administrative staff, technical staff, operations staff). Further the doctor and nurse lie in the category of operations staff. The receptionist come under the category of administrative staff. Computer technician and biomedical equipment's technicians come under the technical staff.

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