**Design Decisions:**

The website, **ShopEase**, was designed with simplicity, user engagement, and functionality in mind. The website features a clean and intuitive layout with the main goal of providing a seamless shopping experience for users. The design is responsive, ensuring accessibility across various devices, including desktops, tablets, and smartphones. Bootstrap 5 was used for the layout, making the design process faster while ensuring a modern and mobile-first approach.

The homepage features a large hero image that immediately captures the visitor's attention and clearly communicates the purpose of the site: "ShopEase - Your one-stop shop for the best deals!" The navigation bar is straightforward, providing easy access to key pages such as Home, About Us, Products, and Contact. An essential part of the design is the product cards displayed on the homepage. Each product card features an image, product name, price, and a link to the product detail page. This layout was chosen to allow users to quickly browse products without feeling overwhelmed by excessive information.

On the product detail page, detailed product descriptions and high-quality images were included to ensure customers can make informed purchasing decisions. An **Add to Cart** button was integrated to facilitate a smooth transition from browsing to shopping. The cart functionality allows users to review the products they selected, including images, quantities, prices, and a total price, making the shopping process more transparent.

The design of the cart page was aimed at providing a comprehensive view of the user's shopping selection, with functionalities like adjusting the quantity of items and removing products. The "Proceed to Checkout" button is prominently displayed, leading users to a checkout page for finalizing their orders.

**Target Audience:**

The target audience for ShopEase consists primarily of individuals who enjoy online shopping and seek a user-friendly, efficient way to browse and purchase electronic products and accessories. This demographic is expected to include tech-savvy shoppers, young adults, and busy professionals who are comfortable with navigating e-commerce websites. Furthermore, given the variety of products such as wireless headphones, smartphones, laptops, and accessories, the target market also includes individuals who are interested in upgrading their technology or buying gifts for others.

The design and layout were also crafted to be accessible to those with varying levels of experience with online shopping. Clear navigation and simple interface elements make it easy for users to quickly understand the site's functionality, while product descriptions and images enhance decision-making for both novice and experienced shoppers.

**Challenges Encountered:**

One of the main challenges during the development process was ensuring the cart functionality worked smoothly across all pages. The cart uses localStorage to store and persist items, which required consistent management of cart data across different pages. A particular issue was ensuring that the cart was correctly updated when items were added or removed, and that the cart count in the navigation bar reflected the correct number of items.

Another challenge was creating a responsive design that looked good on various screen sizes. Although Bootstrap handled much of the layout, I had to manually adjust certain elements to make sure they adapted well to smaller screens, especially product images and buttons. It required frequent testing across different devices to guarantee a smooth experience.

Finally, integrating the checkout page in a simple yet functional way posed a challenge. The checkout process needed to include cart data while allowing users to input their shipping and payment information securely, but due to time constraints, this page currently only handles the cart display. Future iterations will focus on implementing a full checkout process, including payment gateway integration.

Overall, the development of **ShopEase** provided valuable experience in designing and building a functional e-commerce site with a focus on user experience and seamless interaction. The challenges encountered were addressed with practical solutions, and the project is now a strong foundation for further development.