Internet Technology

MOS Burger Course Work

Objectives

- Develop visually appealing and responsive web applications that meet the needs of the target audience and the project requirements.
- Demonstrate the knowledge and understanding of HTML, CSS and JavaScript concepts and principles in the project's implementation.

Coursework Requirements

- You should use your knowledge on HTML, CSS and JavaScript to implement this project.
- Refer this coursework guideline document to understand the project requirements.
- The website must be responsive and display properly on a range of devices, including desktops, tablets and smartphones.
- The web application should be well-designed and visually appealing, incorporating appropriate use of colors, typography, layout and imagination.
- The website should be optimized for performance, including the use of optimized images, and multimedia files and follow the best practices of web optimization.

Project Submission

You're required to create a Git Repository on Github at the beginning of the project. All updates and changes made to the project should be committed and pushed to the repository regularly. The repository should include all necessary files and assets required to run the website, including HTML, CSS and JavaScript, images and any other multimedia files.

Introduction

As a part of a web development final project, you're required to develop a web application solution for the below-described scenario. The guidelines and requirements for this project are outlined in this document.

Project Flow

Step 01: Project Analyzing and Planning

- Review project requirements and understand key objectives.
- Analyze functional and non-functional requirements.
- Identify dependencies and plan the project timeline accordingly.
- Prioritize requirements based on the importance.
- Assess the feasibility of implementing requirements within given constraints.
- Evaluate different technical solutions using HTML, CSS and JavaScript.
- Create a requirement specification document outlining finalized requirements, priorities, dependencies and technical solutions.

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Step 02: Design and Prototyping

- Gather design requirements.

- Conduct research for inspiration.
- Create wireframes to outline basic structure and layout.
- Design mockups to represent the visual look and feel.
- Consider user experience (UX) aspects for a smooth user journey.
- Develop interactive prototypes.
- Finalize design assets.

Step 03: Software Development

- Setup development environment.

- Break down the project into smaller tasks.
- Write HTML structure based on the design.
- Apply CSS styling to HTML elements.
- Add interactivity and functionality using JavaScript.
- Test and debug the code regularly.
- Follow best coding practices and standards.
- Implement responsive design for various devices.
- Optimize website performance.

Step 04: Deployment

- Choose a suitable hosting platform based on requirements.
- Set up necessary infrastructure for production environment.
- Prepare code for deployment, ensuring organization and optimization.
- Upload code and assets to the production environment.
- Configure domain and DNS settings for accessibility.
- Test deployment thoroughly.
- Implement security measures.
- Monitor and optimize performance.
- Launch the web application for public access.

Deployment

You should deploy your web application on GitHub Pages, a free hosting service provided by GitHub. You can easily enable GitHub Pages for your repository, allowing you to host your web application at no cost.

Introduction to Business

"MOS Burgers" is locally-owned medium scale business that specialize in selling a wide variety of burgers, submarines and soft drinks. On an average day, the shop serves between 50-60 customers. Additionally, Vito's Burger shop offers various promotional deals and discounts to their customers to enhance their dining experience.

Despite its popularity, the current method of handling transaction details and issuing bills relies on manual, paper-based processes. As the number of customers visiting the shop continues to grow daily, there is a need to streamline and modernize these operators.

Project Scope and Requirements

To mitigate the challenges inherent in the manual system, Mr. Nimal Mayadunne aims to establish a digital system that can efficiently handle tasks such as Order Processing, Store Management, Bill Issuing, and Customer Management.
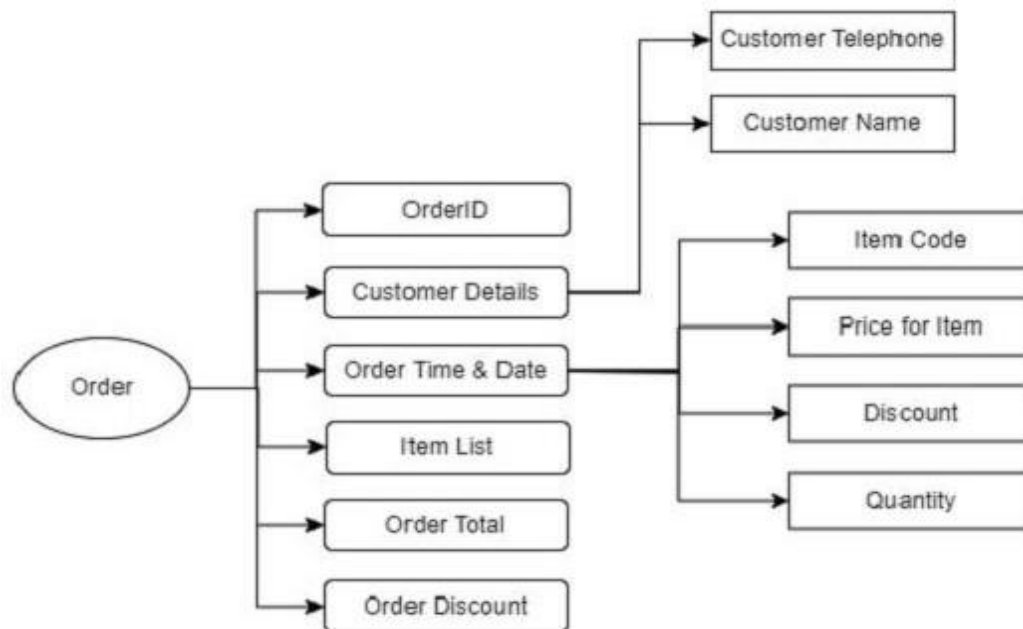
Store Management

