Database

Le is used to **persist** the data
↓
Store permanently

Types of Database

Relational   Non-relational
‖   ⇓
Tables] → rows +   Documents] mongo DB
         columns

- MySQL
→ PostgreSQL
→ MS SQL

#

[JDBC] → Java Database Connectivity

→ establish connection
→ String s = "_____"
→ Create Statement
→ execute

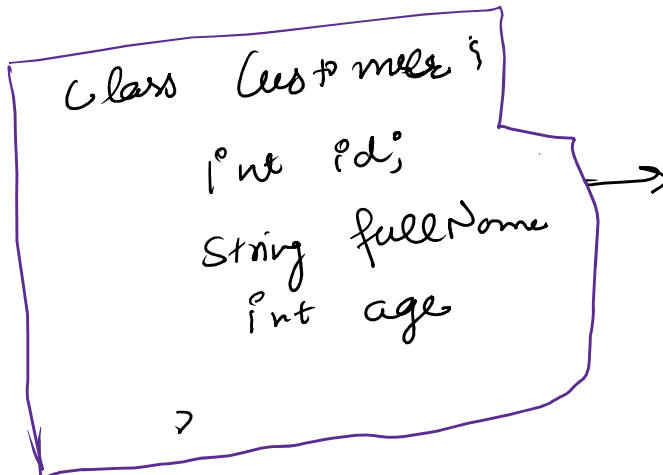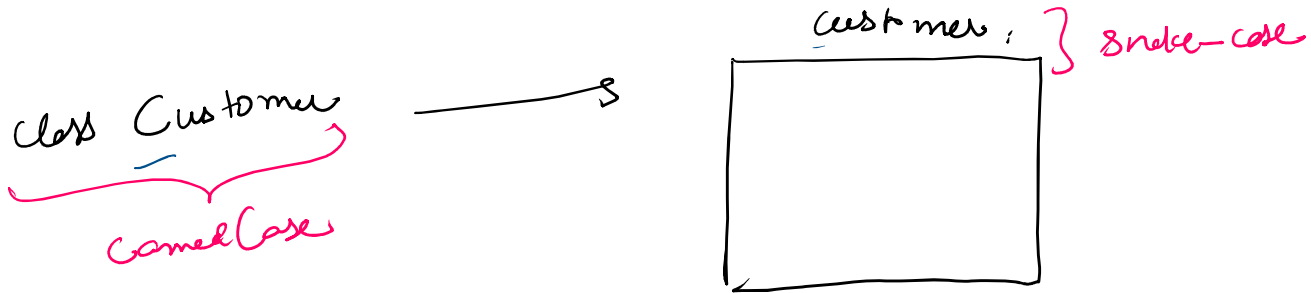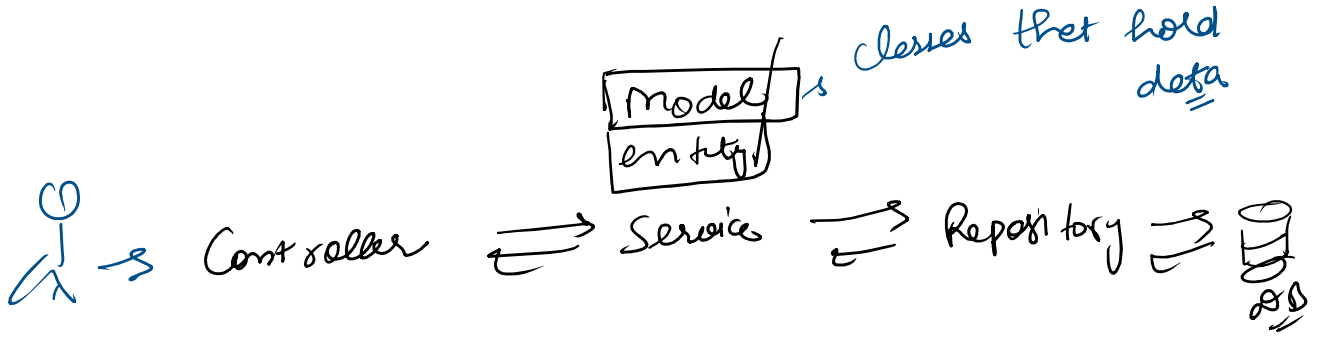#   → classes that hold
                               data

#

Model entity → classes that hold data

👤 → Controller ⇄ Service ⇄ Repository ⇄ 🛢 DB

class Customer ——————→ customer; } snake-case

```
CamelCase
```

class Customer {
  int id;
  String fullName
  int age

}

class name → table name

attributes → columns

int   Customer   varchar
  ↓   ↓ int
id	full-name	age
1	ABC	30
:		

