

Phone Book Application

Create an Angular End-to-End Application which is used to manage the contacts of people.

This application should have following features:

- 1) Adding new contact
- 2) Deleting an existing contact
- 3) Updating an existing contact details
- 4) Displaying all the contacts

Design:

- Phone Book application should use an ASP.NET WEB API service to fetch and manipulate records of contacts in database.
- Database layer should be developed in Entity framework for all the CRUD operations.
- Whole application should follow the n-tier architecture where angular should be used as front-end UI.
- All the forms posted should be validated with client side validation with proper error messages
- Database used is the MS SQL Server. Following fields can be used for the contact table:

```
Id-----> int, auto incremented value
firstname-----> varchar
lastname-----> varchar
gender-----> varchar
dob-----> varchar
email-----> varchar
phone-----> varchar
city-----> varchar
state-----> varchar
country-----> varchar
picture-----> varchar
```

- Use the following model structure:

```
export class Contact {
  id:number;
  firstname:string;
  lastname:string;
  gender:string;
  dob:string;
  email?:string;
  phone?:string;
```

```

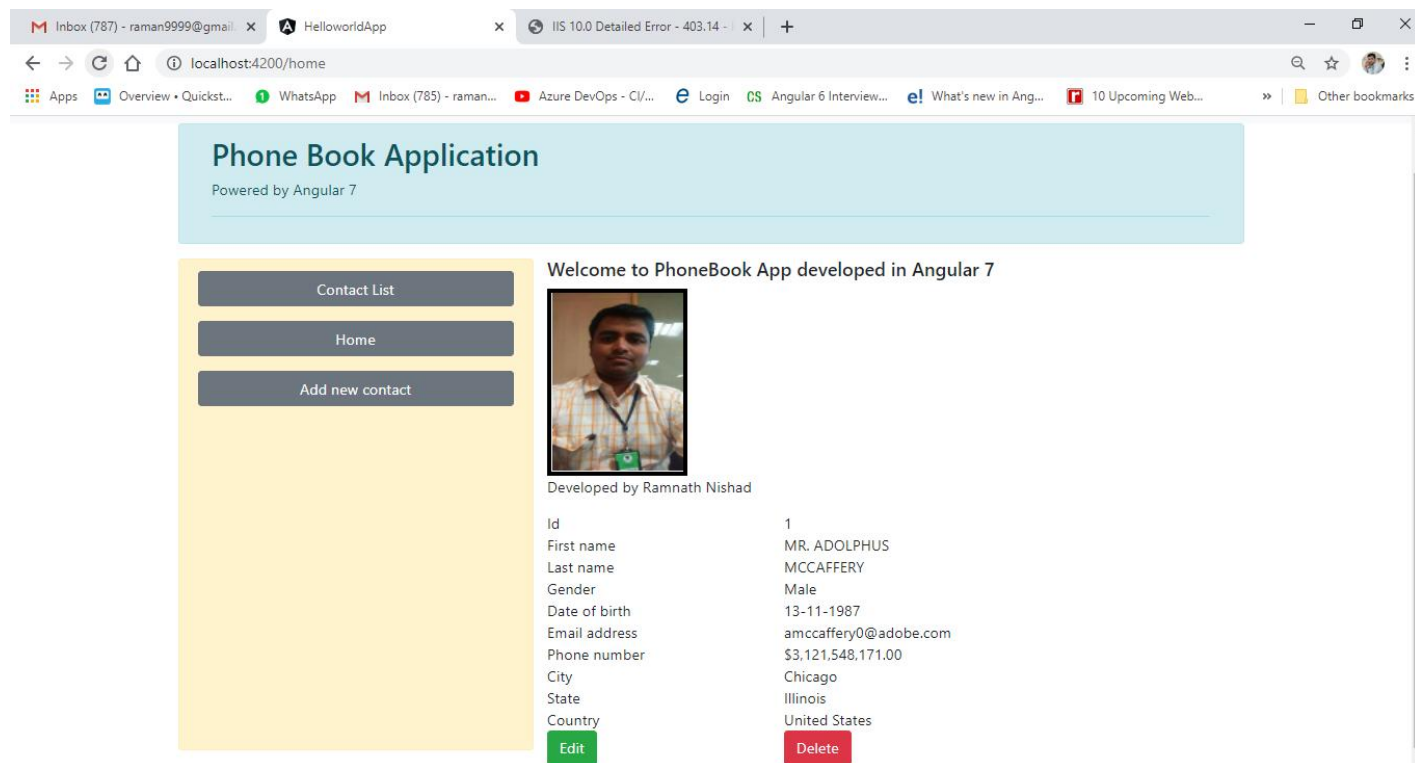
city?:string;
state?:string;
country?:string;
picture?:string='./assets/images/7.jpg';
}

```

- Store few sample pictures in assets folder of the application whose names should be mapped to the id of the contact. For e.g. if the contact id is 1 then its picture file name should be 1.jpg stored in assets folder and in the database picture url can be stored as mentioned in above sample.

