

BSc (Hons) Artificial Intelligence and Data Science

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Module: CM1605 Web Technology

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Group Coursework Report

Group:B

Coursework Group No: 11

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1 Introduction

Welcome to BuyAnything.com, an AI-powered e-commerce platform designed to revolutionize your online shopping experience. By leveraging advanced artificial intelligence and machine learning, we offer personalized product recommendations tailored to your unique preferences and behaviors. Our platform features a modern design for an engaging user experience, including customizable preferences, a dynamic quiz, a user-friendly shopping cart, a gallery of new seller stores, and comprehensive sections like About Us, Query Page, and User Reviews. Additionally, each team member has a dedicated editor's page. Explore BuyAnything.com to elevate your shopping journey with intelligent design and targeted suggestions.

2 Research on Existing Systems

Amazon is a major global e-commerce platform offering a wide range of products with detailed listings, personalized recommendations, and Amazon Prime benefits. Known for its user-friendly layout, it emphasizes easy navigation and search. eBay, a prominent online marketplace, features auction and fixed-price listings with a simple interface focused on search and categorization. Shopify provides e-commerce solutions for businesses to create custom online stores with integrated payment, inventory management, and analytics, offering flexibility and scalability.

3 Technical discussions

Student 1

The website project will begin with a presentation page displaying the title and group member names, transitioning to the main page after 5 seconds. The main page will feature a Sign-Up Form with fields for Name, Age, Email, and user preferences, along with Submit and Reset buttons. JavaScript will handle validation to ensure all compulsory fields are completed and show a personalized alert upon successful submission. The site will also include a Gallery Page with interactive thumbnail images and larger views with descriptions, using mouseover events or radio buttons. Additionally, an Editors Page will list team members' names, contact details, and completed tasks, with a consistent title logo and a link to this page from all other pages. JavaScript will allow users to customize background and text colors via menus and dynamically display data from an XML file.

Student 2

The main page of the website will use CSS to create visually appealing navigation buttons with hover effects, improving user access. It will include a quiz page and an editor page with team details. A consistent title logo will appear at the top, and a link to the editor page will be at the bottom of each page. The HTML form will feature fields for name, email, and query details, with a query theme selection using radio buttons or a dropdown menu. JavaScript will handle form validation, display a summary in a popup, and manage a five-question quiz with a scoring system to engage users and encourage interaction.

Student3

The website will have a main page, Buy Products page, About Us page, and Editors page. The main page will feature a title logo and navigation links, with a credit link to the page editor at the bottom. The Buy Products page will display at least three products with quantity fields, a form collecting compulsory details (Name, Email, Address), and optional fields (e.g., phone number). It will include a points field for discounts and a "Place Order" button. JavaScript will calculate total prices with discounts, validate compulsory fields, and display an order summary popup upon successful validation. The About Us page will show four team member pictures with mouseover details and buttons to adjust font size for accessibility, both implemented with JavaScript. The Editors page, external to the main website design, will list team members' names, contact details, and tasks.

Student 4

The listing page will feature a user-friendly layout displaying products with descriptions, prices, and images. It will include a subscription form for a personalized newsletter, styled with CSS for clarity and accessibility. This form will have compulsory fields for Name and Email Address, and JavaScript will validate the inputs, ensuring they are correctly filled before displaying a confirmation pop-up. Additional JavaScript functionalities will allow users to change background and text colors through menus and dynamically display data from an XML file by parsing it and generating HTML content.

4 Navigation techniques

BuyAnything.com is organized with a clear folder structure to support easy maintenance and scalability. Key folders include "assets" for static files, "css" for styling, and "js" for JavaScript. The "pages" folder contains HTML files for different sections like Home, About Us, Shop, Quiz, Gallery, Cart, and Query, with "index.html" as the main landing page. The navigation bar is consistent across all pages, and breadcrumb trails are used to help users track their location and navigate back to previous pages.

