Typing Speed Test App

Project Documentation: Typing Speed Test App

Overview: The Typing Speed Test App is a web application that allows users to measure their typing speed and accuracy. Users type a given passage within a set time limit, and the application calculates their typing speed in words per minute (WPM) and accuracy percentage. Built using HTML, CSS, Bootstrap, and JavaScript, the app is designed to be responsive and user-friendly on all devices.

Features:

Text Passage: Provides a passage of text for the user to type.

Timer: Counts down from a set time limit (e.g., 1 minute).

Typing Area: Allows users to type the provided passage.

Typing Speed Calculation: Calculates and displays typing speed in WPM.

Accuracy Calculation: Calculates and displays typing accuracy as a percentage.

Error Highlighting: Highlights errors in the user's typing in real-time.

Result Display: Shows the results of the typing test (WPM, accuracy, and errors).

Reset Test: Allows users to reset the test and try again.

Responsive Design: Ensures the application is fully functional and visually appealing across all devices, including mobile phones, tablets, and laptops.

Technologies Used:

HTML: For creating the basic structure of the web page.

CSS: For styling the user interface and enhancing the visual appeal.

Bootstrap: For responsive design and pre-built components.

JavaScript: For handling user input, timing, and calculating results.

Implementation Details:

Text Passage:

The application provides a static or dynamically generated passage of text for the user to type.

The text is displayed prominently on the screen for easy reference.

Timer:

A countdown timer starts when the user begins typing.

The timer is set to a specific duration (e.g., 1 minute) and is displayed on the screen.

Typing Area:

A text input area is provided for users to type the given passage.

The input area captures and tracks user keystrokes.

Typing Speed Calculation:

Typing speed is calculated in words per minute (WPM).

WPM is calculated as **(total characters typed / 5) / (time in minutes)**.

The calculation is updated in real-time as the user types.

Accuracy Calculation:

Accuracy is calculated as the percentage of correctly typed characters.

Accuracy is calculated as **(number of correct characters / total characters) * 100**.

Errors are highlighted in real-time, and accuracy is displayed at the end of the test.

Error Highlighting:

As the user types, any incorrect characters are highlighted in real-time.

Correctly typed characters remain unmarked, while errors are marked with a different color (e.g., red).

This provides immediate feedback to the user about their typing accuracy.

Result Display:

At the end of the test, the application displays the user's typing speed (WPM), accuracy percentage, and total errors.

Results are shown prominently to provide clear feedback.

Reset Test:

A reset button allows users to clear the current test and start a new one.

The timer, text passage, and typing area are reset to their initial states.

Responsive Design:

The application is designed to be fully responsive, providing a seamless experience on different devices.

Bootstrap ensures the layout adapts to various screen sizes, maintaining usability and visual consistency.

Note: The provided implementation details offer a foundational structure that can be customized and expanded upon. You may need to make changes to the project or this entire documentation as per the specific requirements asked by the placement team.