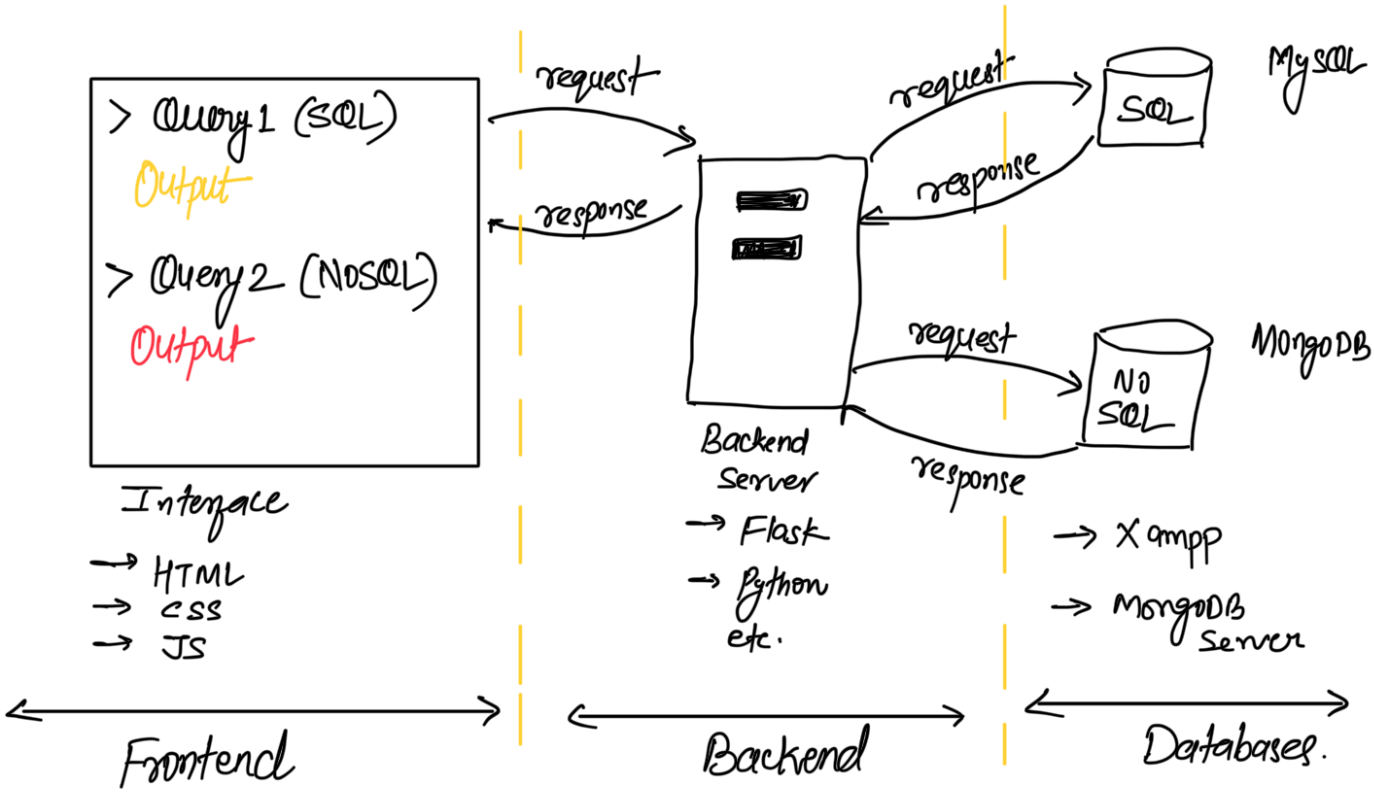
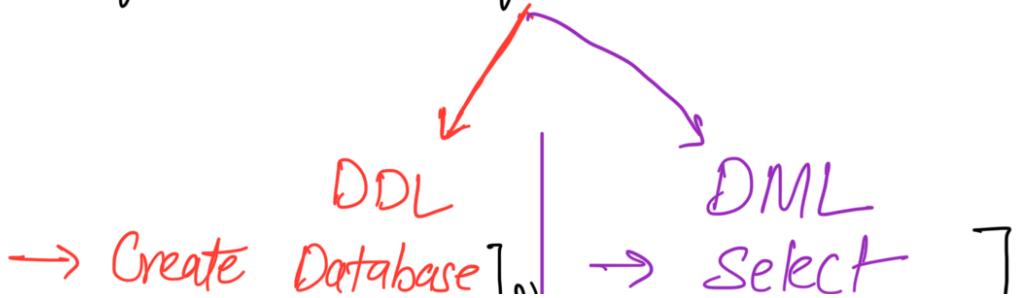
- **Project Name** : Unified Query Interface for multiple databases

- **Project Category** : Utility tools [(1) Interface for multiple databases (CLI) (2) Query language]

- **Project Architecture** :



- **Project functionality** :



→ Drop Database
→ Show Database
→ use Database

Database

→ Create Table
→ Drop Table
→ show Tables

Table

→ Insert
→ Update
→ Delete

Data

DDL → Data Definition language
DML → Data Manipulation language
DCL → Data Control language (Grant, Revoke)
TCL → Transcation Control language (Commit, Roll back etc)

* For future implementation
  → more DDL, DML Commands
  → Add DCL, TCL

(1) Database functionality :

	SQL	NOSQL
(A) create database	✓	✓
(B) show databases	✓	✓
(C) delete database	✓	✓
(D) use database	✓	✓

(2) Table functionality :

	SQL	NOSQL
(A) Create table	✓	✓

(B) delete table ✓ ✓
(C) show tables ✓ ✓

(3) Data Functionality :

	SQL	NoSQL
(A) insert data into table	✓	✓
(B) show data from table	✓	✓
(C) update data	✓	✓
(D) delete data	✓	✓

- Query Structure/Syntax/commands available :

(1) help
(2) hello
(3) clear
] General Commands

* SQL : (MySQL)

(1) create database <databaseName>
(2) show databases
(3) delete database <databaseName>
] SQL Database Query

(4) use database <databaseName>

(5) Create table <tableName>
(<columnName> < Datatype> <AUTO-INCREMENTS> <PRIMARY KEYS>,
<columnName> <Datatype> ,
. . . . . .
)

(6) delete table <tableName>

(7) show tables

SQL Table Query

(8) insert into <tablename> (<column1>, <column2> ..)
values (value1, value2 .....)

(9) show from <tablename>

(10) delete from <tablename> where <condition>

(11) update data in <tablename> set <column = value> where condition

SQL Data Query

* NoSQL : (MongoDB)

(1) Create ns database <databaseName>

NoSQL

or

Create ns database <databasename> <Collectionname>

(2) show ns databases

(3) delete ns database <databaseName>

(4) use ns database <databaseName>

Database Query.

(5) create Collection <collectionName>

(6) delete collection <collectionName>

(7) show collections

NoSQL Collection Query.

(8) insert data into Collection <collectionName> <jsondata>

(9) show data from <collectionName>

or

show data from <collectionName> Columns column2 ... where <Condition>

(10) delete ns data from <collectionName> where <condition>

(11) Update ns data in <collectionName> set<field1=value1>, <field2=value2> where <condition>

NO SQL Data Query