

DATABASE DETAILS:

The SQL database used here is MySQL.

The database consists of the following tables:

1. Contact: It consists of 'Contact_id', 'Fname', 'Mname' and 'Lname'. Contact_id has unique constraint on them.
Column 'Contact_id' is of type integer, whereas 'Fname', 'Mname' and 'Lname' are of type string.
2. Address: It consists of 'Address_id', 'Contact_id', 'Address_type', 'Address', 'City', 'State' and 'zip'. Among them 'Address_id' is a primary key constraint by auto-increment, Contact_id is a foreign key constraint referencing Contact table. Remaining attributes are of string type.
3. Phone: It consists of 'Phone_id', 'Contact_id', 'Phone_type', 'Area_code' and 'Number'. Among them 'Phone_id' is a primary key constraint by auto-increment, Contact_id is a foreign key constraint referencing Contact table. Phone_type, Area_code and Number is of type string.
4. Date: It consists of Date_id, Contact_id, Date_type, and Date. Among them Date_id is a primary key constraint by auto-increment, Contact_id is a foreign key constraint referencing Contact table. Date_type and Date is of type string.

GUI DETAILS:

The GUI is implemented using Python programming language. Here, Tkinter which is the standard GUI library for Python is used and we query the database using pymysql.

At first the application prompts with MENU options:

1. Add Contact
2. Search contact
3. View
4. Modify Contact

Add Contact:

It displays with a field options of all the contacts. When we enter all the details, it will store in the database.

Search Contact:

When we click the second menu option, it will prompt search field and will display full name .

Also, it will prompt modify and delete options on the top hand.

View:

When we click the third menu option, it will display entire person details. At the top, it will prompt with two options update and delete. When we click that button, another field will prompt in order to modify. By entering which row to be modified, it will reflect into the database.

Modify:

When we click the option, an update and delete options are prompted. By clicking the update button, person details with empty fields are displayed and to be entered to fill in the database.

By clicking delete option, it will ask for contact_id to be deleted.