



# Website Building: Weekend Assignment

## JavaScript – World Population

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The following exercise contains the following subjects:

- HTML + CSS + JavaScript

### Submitting instructions:

- Push the entire folder hierarchy of the project to your own repository on Github.
- Please add the following:
  - A link to the repository
  - Free text – a description of the app. Stuff you found hard to implement, known bugs, and your assignment review.

### Our APIs:

We want to create a website to compare populations in different places. [Demo](#)

We will get the list of each country and its cities from [this API](#)

We will get the list of countries per continent from [this API](#)

We want to display our data on graphs. We will use [this library](#) for it.

## Features:

1. We want the ability for the user to choose statistics between continents.

When the user selects a continent:

- a. the distribution of the population in each country will appear on the graph.
  - b. We will show him a list of buttons for all the countries on the same continent.
2. When the user selects a country:
    - a. the distribution of the population in each city will appear on the graph.

### **Problem:**

There are cities that have no data or the name you will receive will be written incorrectly.

### **Solution:**

Search for all the cities in that country and filter the missing cities.

Second option, think about how to find the names in the correct wording.

3. Create a spinner when the data is loading.
4. Make everything responsive.

## Everything should be dynamic

- You should not hard code any country or country statistics.
- Keep it DRY! If you see code repeating itself, put it in a function and have parameters change the individual pieces of code that need to be changed.

for example:

You have a function to search for countries of a specific continent. You will

give as a parameter the continent you want your API to fetch for.

- Have your functions only take care of a specific piece of logic in your application.

### **Ninja:**

1. Enable the option to mark the cities' data by years.
2. Add more features. You can do much more with this API
3. Make it look pretty.
4. Tweak the performance. Maybe local storage can help us here?
5. Disable the buttons when you send an API request. Now what happens is you can click numerous times on a button and it will send numerous times an API request. But we really only need one.