

## Assignment - 5

**Due Date: 4/30 (Sunday), 11.59 pm**

**Points: 100**

You will be creating an Angular app that manages contacts. The application should have the following abilities:

1. Ability to display the list of current contacts. Each contact displays the following information:
  - a. First Name
  - b. Last Name
  - c. Phone Number
  - d. Email Address
2. Ability to edit an existing contact – User should be able to edit any of the fields of an existing contact and save changes.
3. Ability to Delete an existing contact – User should be able to delete an existing contact. This should automatically update the contact list.
4. Ability to add New Contacts – Users should be able to create new contacts. Any new contacts would be automatically added to the contact list.
5. Use Bootstrap or Angular Material to style the elements.

Check out the simple application that I quickly put together:

<http://students.cs.ndsu.nodak.edu/~kotala/contactManager/>

**You will develop this app on your local machine on VS Code as you will be deploying the final app on your web accounts.**

This application displays a separate card for each of the contacts. I created a simple JSON file with the following contents:

```
export let CONTACTS : any = [
  {
    fName : 'John',
    lName : 'Adams',
    phoneNumber: '701-000-1000'
  },
  {
    fName : 'Mary',
    lName : 'Jane',
    phoneNumber: '701-000-1000',
```

```
}  
]
```

So, when the app shows up, it shows up with two default contacts.

I would suggest you refer to the example project we worked on when discussing Angular- Adding New Components. Here is the completed project on stackblitz (<https://stackblitz.com/github/kotala-sudo/practice-NewComponent-Completed> ). In that project, we displayed separate course-cards for each of the courses. The course information was stored in an array of dictionary objects in a TS file. An interface type called Course was also defined.

Your task would be to first architect your angular application. Start by

1. Decomposing your application into separate Components.
2. For each of the Components describe its responsibilities
3. Next, for each Component, describe any inputs and outputs it requires.

Remember, that each component controls part of a screen. A simple thumb rule could be to create a new component for each of the features. Next, you would need to organize the components in a hierarchy defining the Parent-Child relationships between the components. You can accomplish all the data communication between different components by using different data bindings and/or using services.

I expect your application to not have to look like the one I created. I am hoping you will come up with a better design and solution. You are welcome to further enhance your application by providing any additional features beyond the required features of this assignment.

When you are done completing the project. You will deploy your application in the following location:

**<http://students.cs.ndsu.nodak.edu/~yourUnixLogin/angular/Assignment-5/>**

Follow the instructions and demo posted under Assignment – 4 to build and deploy your web app.

**Note:** You have already created a folder named **angular** inside the **public\_html** folder as part of Assignment - 4. You would need to first create a new folder named **Assignment-5** inside **angular** folder before you transfer the contents of the **dist** folder that is created after you run the **ng build** command

*Make sure to follow the building and deploying instructions from Assignment – 4 to set files permissions appropriately and deploy your application.*

**In a document file type, the following answers:**

1. **Copy and paste the URL of your working web application. The URL will look something like this.**

(<http://students.cs.ndsu.nodak.edu/~yourUnixLogin/angular/Assignment-5/>)

2. Explain the design of your application with regards to the different components you created and what was the purpose of each of these components and the hierarchy of these components identifying the parent-child relationships.
3. Explain the usage of different types of data bindings or service that you used in the project and for what purpose.
4. Describe any enhancements that you made to your application that goes beyond the requirements of this assignment.
5. Save the document as **PDF** file.

### **Things to Submit:**

1. Your word file with answers.
2. Your zipped project folder ([after removing node\\_modules](#)) folder.

**Make sure that you upload both (PDF file and the zipped project folder) before you hit the submit button. Please note that you only have one submission for your home assignment. Make sure that are submitting your final work.**