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1. Navigation Bar

The navigation bar exists on every page of our website. It is a responsive navigation bar that is designed to be easy to use no matter the size of the device you are working on.

The navigation bar begins with a “home” button that leads the user to the home page once clicked.

The second item on the navigation bar is a menu dropdown that gives the user the option of pressing on one of the three main content pages.

The third item on the navigation bar is a link to our web app. Pressing this will open it in a new tab.

The fourth item on the navigation bar is a link to our “more info” page.

The *ai for all* logo exists in the center of the navigation bar and also serves as a link to the home page.

A link to our opensource GitHub repository is the final item on the navigation bar and will open in a new tab once clicked.

2. Home Interface

i) The first thing a user sees when they open the website is our home page. The first words they read will give a brief overview of the importance of the project.

ii) An *interesting idea* section briefly describes how the project can be of benefit to a wide variety of people of all ages and professions as well as merchandisers and consumers.

iii) The three main components of our website are our “web scraper” page, our “machine learning” page, and our “dynamic visualizations” page. Brief words are given on the home page for each section and a button is present that will direct users to each page.

3. Web Scraper Page

i) Navigating to the “web scraper” page presents the user with a brief overview of why data acquisition is so valuable.

ii) The *how we did it* section describes *how* we can safely and quickly extract data from online webpages.

iii) The *benefits of using a web scraper* section shows users why they should use a web scraper and offers various resources they can use to expand their knowledge on useful file formats such as json and csv.

iv) The *how does it work?* section responds this very question regarding how a web scraper works. It presents the user with a variety of resources they can use to expand their knowledge on topics such as html, classes, ids, website structure, and indexing. Users are shown the two main components

that went into the building of our web scraper and are encouraged to visit our opensource GitHub repository where they can clone the web scraper and make changes of their own.

The section also offers users the option of a dropdown menu that shows them how some of our scraped datasets look like.

4. Machine Learning Page

i) The first thing a user sees when they open the machine learning page is a brief overview of the importance of understanding concepts such as machine learning.

ii) The *Where do we begin?* section lets users know that we are not yet ready to feed our data to any models. The first thing we must do is make sure our data is *clean*. The section goes on to explain what it means for data to be clean and how we were able to clean our data after extracting it using our web scraper.

This section also gives users a variety of resources they can use to expand their knowledge on data types and functions.

iii) The *What is machine learning?* section gives users insight into this seemingly difficult to understand concept. The section is a beginner friendly introduction into machine learning and offers users resources they can use that can help them understand concepts such as *clustering* that are important in many machine learning algorithms.

iv) The *visualizing data* section allows users to see how, once the data is cleaned and ready to use, can be extremely useful. Visualization models give us different perspectives and allow us to witness the data in a variety of ways.

This section gives the user the option of a dropdown that includes a variety of data visualization models. Additionally, choosing an option will present users a brief paragraph that gives an overview of the model.

5. Dynamic Visualizations Page

i) The first thing a user is presented with once they open the dynamic visualizations page is a brief paragraph on the processes we have gone through to get to the current section. The data has been collected and cleaned and is now ready for further analysis.

ii) The *A web app* section has the purpose of introducing our anvil web app. After presenting the importance of dynamic content, the website loads a frame of the anvil web app that users can interact with.

iii) The *What's next?* section serves as the concluding words of the website. Users are encouraged to visit our repository and benefit from the code we have created. Additionally, users are encouraged to visit our “more info” page where quality resources are offered to expand our knowledge.

6. More Info Page

The more info page serves as a guide for three main topics: web scraping, machine learning, and deep learning. The page is organized by way of three main subsections each corresponding to one of these topics. Link will open in new tabs with the purpose of keeping the website open in case additional links are to be visited.

7. Footer

The footer forms part of every page on our website and serves the purpose of giving users brief yet concise insight into the motivation of our team as well as various links. These links include: our GitHub repository, an *email us* link, and a link to the *Generation AI Nexus* homepage.