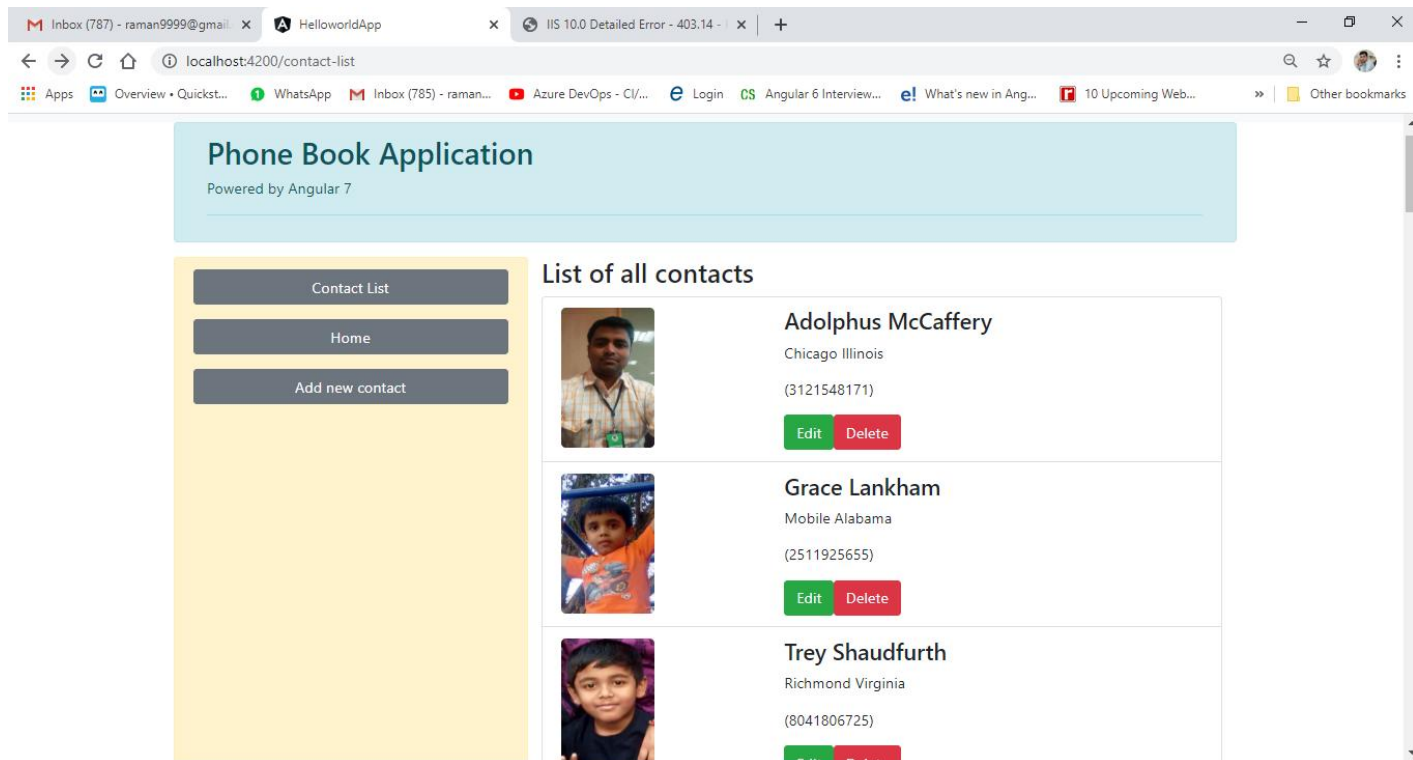
Flow of the application:

1) Home page should look like this, which should display a header, side menu buttons and a right side owner details as shows below from database (you can assume any contact record from database as owner):



2) When first button “**Contact List**” is clicked, it should display all the contacts from database in the right column as below. It displays the contact **Picture, First Name, Last Name and Country**. It should also have two buttons for **Edit** and **Delete**.

When **Edit** is clicked, it should go for edit form and on click of **Delete** button it should delete the record and refresh and display the list again.



3) When **Home** button is clicked, it should go back to home again

4) When **Add new contact** button is clicked, it should open the Add form as below:

Phone Book Application

Powered by Angular 7

Contact List

Home

Add new contact

Add contact details

Firstname

Lastname

Email address

Gender

☐ Male ☐ Female

Date of birth(YYYY/MM/DD)

Phone number

City

State

Country

Picture URL

Add Contact

Note: Add button should be disabled till all the fields are not entered correctly.

On click of **Add Contact**, record should get inserted in database using Web API and it should go back to display all the contacts list again.

5) Similarly whenever **Edit** button is clicked, it should display edit for modifying the contact details as below:

Phone Book Application

Powered by Angular 7

Contact List

Home

Add new contact

Edit contact details

Id

1

Firstname

Adolphus

Lastname

McCaffery

Gender

Male

Date of birth

1987/11/13

Email address

amccaffery0@adobe.com

Phone number

3121548171

City

Chicago

State

Illinois

Country

United States

Picture URL

/assets/images/1.jpg

Save

On click of **Save**, contact details should get updated in database.