Online Contact Management

An online Contact Management application, for managing contacts using Java SpringBoot Maven as a programming language, HTML, CSS, JavaScript as scripting languages and MySQL as a database.

The features of the applications are as follow,

1. Add new Contact
2. Find Existing Contact
3. Delete Existing Contact
4. Update Existing Contact

For the above operations the schema of the database is as given on the E-learning.

1. Add New Contact:
   A form based on the web scripting language has been created in order to add the new data into the database, which consists of Java and MySQL as backend and frontend support from web scripting libraries as mentioned previously.

2. Finding Existing Contact:
   Finding the existing contact is another feature of the web application. For finding any existing contact user must provide a keyword of their choice from the database which he/she seeks to find from the database. Then the user input values get compared with the existing tables (All 4) which has the “id” column as primary key, which also works as a foreign key for the other tables and because of that displaying the contact information gets done.

3. Deleting the Existing Data:
   Deleting the existing data from the database is the tedious task as data are separated in various tables and contain the foreign key constraint. Once, the searched data is requested to be deleted then the data from the primary table gets deleted and as it works as a foreign key constraint the data from the other tables gets deleted as well.

4. Updating the Existing Data:
   A user can update the information. Here, in the backend “id” of the selected field is passed and the original information from database is retrieved and then can be edited as per the requirement. The database will then get updated.

Architecture of the Back-End Database:

Table1: This is the primary table of the database named contact_table, having 4 columns as follow,
a. Id: Primary Key, A auto increment field.

b. First Name (Fname)
c. Middle Name (Mname)
d. Last Name (Lname)

Table2: Second table of the database which contains the personal information of the user, and the fields of the same are as below,
a. Contact_id: Reference (Foreign) Key Constraint.
b. Address
c. Address Type
d. City
e. State
f. Zip
Here, “id” is auto increment field.

Table3: Third table of the which contains the contact information about the user having fields as below.
a. Id: Reference (Foreign) Key Constraint
b. Area Code
c. Number
d. Phone_type
Here, the value of “id” field is set as auto increment.

Table4: Forth table of the which contains the date information about the user having fields as below.
a. Id: Reference (Foreign) Key Constraint
b. Contact_date (A calendar date)
c. Date_type(Birthday/Anniversary)
Here, the value of “id” field is set as auto increment.

Search History:
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