

CONTACT LIST APPLICATION DESIGN DOCUMENT

Description: -

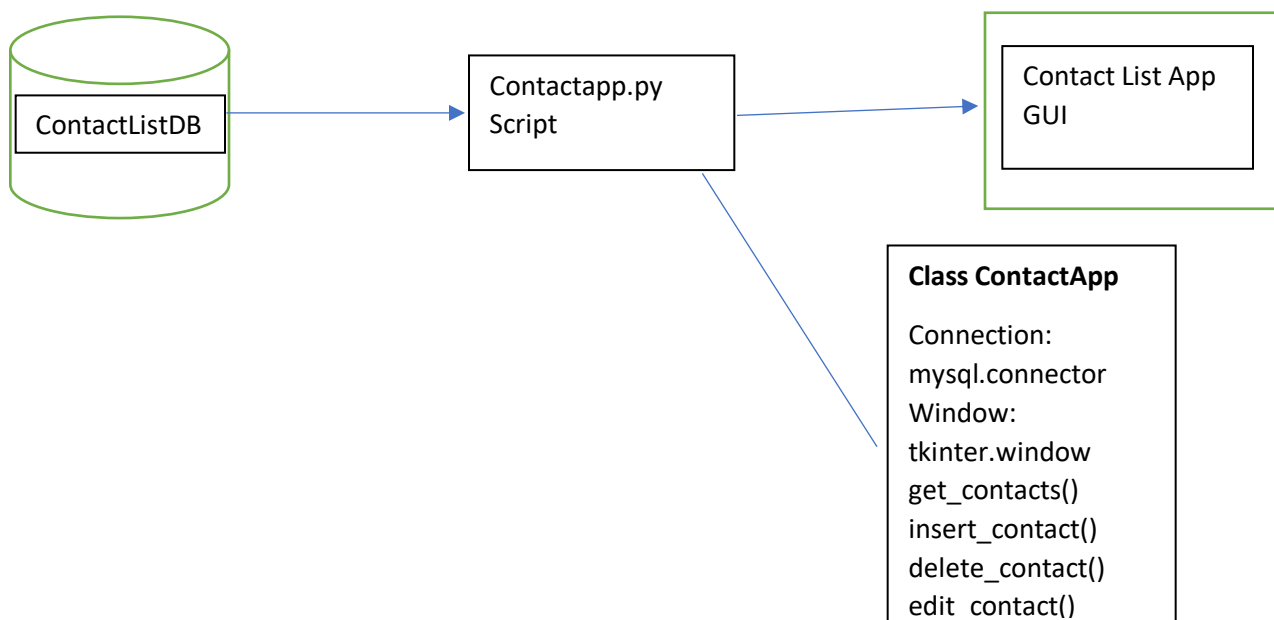
The Contact List Application displays a GUI which allows the user to perform CRUD operations.

Scope: -

- 1) Contact List application displays list of contacts on a separate display window.
- 2) It allows users to search a string from the ContactListDB.
- 3) It allows users to add new contacts, it also allows users to modify/delete existing contacts.
- 4) Language: Python 3.8 (Tkinter Package)
Database: MySQL

System Architecture: -

- 1) The Python Script contactapp.py connects to the MySQL database ContactListDB to perform all the CRUD operations.
- 2) The Python Script also generates a GUI which is responsible for displaying data according to the operations performed by the User.
- 3) The Python script also handles the errors thrown on the Database side and GUI side.
- 4) Contactapp.py also generates the queries which are run on the MySQL Database.
- 5) Contactapp.py also generates the data that is displayed on the Contact List App GUI



Design Decisions: -

- 1) It has been decided that its better to have one class which is responsible for all the CRUD operations. The class has all the required functions which can be called according to the interaction of the user with the GUI.
- 2) All the database errors are also captured and handled on the script side.
- 3) Display window should be automated, it makes for a better user experience.
- 4) The GUI should open on the display window.

Assumptions: -

- 1) The user should have some prior knowledge of the ContactListDB database.

GUI: -

- 1) The display window is fully automated, it refreshes every time an operation is performed by the user.
- 2) Clicking Add or Modify Button opens a form.
- 3) Search Button displays the result of the search on the display window.
- 4) Every entry on the display window can be deleted or modified.
- 5) Each added contact is also reflected on the display window.