

### 1.HTML Structure:

- The code starts with the `<!DOCTYPE html>` declaration, indicating that this is an HTML5 document.
- The `<html>` tag represents the root element of the HTML document.
- The `<head>` section contains metadata about the document, such as character encoding, viewport settings, and the title of the page (which will be displayed in the browser's title bar or tab).
- The `<body>` section contains the visible content of the webpage.

### 2.External Resources:

- The webpage uses the Bootstrap CSS framework to style its elements. It includes the Bootstrap CSS file from a CDN (Content Delivery Network) hosted at <https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css>.

### 3.Custom Styling:

- Some additional custom styling is applied to the elements using inline CSS and the `<style>` tag within the `<head>` section.
- The `.container` class is centered, and it has a top margin of 50 pixels.
- The `.btncss` class is applied to the buttons to add some margin on the right and set a border-radius to create rounded corners.

### 4.Body Content:

- The `<body>` section contains a background image set with the `background` attribute using a local file path. However, it seems that there are two different image paths commented out. One is a local path (commented out), and the other is a URL to an external image (`athlete-ready-run-with-are-you-ready.jpg`) hosted on the internet. Since the local path is commented out, the background image from the URL will be used.
- Inside the `<div class="container">`, there are several elements:
  - An `<h1>` tag displaying "STOPWATCH" in bold text.
  - An `<h2>` tag containing a `<span>` with the `id="display"`. This will be used to show the elapsed time of the stopwatch, and the initial value is set to "00:00:00".
  - A `<div>` element with class "btn-group" containing three buttons: "Start," "Stop," and "Reset." Each button has an `id` attribute (`"start"`, `"stop"`, and `"reset"`) and specific classes to style them with Bootstrap.

## 5. JavaScript Functionality:

- The script section contains JavaScript code responsible for the stopwatch functionality.

Three variables are initialised - `startTime` to hold the start time when the stopwatch starts, `interval` to hold the `setInterval` object, and `isRunning` to keep track of whether the stopwatch is running or not.

1. Function `formatTime(milliseconds)`: This function takes the time in milliseconds and formats it into a string with the format 'MM:SS:MS' (Minutes, Seconds, Milliseconds). The `padStart` method is used to ensure that all time units are displayed as two digits.

2. Function `updateDisplay()`: This function is used to update the time display on the stopwatch. It calculates the current time elapsed since the start time and then displays it in the 'MM:SS:MS' format by calling the `formatTime` function.

3. Function `start()`: When this function is called, it checks if the stopwatch is not already running using the `isRunning` flag. If not, it sets the start time (`startTime`), initiates the interval to call the `updateDisplay` function every 10 milliseconds, and sets `isRunning` flag to true.

4. Function `stop()`: This function stops the stopwatch by clearing the interval which stops the `updateDisplay` function from being called every 10 milliseconds. It also sets the `isRunning` flag to false.

5. Function `reset()`: This function resets the stopwatch. It stops the stopwatch by calling the `stopStopwatch` function and then resets the display to '00:00:00'.

### 6. Event Listeners:

- The script also contains event listeners that trigger the stopwatch functions when the corresponding buttons are clicked. For example, the `start` function is called when the "Start" button is clicked, `stop` is called when the "Stop" button is clicked, and `reset` is called when the "Reset" button is clicked.

The resulting webpage will display a "Stopwatch" title, the elapsed time in the format "mm:ss:ms", and three buttons to control the stopwatch (Start, Stop, and Reset). When the user clicks the "Start" button, the stopwatch will begin counting up in real-time. Clicking the "Stop" button will pause the stopwatch, and clicking the

"Reset" button will set the stopwatch back to zero. The background of the page will display the specified image.

