# Contact List Application

# Design Document

## SYSTEM ARCHITECTURE

The Contact List Application is designed to list the contacts in a database, including their address, phone and date.

The application has the following functions:

1.  Searching for Contacts:
    a.  Contacts can be searched for given a keyword in all four tables.
    b.  Contact can also be searched separately for Address table, Contact table, Date table and Phone table.
    c.  It returns the row matching the keyword along with the number of hits.

2.  Adding Contacts:
    a.  Contacts can be added by pressing the Add button.
    b.  There is an Add button for each table which returns a form to be filled for each table.

3.  Modifying and Delete:
    a.  There is an action column with Edit and Delete
    b.  Edit will return a form to edit that row
    c.  Delete will delete the row from the database.

## DESIGN DECISIONS

1.  Assume that data entered is atomic.
2.  Multiple phone numbers, addresses and date for a single contact has to be manually added.
3.  Date is added in yyyy-mm-dd format.

## LANGUAGES/FRAMEWORKS/PACKAGES USED

1.  Python flask
2.  HTML
3.  CSS
4.  MySQL
5.  Python (3.6+)
6.  Python (mysql-connector)

## REQUIREMENTS TO RUN THE APPLICATION

1.  MySQL running on local host
2.  Python 3.6 installed
3.  MySQL, Flask packages installed for python.