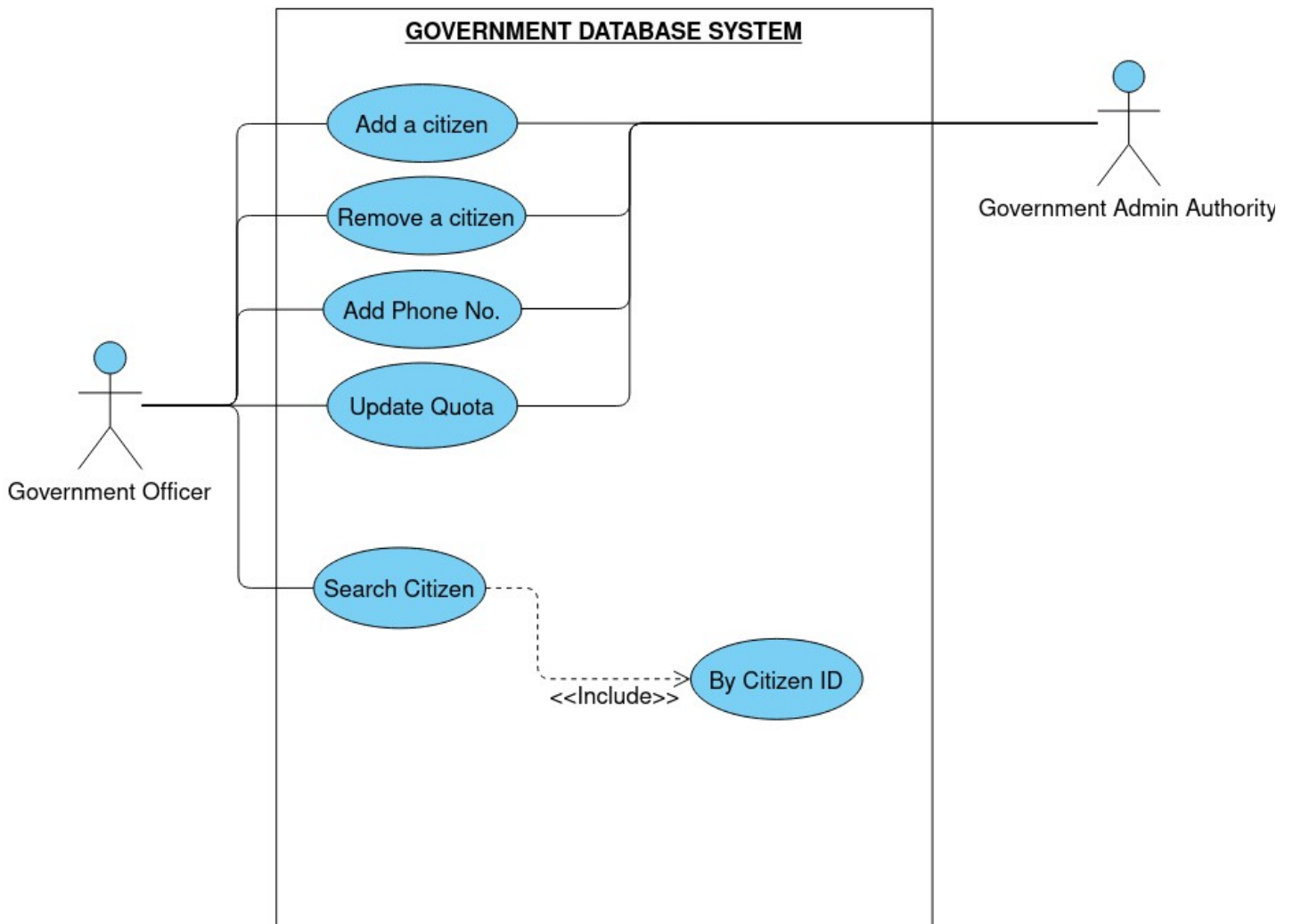


JDBC PROJECT REPORT

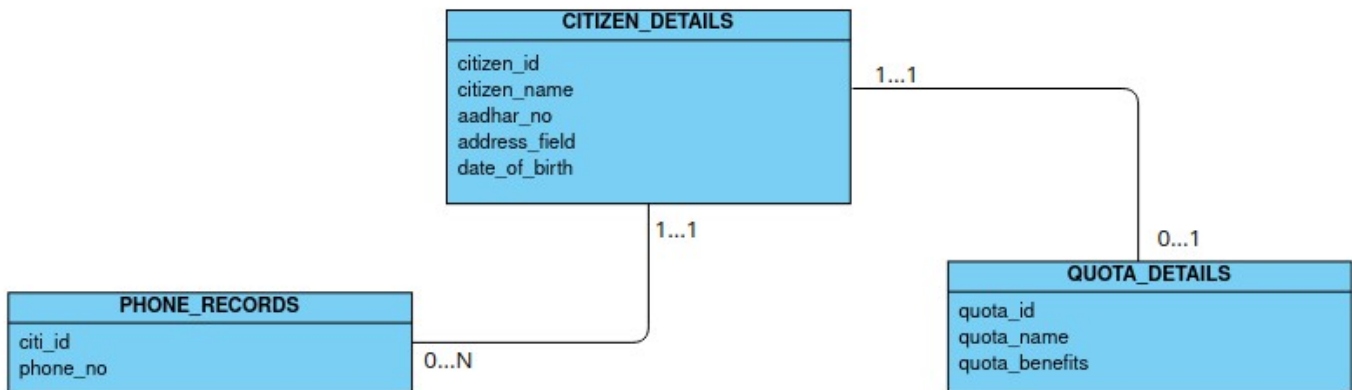
Samaksh Dhingra (IMT2019075)

