TEAM: FairyMander

Overview: The purpose of the Alpha Prototype Demo is to clearly demonstrate the extend to which all core user flows envisioned for the product are supported by the current implementation.   The flow of the demo is very natural: you simply introduce each of the major usage scenarios, and then follow through each of them, just as an end-user would in using the product. Grading is based on how completely the current product supports all key functional aspects within a coherent, realistic user flow. Interface refinement, clunkiness, and aesthetics should be ignored for now; the focus is simply on functional ability to complete the user flow.

This template is fleshed out by the team, approved by the team mentor, and brought to demo as a grading sheet.

Overview of major product use cases

Based on the Requirements document and subsequent development discussions with your client and mentor, briefly describe each of the key use cases for your product:

UC1: Short title for Use Case. <Concise 1-5 sentence description of this use case: nature of the user (admin, normal, guest) and the what they are seeking to do with the product in this use case. >

UC2: short title. Description. Repeat for other challenges.

Etc. Most products will have between 2 and 5 core use cases.

User Flows: Detailed walk-through for each use case:

In this section, we outline the demonstrations of each use case that we have prepared, giving a step-by-step outline of the user flow that would be followed by a real user for that use case.

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<mark>Use case 1: Run District Map Generator on AZ, PA, and UT Maps</mark>

<u>User Flow:</u> Step by step overview of user interactions with product

1. Developer initializes the "DistrictGenerator" object with fields needed to generate the district map they want.

2.   Developer runs the algorithm, seeing the step progress. They will choose to keep the top 3 maps. These maps will be shaved as shape files

3. Developer uses the folium converter to visualize their results

Evaluation and Comments:

- Convincingly demo'd each of listed challenges?

- Other evaluative comments:

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User Flow: Step by step overview of user interactions with product

1. Developer loads a generated AZ map and the current district map
2. Developer runs a fairness metric analysis on the generated AZ map, obtaining a value for each metric outline in the fairness metric module description
3. Developer does the same for the current district map
4. Developer performs a comparison operation, seeing a comprehensive comparison between both maps' fairness metrics.

Evaluation and Comments:

- Convincingly demo'd each of listed challenges?

- Other evaluative comments:

ETC, ETC...for all remaining Use Cases.

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Use Case 3: View Redistricted Maps on FairyMander Website

User Flow: Step by step overview of user interactions with product

1. User opens a web browser and navigates to the FairyMander website
2. User is presented with navigation links and an interactive United States map along with the fairness, redistricting process, and insightful information
3. Upon clicking on a state, the user is presented with current congressional districts and the FairyMandered Algorithm in a side-by-side comparison

4. Upon scrolling down, the user is presented with the Demographic Distribution and US Census Bureau statistics for each district.
5. Lastly, the user is presented with the redistricting laws for that certain state and the choice to visit other states along with a link to provide feedback if the user chooses so.
6. User navigates away from the FairyMander website and closes browser

<u>Evaluation and Comments:</u>

ü Convincingly demo'd each of listed challenges?

ü Other evaluative comments:

ETC, ETC...for all remaining Use Cases.

Known short-comings: Functionality still deficient/missing:

If there were challenges you listed earlier that were *not* covered by a demo, list here. This will hopefully be a short list…but better to be clear about where you are. If you have items here, you could list (if applicable) any pending plans/schedule to get this implemented.

Approved by VNF on Oct. 19th , 2024