Writeup

Part 1

Building upon current trends for services to provide users with a yearly recap of their activities (Spotify Wrapped, Apple Music Recap, Duolingo Review), My project aims to provide users with a personalized recap of their YouTube watching habits for the year. It uses data made accessible by GDPR to show users their top YouTube creators and viewing habits in the form of animated charts and visuals. This information is interesting and engaging because it allows users to see how their YouTube consumption habits have changed and share their favorite creators with others.

One of the key features of my project is the ability to see a user's top YouTube creators for the year. This feature is interesting and engaging because it allows users to see which creators they have been most engaged with and understand better what kind of data that corporations have on them.

In addition to showing users their top creators, our website also provides detailed charts and graphs that illustrate a user's overall YouTube watching habits for the year. This information is presented in the form of line and bar charts, which show the user's number of videos watched, and average number of videos for each month of the year. This information is interesting and engaging because it allows users to see how their YouTube habits have changed throughout the year, and identify any trends or patterns in their viewing habits.

The target audience of my application is anyone who uses YouTube regularly and is interested in learning more about their own viewing habits. By providing users with a detailed breakdown of their watching history, our website allows users to gain a better understanding of their own YouTube consumption patterns, and make informed decisions about the content they watch in the future.

Part 2

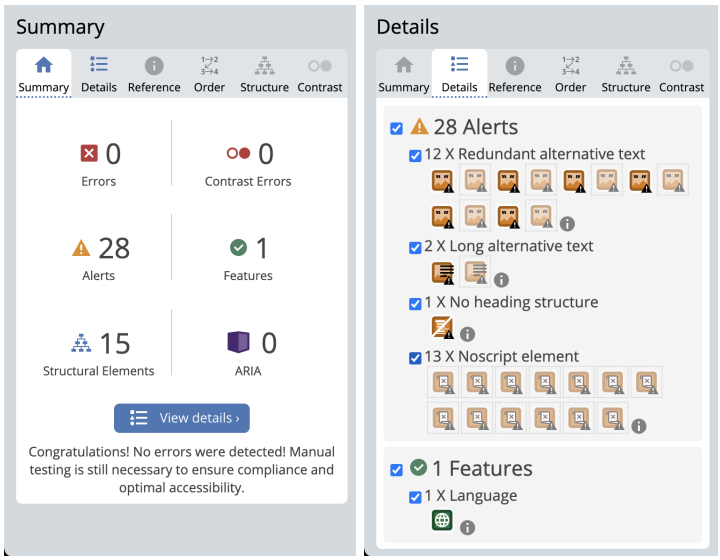
- Screen sizes for best experience: >1200px for desktop, <640px for mobile
- Button that leads you from the landing page to the upload data page.
    - Click on the “Start” button on the landing page
- Go through the instructions on how to download your YouTube data from Google
    - Click on the left and right arrow buttons next to the image
- Start the recap
    - Click on the Upload Data button and select the downloaded watch-history.js from your local files
    - Or click on the Load Sample Data button to use dummy data (for grading)
- Browse your analysis
    - Click on the left and right arrow buttons at the bottom to browse the different visualizations and insights
    - Hover over bar charts for tooltips

- Share a summary of your favorite creators
    - Click on the save image button on the final view in the analysis