5 Color Balance Section

The color palette of black, blue, and beige for the e-commerce website enhances the appeal of tech products. Black conveys sophistication and modernity, providing strong contrast and readability. Blue builds trust and professionalism, creating a calming and user-friendly atmosphere. Beige adds warmth and approachability, balancing the boldness of black and the coolness of blue, while serving as a neutral background. This combination creates a cohesive brand identity that appeals to tech-savvy consumers, improving user experience and engagement.

5.1 Test for Color Contrast

Colour Contrast Check

Date created: January 11, 2005
Date last modified: January 11, 2015

Foreground Colour:	Background Colour:	Results
# F7F6C8	160B2E	This is example text. Some of it bolded. <i>Some of it italicized.</i>
Red: <input type="range"/>	Red: <input type="range"/>	Brightness Difference: (≥ 125) <input type="text" value="222.77"/>
Green: <input type="range"/>	Green: <input type="range"/>	Colour Difference: (≥ 500) <input type="text" value="614"/>
Blue: <input type="range"/>	Blue: <input type="range"/>	Are colours compliant? <input type="text" value="YES"/>
Hue (°) <input type="range"/>	Hue (°): <input type="range"/>	Contrast Ratio <input type="text" value="16.916"/>
Saturation (%) <input type="range"/>	Saturation (%): <input type="range"/>	WCAG 2 AA Compliant <input type="text" value="YES"/>
Value (%) <input type="range"/>	Value (%): <input type="range"/>	WCAG 2 AA Compliant (18pt+) <input type="text" value="YES"/>
		WCAG 2 AAA Compliant <input type="text" value="YES"/>
		WCAG 2 AAA Compliant (18pt+) <input type="text" value="YES"/>

Figure 1: Color Contrast Test

6 Typography/Consistency

Typography by using consistent font families (like Georgia and Times New Roman), adjusting text alignment, and varying font sizes and weights for different elements. This enhances readability and maintains a unified text style across the site. Color and styling also play a role in making text visually appealing and easy to read.

Consistency is achieved through uniform design elements, such as colors, font families, and spacing. Layout properties like padding and margins are consistently applied, and responsive design techniques ensure that the site looks cohesive on different screen sizes. Interactive elements, like buttons and hover effects, are styled uniformly to provide a consistent user experience

7 Accessibility Techniques

Implementing compulsory user input forms for order placement ensures accurate information collection and improves customer satisfaction. The forms will be designed with accessibility in mind, featuring clear labels, instructions, and validation methods. A quiz for points calculation will engage users, focusing on keyboard navigation and screen reader compatibility. Accessibility features will include accessible links, skip navigation options, multimedia captions and transcripts, resizable text, proper color contrast, and text alternatives for images, all contributing to a more inclusive and user-friendly e-commerce experience.

