**HTML** - The purpose of HTML in creating a responsive navigation bar with a dropdown menu is to define the structure and layout of the navigation menu. HTML organizes the links, dropdowns, and interactive elements, providing the foundation that CSS and JavaScript can style and enhance for responsive design and user interaction. It enables a functional and accessible nav bar that adapts to different screen sizes and devices.

**CSS** – The purpose of CSS is to style a responsive navigation bar with a dropdown menu. It ensures that the nav bar looks good on both desktop and mobile devices, adjusting its layout accordingly. On desktop, the navigation items are displayed horizontally with a dropdown that appears on hover. On mobile, the navigation transforms into a collapsible menu (controlled by a hamburger icon), and the dropdown adapts to fit within the mobile layout. The CSS also includes hover effects, colors, and spacing to enhance user experience and accessibility.

**JavaScript** - The purpose of JavaScript is to make the navigation bar interactive and responsive. It ensures that the dropdown menu works with hover on desktop and with clicks on mobile, hides the dropdown when clicking outside of it, and toggles the mobile menu when clicking the hamburger icon.