

Date: 28-10-2021



SOFTWARE DESIGN AND ARCHITECTURE

LAB NO. 05

Domain Model

Submitted by:

Hajra Muqddsa Akbar

Roll no. 12319

Maheen Nasir

Roll no. 12315

Course and Section:

BSSE--4B

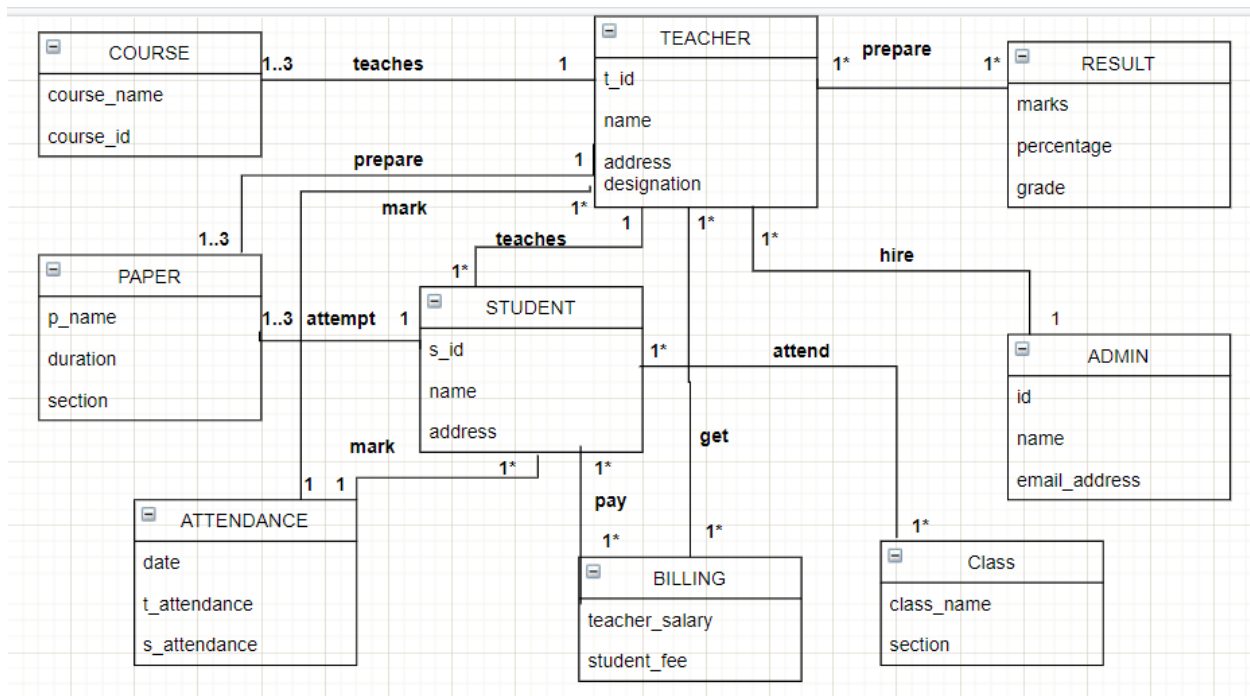
Submitted To:

Madam Saadia Shabir

Q1 Consider a school management system. Draw a domain model for this scenario and identify conceptual classes by using following conceptual class category list i.e taught in lecture

Conceptual Class Category	Example
Business Transaction	Billing , Fee
Transaction line item	Billing line
Product or service	Books , uniform , transport
Where is transaction recorded	Acquaintance roll, Contingencies and fee collection register, Ledger
Roles of people or organization	Student, Teacher, Owner, Administrator
Noteworthy events, often with a place or time we need to remember	Academic performance, Students achievement and Grades, Extracurricular performance
Physical objects	Building, Office space , Equipment in library and laboratory, Furniture, vehicles
Description of things	Fee , salary , scholarships description
catalogue	Course Catalogue, Fee Catalogue, Attendance Catalogue
Container of things (physical or informational)	School
Things in container	Student , Teacher, Admin
Other collaborating system	Examination Board
Record of finance, work, contract, legal matters	Acquaintance roll, Contingencies and fee collection register, Ledger
Financial instrument	Credit, Cheque, Cash

Diagram:



Q2 Consider the following use case and develop a Domain Model using a noun phrase identification technique to represent the relevant conceptual classes with attributes and the association between them

Title: Deposit Money in ATM

Primary Actor: Customer

Main Scenario: The Customer approaches the Bank's ATM

The customer inserts his/her card

The ATM requests the customer's PIN

The customer enters his/her PIN

The ATM validates the customer's details

The ATM displays a list of actions

The customer selects deposit

The ATM requests the money be inserted

The customer inserts the money in the ATM

The ATM adds up the money inserted and asks customer to confirm total

The customer confirms the total

The ATM updates the balance of the customer's selected account
The ATM returns the customer's card.

Nouns:

Money, customer, bank, ATM, atm card, balance, account.

Diagram:

