Set Up Instructions:

🎈 **Clone the repository from the following link: [repository link].**

🎈 **Create your own branch to complete this test.**

🎈 **Ensure you have Node.js and Python installed.**

🎈 **Create a virtual environment:**

```
python -m venv env
```

🎈 **Activate the virtual environment:**

```
.\env\Scripts\activate
```

🎈 **Install dependencies:**

```
pip install -r requirements.txt
```
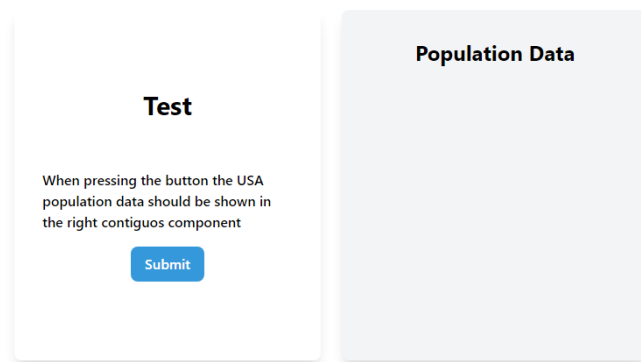
🏍️ **Run the app:**

```
python run.py
```

HTML Test

Inside the /templates directory, there is an index.html file.

- ✨ Resize the main component to have a width of 350px.

- ✨ Move the title inside the main component.

- ✨ Change the button color to blue.

Desired result:

🎂 Hint: You can visualize the app running the following code:

python run.py

Request and Data Management Test:

The app is making a request to datausa.io/api to fetch the USA population over a range of years.

- ✨ Create a service inside population_services_Test2.py to make this request and print the result to the console.
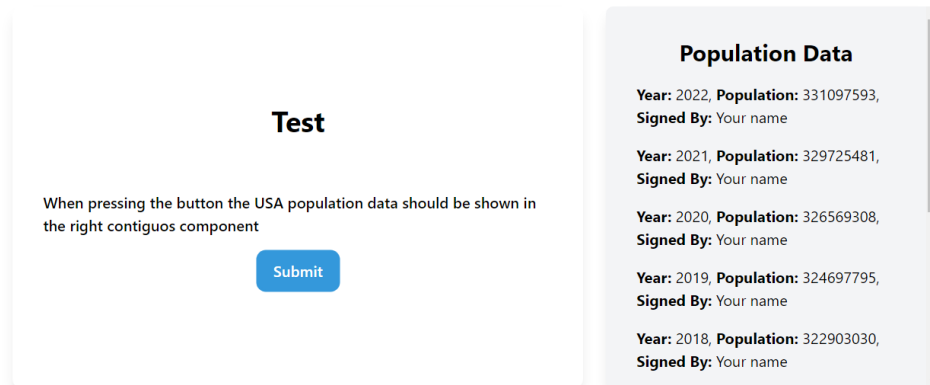
Desired result:

```
{'data': [{'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2022, 'Year': '2022', 'Population': 331097593, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2021, 'Year': '2021', 'Population': 329725481, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2020, 'Year': '2020', 'Population': 326569308, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2019, 'Year': '2019', 'Population': 324697795, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2018, 'Year': '2018', 'Population': 322903030, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2017, 'Year': '2017', 'Population': 321004407, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2016, 'Year': '2016', 'Population': 318558162, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2015, 'Year': '2015', 'Population': 316515021, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2014, 'Year': '2014', 'Population': 314107084, 'Slug Nation': 'united-states'}, {'ID Nation': '01000US', 'Nation': 'United States', 'ID Year': 2013, 'Year': '2013', 'Population': 311536594, 'Slug Nation': 'united-states'}], 'source': [{'measures': ['Population'], 'annotations': {'source_name': 'Census Bureau', 'source_description': 'The American Community Survey (ACS) is conducted by the US Census and sent to a portion of the population every year.', 'dataset_name': 'ACS 5-year Estimate', 'dataset_link': 'http://www.census.gov/programs-surveys/acs/', 'table_id': 'B01003', 'topic': 'Diversity', 'subtopic': 'Demographics'}, 'name': 'acs_yg_total_population_5', 'substitutions': []}]}
```

- ✨ Manipulate the data to include your name in every object as follows, and print the modified result in the console.

```
{
  "ID Nation": "01000US",
  "Nation": "United States",
  "ID Year": 2013,
  "Year": "2013",
  "Population": 311536594,
  "Slug Nation": "united-states",
  "Signed": "Your name"
}
```

- ✨ Finally, modify the function to return the manipulated data and copy the function into the population_services.py file .
- 🎂 Hint: You can test the code inside population_services_Test2.py by running:
  python .\app\services\population_services_Test2.py
- 🎂 **Hint**: You can also test this functionality by clicking the "Submit" button when the app is running.

Desired result:

The JavaScript function is making a request to the /populations endpoint and filtering the response data to display it in the HTML component. As seen in the previous test, not all the data from the response object is being shown.

- ✨ Include "Nation" and "ID Nation" in the HTML component that is being rendered with the response data.

Desired result: