

# DESIGN DOCUMENT

## SYSTEM ARCHITECTURE

- Everything described below is done using SQL, javascript and HTML
- There will be 4 tables created in a database called "ContactInfo"
- Table 1: "Contact"
  - First Name: Fname
  - Middle Name: Mname
  - Last Name: Lname
  - Key: Contact\_id
- Table 2: "Address\_tbl"
  - Address id: Address\_id
  - Contact id: Contact\_id
  - Address type: Add\_type
  - City: City
  - State: State
  - Zip: Zip
- Table 3: "Phone"
  - Phone id: Phone\_id
  - Contact id: Contact\_id
  - Phone type: Phn\_type
  - Area code: Area\_code
  - Number: Number
- Table 4: "Date\_tbl"
  - Date type: Dt\_type
  - Contact id: Contact\_id
  - Date id: Date\_id
  - Date: Date

## DESIGN DECISIONS

- All data entry and manipulation is done in a html form
- There is only one web page where all operations are done
- CREATE TABLE
  - Create above listed tables before doing any transactions by clicking the "Create table" button on the form
  - All tables listed above are created at once
  - All success messages are displayed in the console log for web browser
  - All error messages while creating tables are displayed in the form of pop-up alerts

- INSERT
  - Insert into all tables can be done only after all tables creation
  - The form is inserted as a whole
  - Each element of the form is inserted into the respective table as per the above list
  - All success messages are displayed in the console log for web browser
  - All error messages while inserting into tables are displayed in the form of pop-up alerts
- DELETE TABLE
  - All tables listed above are deleted(dropped) at once
  - Once tables are deleted, they need to be created again to carry out any transactions
- FETCH RECORD
  - Fetches all records according to the filled out form element
  - All four tables will have the filtered records' rows displayed

## ASSUMPTIONS

- You can create and delete all tables at once
- Area code for phone numbers is only 3 digits long
- Phone number is only 10 digits long
- Type of addresses: Home, work, other
- Type of Phone numbers: Home, work, fax, other
- When a record is deleted in one table (contact), all its corresponding information is deleted in the other tables(address\_tbl, phone, Date\_tbl) using the contact\_id
- Updating a record happens table wise. Each table has a separate update button