7.1 Accessibility Tests

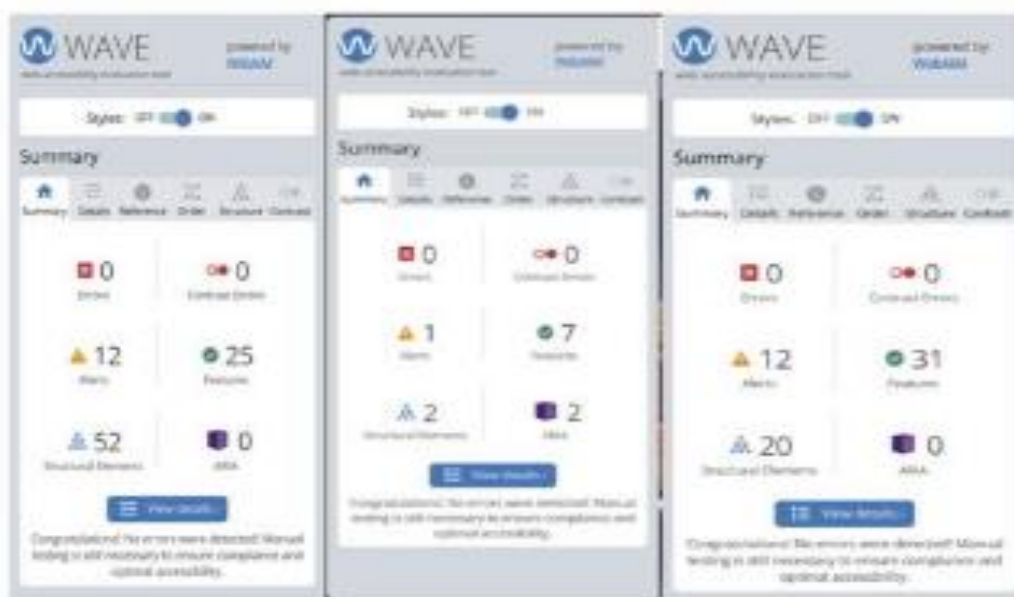


Figure 2: Accessibility Tests

8 Overall Self Reflection

It sounds like the project was a great opportunity for growth! Balancing aesthetics with functionality, troubleshooting, and adapting to challenges are all crucial skills in web development. Plus, improving communication and project management skills will definitely help in future projects. If you have any more projects or need further assistance, feel free to reach out!

9 Site Diagram

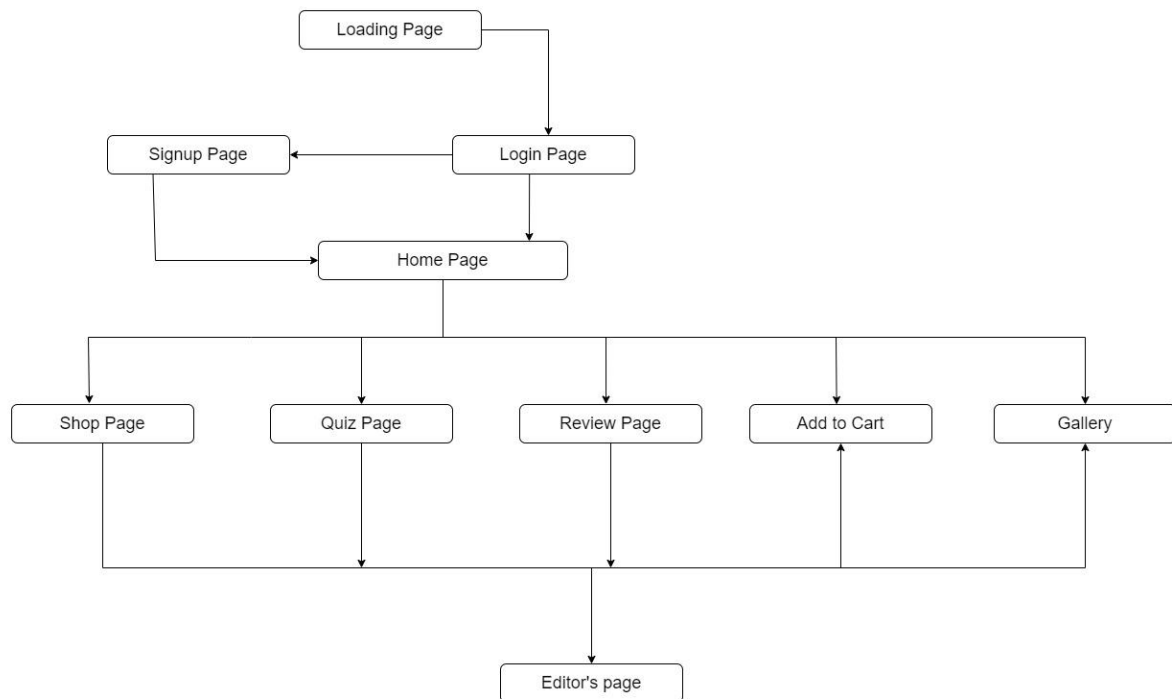


Figure 3: Site Diagram

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