Two choices

c1   c2

Business logic   Business logic | Java
+
Handle DB operation   sou   DB operations are
                              handled by
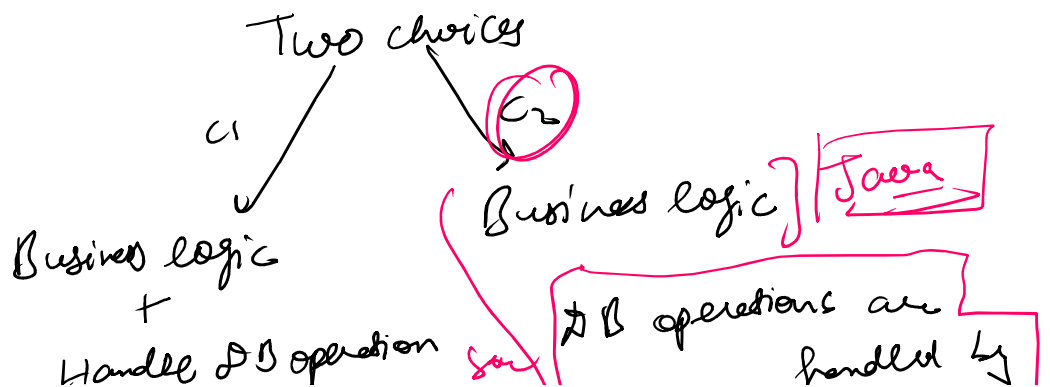
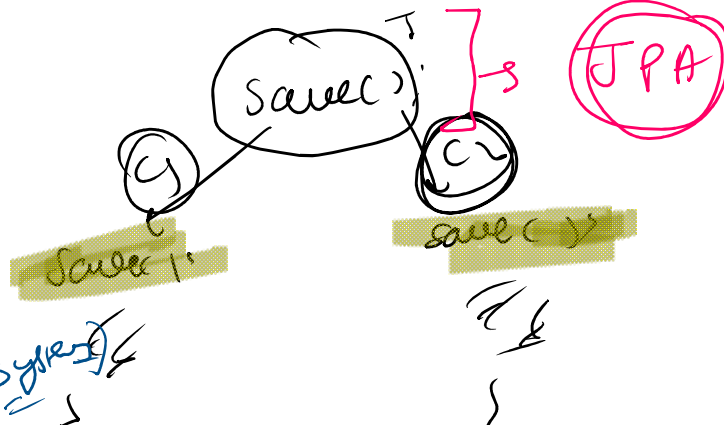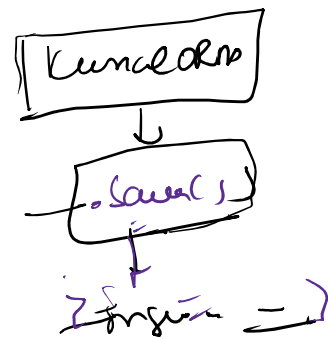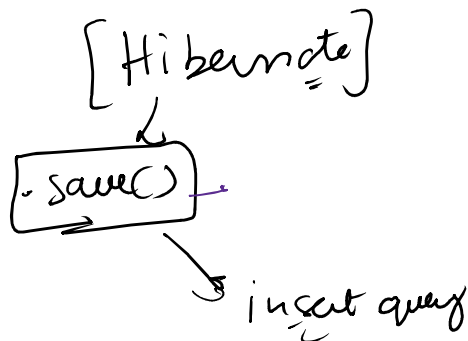Handle DB operation soi. | DB operations are handled by some one else |

ORM] → [Object Relational Mapper]
                Java   Tables

                                        iBatis, Toplink

Hibernate] → ORM framework.

A library / framework which exposes a set of Java functions which can be used to perform DB operations.

[Hibernate] | Kunal ORM |
    | |
[.save()]   [.save()]
    ↓   ↓
    insert query   Z firgim ___)

        save()] → (JPA)
      G   C
    save()   save()

[... microservice]

[Sun microsystems]

JPA → Java Persistence API ⟧ → ORM frame work
gives implementation

↳ interface

a specification for an ORM framework

[API]

→   Hibernate ✓   │   JPA ✓
             JPA ✓   │   Hibernate ✗

Enum
↳
data type which is used when the no. of
input values is limited one fixed.

days of week

@ Not Null → works at the application/ Java level

@ Column (nullable = false) ← works at DB level
                                          ↓
                              adds constraint to the

                    DB column.