GOVERNMENT DATABASE SYSTEM

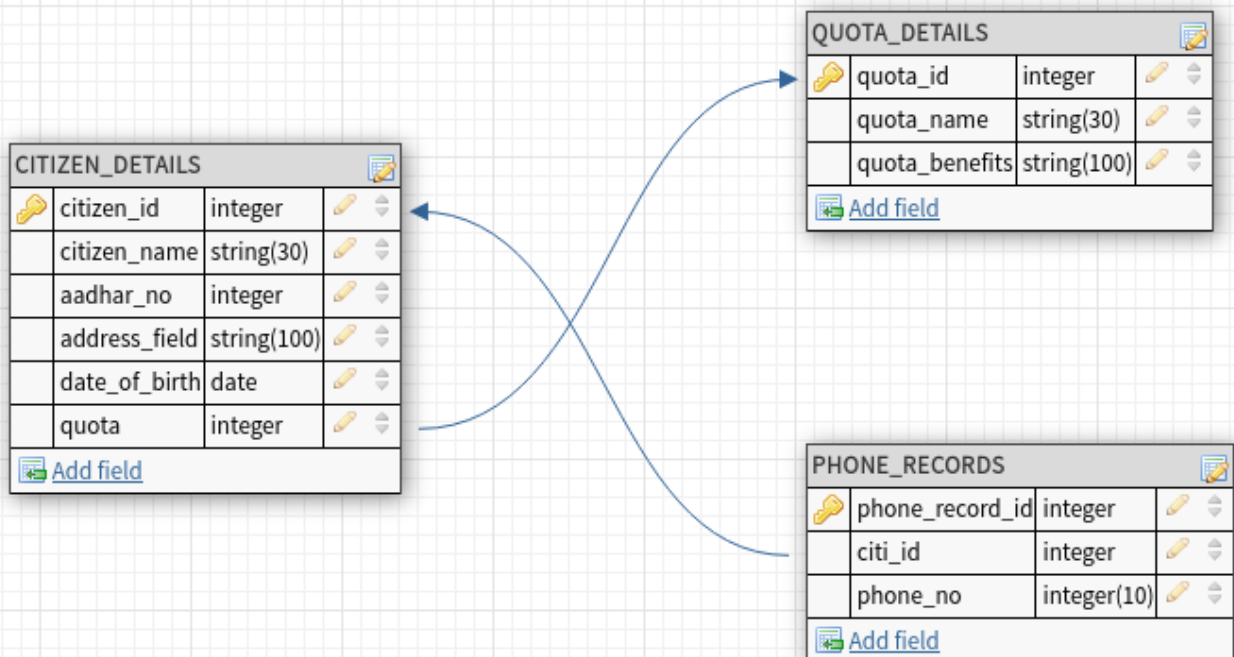
USE-CASE DIAGRAM



UML CLASS DIAGRAM

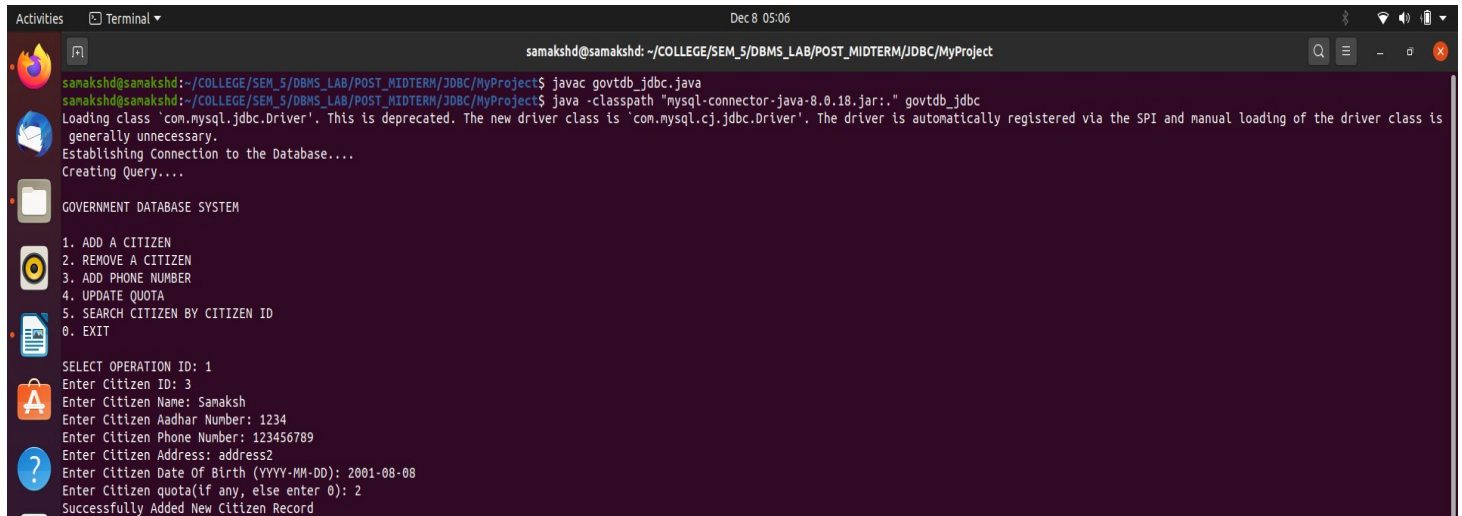


OR MAPPING (DB DESIGN) [Using DBDesigner.net]



OUTPUT SCREENSHOTS

1. Insert



```
Activities Terminal Dec 8 05:06
samakshd@samakshd: ~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject

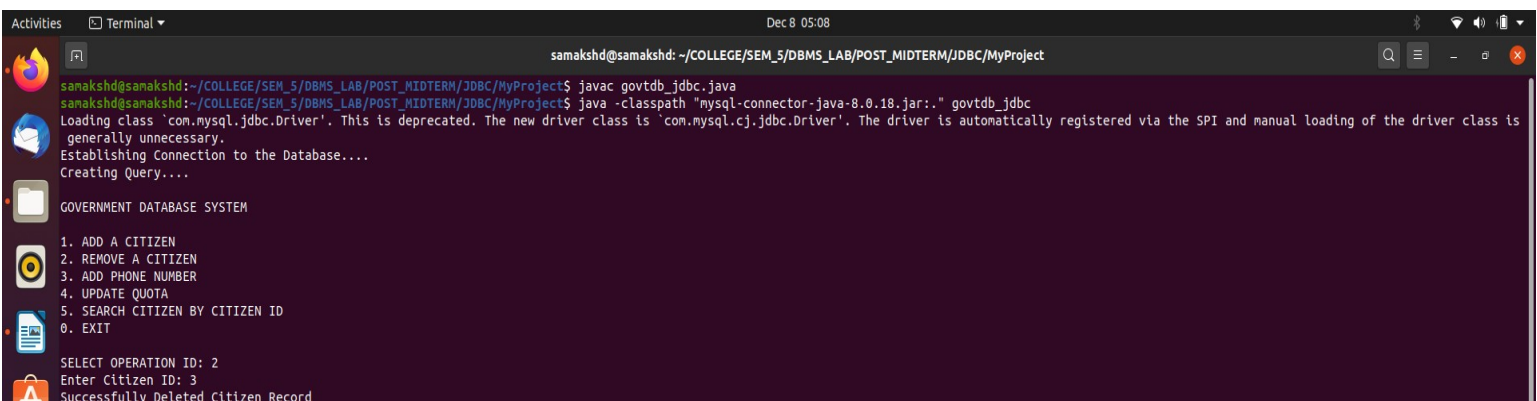
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ javac govtdb_jdbc.java
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ java -classpath "mysql-connector-java-8.0.18.jar:." govtdb_jdbc
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of the driver class is
generally unnecessary.
Establishing Connection to the Database....
Creating Query....

GOVERNMENT DATABASE SYSTEM

1. ADD A CITIZEN
2. REMOVE A CITIZEN
3. ADD PHONE NUMBER
4. UPDATE QUOTA
5. SEARCH CITIZEN BY CITIZEN ID
0. EXIT

SELECT OPERATION ID: 1
Enter Citizen ID: 3
Enter Citizen Name: Samaksh
Enter Citizen Aadhar Number: 1234
Enter Citizen Phone Number: 123456789
Enter Citizen Address: address2
Enter Citizen Date Of Birth (YYYY-MM-DD): 2001-08-08
Enter Citizen quota(if any, else enter 0): 2
Successfully Added New Citizen Record
```

