Deploying, Configuring and Test Plan

Github Link: https://github.com/talhahafeez2/talhahafeez2.github.io

Deploy with data:

- To test the solution with already present data on the git repository, you can go to https://talhahafeez2.github.io/.
- After going to the site, you can enter information in any of the inputs and after clicking the search button, all the contacts matching the information you enter will be displayed as a table below the search button.
- Note that only the contacts that match all the information entered will be displayed in your search. For example, if you enter "t" in first name and enter "g" in last name then only contacts that have "t" in their first name and "g" in their last name will be displayed, contacts with "t" in their first name and "g" not in their last name or vice versa will not be displayed.

Configuring the solution to deploy with custom data:

- To test your solution with your own custom data, you can do so in 2 ways:
 - One way is to create a repository in your own github account and create your own github pages website. After which, you can download the files in my github repository and upload them to your own github repository but replacing the "data.json" file with your own "data.json" file. Thus, you will be able to run my solution with your own custom data.
 - The second way is to ask to become a collaborator on my github repository, thus being able to clone my repository, replacing the "data.json" file and then pushing the changes to my repository. Then, going to https://talhahafeez2.github.io/ will allow you to deploy my solution with your own custom data.

Test Plan:

- To test my solution, I created a "data.json" file with 15 different contacts. Namely "Contact 1" to "Contact 15".
- I then deployed my solution with the data file above.
- First, to test the search and pagination features, as soon as the solution was loaded, I clicked the search button without entering anything in the search inputs. Expected result for the contacts displayed is that all the contacts in the data file will be displayed since nothing was filled out in the inputs. Expected results for the pagination is that since there are 15 contacts in total, the restriction for number of contacts on one page being 5 means that at least 3 pages must be generated. After testing with my solution, I get the expected result.
- Then, I entered information in a single input, "1" in last name. Expected result was 7 contacts and 2 pages. After testing, I also get the expected results.
- After, I entered information in multiple inputs, "1" in last name and "4" in street address. Expected result is a single contact, which would be "Contact 14" since "Contact 14"'s address is set to "Address 14", thus it fits requirements for last name and street address. After testing, the expected result was obtained.
- Now, I tested the checkbox selection functionality. When a contact was displayed (both with pagination and without), I clicked the checkbox on one of the contacts. The expected result was that the correct contact information was filled out automatically on the input fields of the search. After testing, I obtained the expected result.

Constraints of my current solution:

 One constraint on my current solution is that all the required fields must be present in the contact information in your data file for all contacts even if the value for the field is empty. For example, each contact in the data file must be as follows:

```
}, {
    "first_name": "Contact",
    "last_name": "2",
    "date_of_birth": "2024-12-01",
    "email": "Email 2",
    "phone": "1234567890",
    "address": "Address 2",
    "city": "City 2",
    "state": "State 2",
    "zip": "
},{
```