

NAVIGATE A11Y

● INTRO/MISSION ●

NavigateA11y, built with Next.js and Tailwind CSS, is an accessibility checker.

Paste a link, and it instantly assesses website accessibility by examining good and bad semantic practices, providing a clear rating.

Using Artificial Intelligence, it returns feedback and recommendations to enhance the site's accessibility.

TECHNOLOGY USED



Our ranking system evaluates each tag on a website, assigning points based on good semantics and deducting points for bad or vague tags. We prioritize crucial features like alt text to ensure accessibility.

We've trained an OpenAI model that examines HTML code, providing personalized and straightforward suggestions to enhance a site's accessibility. By checking a website's HTML for improvements, the tool offers helpful suggestions to improve site accessibility.



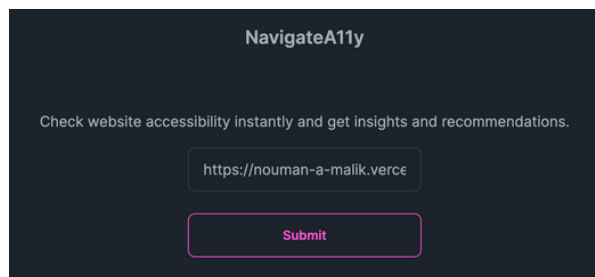
FUTURE WORK

We look forward to adding an AI-assisted code editor that not only gives feedback, but also suggests changes in code you can make to improve your website's accessibility. We also plan to have the production site working completely without freeware.

PROBLEMS FACED / TECHNICAL ISSUES:

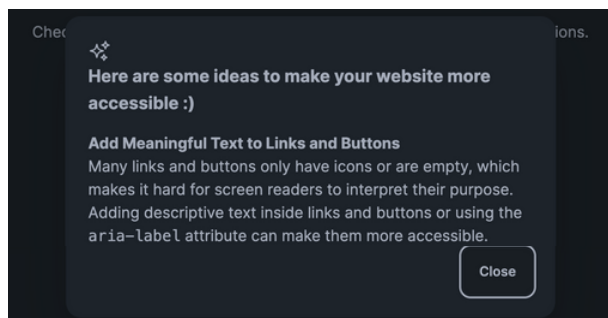
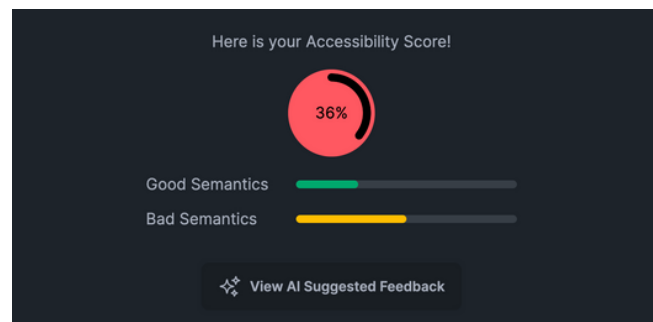
Throughout this project, we faced a few issues involving the use of freeware and its limitations on the capability of the final project. One main issue that we encountered was the limit of characters we could use in each API request for the GPT 3.5 model. This was easily solved by upgrading to the more expensive GPT 4.0 model. We also faced a problem where the GPT 4.0 model took too long to return a response. If the website HTML is too long, GPT takes longer to process it and the host times out. This issue is not present for the local host and is only present with the production as it is freeware with limitations.

TUTORIAL



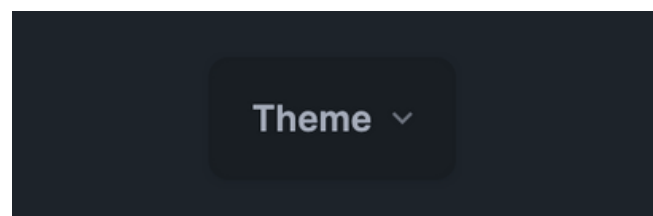
On the homepage, you'll find a simple search box. Just paste the link of the website you want to assess and hit the 'Check Accessibility' button.

After checking the accessibility, you'll see results displayed on the page. These results include an accessibility rating, and a few statistics about your site. Green indicates good accessibility, while red signals areas for improvement.



For more detailed feedback, click the 'Feedback' button. Our AI-powered system analyzes your website's HTML code and provides personalized suggestions to enhance accessibility.

Use the theme button in the top right to choose from Dark, Retro, Cyberpunk, Valentine, or Aqua themes. Find the perfect style for your browsing comfort.



RESOURCES

Github Repository Link:

<https://github.com/NoumanAMalik/NavigateAlly>

Live Site:

<https://navigate-ally.vercel.app/>

(Due to free site hosting, API timeout is restricted. Only a few small sites work on our live site at the moment. In our video there is the demo working locally which has no restrictions (where all sites work). Here are a few examples to run for the live site:

<https://nouman-a-malik.vercel.app/#Experience>

<https://noumanamalik.github.io/Movie-Database/>

<https://afrokk.dev/>

Link to our Youtube Video:

<https://youtu.be/ZQd213fhiuY>