2. Delete



```
Activities Terminal Dec 8 05:08
samakshd@samakshd: ~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject

samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ javac govtdb_jdbc.java
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ java -classpath "mysql-connector-java-8.0.18.jar:." govtdb_jdbc
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of the driver class is
generally unnecessary.
Establishing Connection to the Database....
Creating Query....

GOVERNMENT DATABASE SYSTEM

1. ADD A CITIZEN
2. REMOVE A CITIZEN
3. ADD PHONE NUMBER
4. UPDATE QUOTA
5. SEARCH CITIZEN BY CITIZEN ID
0. EXIT

SELECT OPERATION ID: 2
Enter Citizen ID: 3
Successfully Deleted Citizen Record
```

3. Update

```
Activities Terminal Dec 8 05:09 samakshd@samakshd: ~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ java -classpath "mysql-connector-java-8.0.18.jar:." govtdb_jdbc
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of the driver class is
generally unnecessary.
Establishing Connection to the Database....
Creating Query....

GOVERNMENT DATABASE SYSTEM

1. ADD A CITIZEN
2. REMOVE A CITIZEN
3. ADD PHONE NUMBER
4. UPDATE QUOTA
5. SEARCH CITIZEN BY CITIZEN ID
0. EXIT

SELECT OPERATION ID: 4
Enter Citizen ID: 2
Enter Updated Quota ID: 1
Successfully Updated Quota
```

4. Search/Retrieve/Select

```
Activities Terminal Dec 8 05:10 samakshd@samakshd: ~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ java -classpath "mysql-connector-java-8.0.18.jar:." govtdb_jdbc
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of the driver class is
generally unnecessary.
Establishing Connection to the Database....
Creating Query....

GOVERNMENT DATABASE SYSTEM

1. ADD A CITIZEN
2. REMOVE A CITIZEN
3. ADD PHONE NUMBER
4. UPDATE QUOTA
5. SEARCH CITIZEN BY CITIZEN ID
0. EXIT

SELECT OPERATION ID: 5
Enter Citizen ID: 2
Searched Citizen Record:-

Citizen ID: 2
Citizen Name: Sam
Citizen Aadhar Number: 123
Citizen Address: addr1
Citizen Date Of Birth: 2020-09-09

Quota ID: 1
Quota Name: Indian Army Officer
Quota Benefits: Free Travel

Phone Numbers:-
123456778
```

5. Exit

```
Activities Terminal Dec 8 05:10 samakshd@samakshd: ~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$ java -classpath "mysql-connector-java-8.0.18.jar:." govtdb_jdbc
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of the driver class is
generally unnecessary.
Establishing Connection to the Database....
Creating Query....

GOVERNMENT DATABASE SYSTEM

1. ADD A CITIZEN
2. REMOVE A CITIZEN
3. ADD PHONE NUMBER
4. UPDATE QUOTA
5. SEARCH CITIZEN BY CITIZEN ID
0. EXIT

SELECT OPERATION ID: 0
THANK YOU !!
samakshd@samakshd:~/COLLEGE/SEM_5/DBMS_LAB/POST_MIDTERM/JDBC/MyProject$
```

NOTES AND INSTRUCTIONS TO RUN THE CODE

Assumption:- Don't add more than 1 length string in input as it may behave abruptly in current implementation.

Running and testing the program:-

1. Compile the .java file using following command:-

```
javac govtdb_jdbc.java
```

2. Execute the java file using following command:-

```
java -classpath "mysql-connector-java-8.0.18.jar:." govtdb_jdbc
```

3. Perform basic CRUD Operations as displayed on menu and follow the instructions as directed by each option in menu.