**DESIGN DOCUMENT**

The database consists of the following tables:

1. Contact: It has 4 columns, Contact\_id which is the auto incremented primary key, Fname which is the first name, Mname which is the middle name and Lname which is the last name.
2. Address: It has 7 columns, Address\_id which is the auto incremented primary key, Contact\_id which is the foreign key that points to Contact.Contact\_id, Address\_type specifying the type of address which can be either home/work, City, State & Zip.
3. Phone: It has 5 columns, Phone\_id which is the auto incremented primary key, Contact\_id which is the foreign key that points to Contact.Contact, Phone\_type specifying the type of phone number which can be either home/work/cell, Area\_code (in the format XXX), Pnumber which is the phone number without prefixed area code (in the format XXX-XXXX).
4. DateTable: It has 4 columns, Date\_id which is the auto incremented primary key, Contact\_id which is the foreign key that points to Contact.Contact, Date\_type which can be any type (ex: birthday) & C\_Date which is the Calender date.

All the table entries fro Contact table are stored in Address.csv, Contact.csv,Phone.csv and DateTable.csv.

The GUI details are as follows:

1. The GUI is implemented with JDBC using JSP, HTML, CSS and BOOTSTRAP.
2. The landing page has 5 sections.
3. The first section is to view the contacts in the database.
4. The second section is to add new contact into the database.
5. The third section is to update a contact in the database using Contact\_id.
6. The fourth section is to delete a contact in the database using Contact\_id.
7. The fifth section is to search for contact given any search string from any column.