

Project#1: Gazetteer

Overview

This will be a one page responsive website that works well on mobile devices and desktops. The design will be minimal, with a map that covers the screen/tab and icons that can be selected by the user to access data and functions.

Functionality

The map will default to the user's location and they will have options (by clicking on an icon or through modals that pop up when an icon is clicked) to do the following:

- loader whilst page is rendering
- change the map style (different map tile options)
- get data about their currently selected country, such as area, bordering countries, weather, largest cities, national flag, top ten lists (e.g. ten longest rivers, ten most densely populated cities)
- show relevant data on the map e.g. largest cities are pinned and labelled
- highlight on the map other countries according to a range of criteria e.g. shared border, similar population, same main language
- country search, allowing the user to search for any country, have that country highlighted and centred on the screen and be able to get relevant data as for their home country

Libraries and APIs

- Bootstrap – UI
- Leaflet – map display
- JQuery/AJAX – dom manipulation and user input
- OpenCage – get coordinates for map pins
- OpenWeather – weather data
- Geonames – geographical data, wiki info
- RestCountries – geographical data (e.g. borders, languages)
- CurrencyLayer – currency information
- Travel-Advisory – traveller information

Other Resources

HTML, CSS, JavaScript, PHP, cURL, AJAX