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Assignment 8

Part 1

The world is vast, yet we have a tendency to stick within our own known world. This is especially true for Americans who, as the prevailing culture for the last few decades, tend to think the world revolves around them. The purpose of this website is to showcase pivotal books from countries all over the world. This is a way to encourage people to read literature from cultures other than their own, and cultures that are often overlooked. Each country has at most 3 books displayed, showing the book cover, title, author, and a link to read more about it. I made this website engaging by implementing an interactable, clickable map of the world. After all, clicking a map is more exciting than reading through a list of books. I also think when looking at a list, people tend to start at the top, but by using a map, it encourages users to explore because they can randomly select a country to look at. The target audience for this website are book lovers and anyone interested in learning more about the world.

Part 2

- Hover over any country to see the name
- Click on any country in the map to see books related to it
- Click on the “more info” button in the book cards to open a new tab and read more about it in Google books
- The website is responsive, but you have to refresh to reset the sizing of the map. The columns respond on their own.

Part 3

- D3
    - I chose to use this library because it seemed the best and most powerful tool for manipulating data. A lot of other people use it too, so I was able to find tutorials and threads about issues I was facing.
    - I used D3 to create the interactable map out of a json file consisting of a bunch of coordinates that would generate the map svg. I also used D3 to read the csv file I made containing all the book information.
    - Without D3, I wouldn’t have been able to create an interactable map or read the csv file nearly as simply.
- Google Books API
    - I chose this API because of its robust database for books -- it’s from Google, after all. I originally wanted to use the Goodreads API but Goodreads stopped supporting it December 2020 so I wasn’t able to get an API key for it.
    - I used this API in order to get data on the books (specifically the book cover image and a link for more information). I could’ve included a book description in each book card but I didn’t because descriptions tended to be really long and wouldn’t fit well within the card.
    - This API adds consistent thumbnail images for each book, which makes the website much more appealing because it adds colors to what otherwise would be

just a list of book titles and authors. It also links users to more info on the book, which is great for users who are considering reading it.

- Bootstrap
    - I chose this library because it's easy to use, has fantastic documentation, and is known for being a useful library to create responsive websites.
    - I used this library to make this website responsive. This means that the website is user friendly on mobile and desktop interfaces. I also used this library for its components, specifically the card component, which saved me time because I didn't have to program my own cards.
    - This library adds a cleaner interface to the website and a well programmed card structure.
- Python
    - I used python to help me create and edit the csv file for the books. I chose python because I was familiar with it. I wanted to use web scraping to create the csv file, but I faced a lot of difficulties with it so I swapped to python.
    - I used python to create a script to populate, format, and clean the csv file. I wasn't entirely sure what I was doing so the code is definitely not very efficient. I got the initial list from a website and used python to convert the list into a csv, and also swapped out a lot of books based on my own vetting process.
    - Python adds to my website because it created the csv file, which is used to generate the books related to each country.

Part 4

The only change I made to my original mockup is to swap the published date with a button linked to more information because I thought that would be more useful than the publishing information. Everything else was essentially the same.

Part 5

I faced a lot of challenges with the map on this website. The main one was that I wanted to implement a zoom feature with the map, but based on the json file I used to generate the map and after several failed attempts, it didn't seem possible. In the end, I compromised by setting the map scale to auto adjust based on the size of the window. This also meant that for the map to be responsive, you have to refresh the window to reset the scale, which I thought was fine anyways because users don't usually resize the window upon accessing.