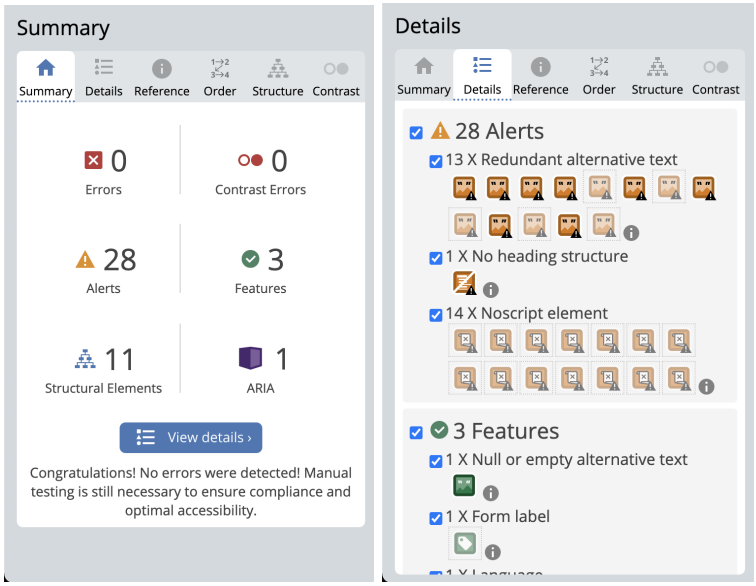
Accessibility

The website is navigable by using the tab and enter keys as all interactable components are selectable. Alt text and contrast are also set correctly, with all HTML elements semantically set. The website has 3 main pages: the landing page, the upload data page, and the analysis page which contains multiple screens in a slideshow view.

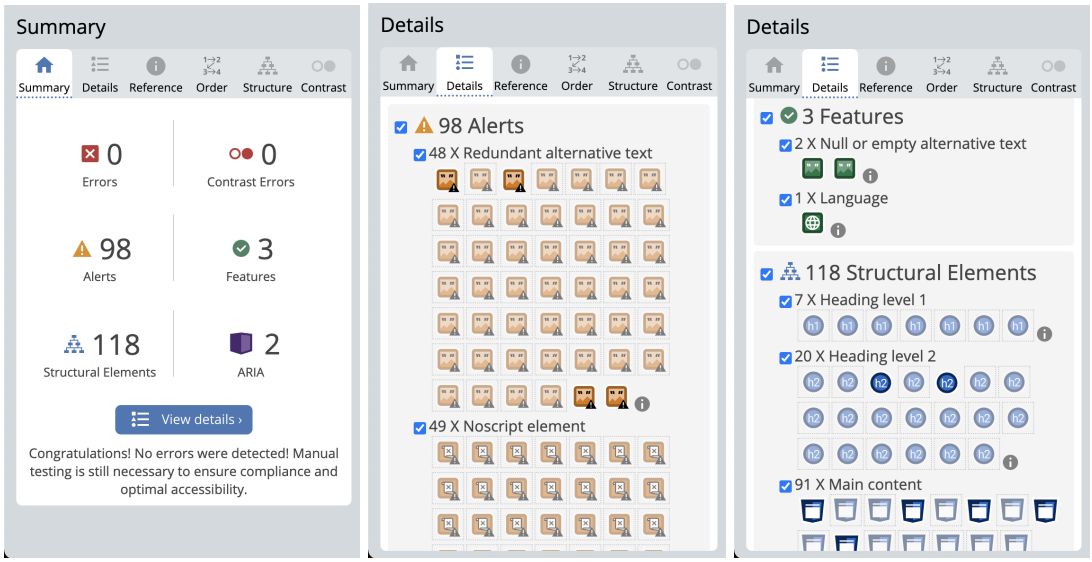
Landing: /



Upload: /upload



Analysis: /analysis



Part 3

- Framer Motion
- It's a simple and intuitive library to use to add animations to a website. Uses CSS properties for animation.
- Calling the library component in a custom wrapper component and then calling that on each of my pages for most elements.
- Adding fade in and up effects to the background and the different elements on my website.

- d3
- One of the most popular and customizable libraries for data visualization on the web.
- Adapting code from the d3 examples on Observable into bar chart, horizontal bar chart, and calendar view components.
- Interactive visualizations on the analysis page

- html-to-image
- Needed functionality to export website components as an image for users.
- Created an HTML element with all the user's data summarized in a component and converted that into a PNG image.
- Users are able to share a summary of their top creators with friends and family.

- Youtube API
- To add more functionality to a Youtube Recap website.
- Called the channel information endpoint to get the channel information for certain Youtubers.
- Images of a user's top creators on the analysis page.

Part 4

Some of the main feedback I received during the prototyping phase involved making the charts more clear and adding some animations. While implementing my solution, I kept those in mind and added clearer axes to my charts along with animations. Additionally, I added the Share image page as a bonus, and also added accessibility support for many of the elements on the page. The overall design did not change too much but many of the tiny bugs were polished up.

Part 5

Figuring out how to export the summary of a user's recap into an image was a challenge as HTML Canvas didn't support importing external images. Finally settled on the html-to-image library which supported that.. Cross browser compatibility was also a slight challenge as Safari processes certain CSS properties differently.