

## MOBILE BUSSINESS SYSTEM

Members -

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### **Actors**

1. Customer
2. Service provider

### **Use cases**

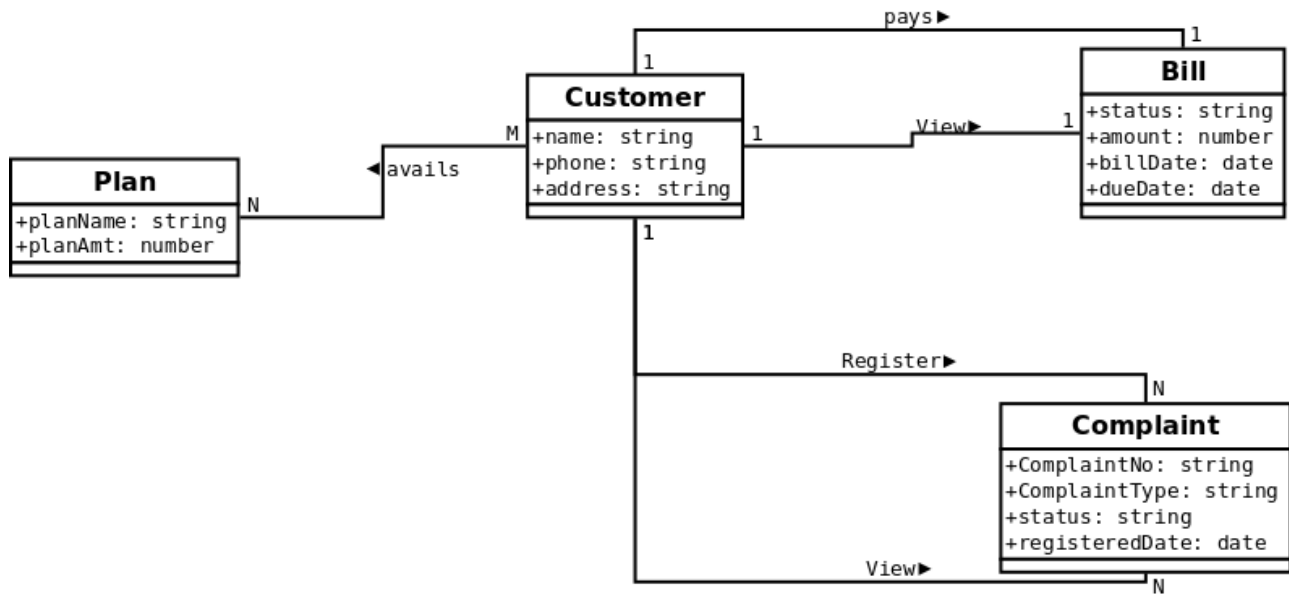
Customer -

Use case	Description	Tables Used
Edit details	Can edit personal details	Customer
Pay bill	Can pay a particular bill	Bill
Get bill	Can view the bills to be paid	Bill
View plans	Can view all the available plans	Plan
Change plan	Can change the existing plan and bill the customer for the previous plan	Customer, Plan, Bill
Register complaint	Can register a complaint	Complaint
Check complaint status	Can check the status of the complaints	Complaint

Service Provider -

Use case	Description	Tables Used
Add customer	Can add a new customer, setting a plan he selects	Customer, Plan
Delete customer	Can delete an existing customer if he has no bills pending	Customer, Bill, Complaint
Monthly revenue	Can check the income per month	Bill
View pending complaints	Can view all the pending complaints	Complaint, Customer
Add plan	Can add a new plan	Plan

## UML Class Diagram



## Relational DB Design

### customer

Name of Column	Data Type	Constraints
customer_id	Integer	PK, surrogate
customer_name	String	NOT NULL
phone	String	Unique, NOT NULL
address	String	NOT NULL
present_plan_id	Integer	NOT NULL, FK reference to plan.plan_id, ON DELETE CASCADE
plan_start_date	Date	NOT NULL

### plan

Name of Column	Data Type	Constraints
plan_id	Integer	PK, surrogate
plan_name	String	NOT NULL, unique
plan_amt	Float	NOT NULL

## complaint

Name of Column	Data Type	Constraints
complaint_id	Integer	PK, surrogate
complaint_type	String	NOT NULL
status	String	Enum
customer_id	Integer	NOT NULL, FK reference to customer.customer_id, ON DELETE CASCADE
register_date	Date	NOT NULL

## bill

Name of Column	Data Type	Constraints
bill_id	Integer	PK, surrogate
customer_id	Integer	NOT NULL, FK reference to customer.customer_id, ON DELETE CASCADE
bill_status	String	Enum
amount	Float	
due_date	Date	NOT NULL
bill_date	Date	NOT NULL

## Individual Contributions

The DAOs and the use cases were divided among the members equally and worked upon individually. The integration of the use cases and the presentation layer were done by all the members together.