"MOS Burgers" shop offers a variety of food items and beverages, each listed with corresponding prices in annex 01. The system users should have the capability to add new items, manage the existing item list, update price lists, and receive notifications regarding item expiration dates. This functionality is essential for efficient and organized operations within the MOS Burgers shop.

- User should be able to view all food items.
- All food items within the system should be presented to the user categorically. The
- Comprehensive list of food items and their respective categories is provided in the annex at the
- End of the document. When displaying the food items, the list should include the price, quantity
- On hand, expiration dates for packaged foods, and the unique food item code.
- User should be able to update and delete food items.
- User should be able to add items to the system.
- System should notify user about the expired food items and should be able to remove those food items marked as expired.

Order Management

The system needs to handle placing orders and keeping track of order details. The diagram below illustrates the information that should be stored in each order. To manage and organize this data, you can use JavaScript Arrays and Objects making it straightforward and efficient for both ordering and storing information.

- The system should allow users to select food items from the menu by typing the item name, item code, or by category. Upon selection, the system will display essential information such as the item's price, expiration warning (if the selected item has already expired), item code, and the applicable discount percentage, if any. This feature aims to provide users with a convenient and organized method for accessing key details about the chosen food items.
- All selected or added food items should be displayed in the cart with their respective prices and quantities. The price calcul
- ation is based on the unit price multiplied by the requested quantity for each item.
- Users should be able to add a discount percentage to the whole order. Reduction of the discount should calculate as,

  Final Amount = Total – (Total x Discount Percentage)

- Users should be able to view previous orders, by searching from customer ID (Contact Number) or by Order ID. Users should be able to edit, delete and update the previous order details.
- After the order is completed, the system should generate a receipt for the order. (Only Generating a PDF is enough)

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Customer Management

All customer details should be stored in the system for future tasks. For instance, "MOS Burgers" shop is planning to conduct a SMS campaign for its customers. Additionally, they have the idea of providing offers to the best customers based on their interactions with the shop. Hence, the proposed system should be capable of keeping track of customers who visit the shop.

● This system should be able to add customers both while placing orders and through a separate process.
● Should be able to update, delete and edit details of customers.
● Should be able to view orders under each customer name.

Report Generating

The owner of "MOS Burgers" wishes to receive reports on various variables to make informed decisions about the business. These reports provide insights into the pace of selling different food items over time and help understand the pattern of customer food purchases.

● System should be able to generate a monthly report of sales.
● Users should be able to view customers with the highest rate of orders within the month.
● Should be able to generate an annual sales report and food items count report.

Item Code	Item Name	Price (LKR)	Discount
Burgers			
B1001	Classic Burger (Large)	750.00	-
B1002	Classic Burger (Regular)	1500.00	15%
B1003	Turkey Burger	1600.00	-
B1004	Chicken Burger (Large)	1400.00	-
B1005	Chicken Burger (Regular)	800.00	20%
B1006	Cheese Burger (Large)	1000.00	-
B1007	Cheese Burger (Regular)	600.00	-
B1008	Bacon Burger	650.00	15%
B1009	Shawarma Burger	800.00	-
B1010	Olive Burger	1800.00	-

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B1012	Double-Cheese Burger	1250.00	20%

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B1013	Crispy Chicken Burger (Regular)	1200.00	-
B1014	Crispy Chicken Burger (Large)	1600.00	10%
B1015	Paneer Burger	900.00	-
Submarines			
B1016	Crispy Chicken Submarine (Large)	2000.00	-
B1017	Crispy Chicken Submarine (Regular)	1500.00	-
B1018	Chicken Submarine (Large)	1800.00	3%
B1019	Chicken Submarine (Regular)	1400.00	-
B1020	Grinder Submarine	2300.00	-
B1021	Cheese Submarine	2200.00	-
B1022	Double Cheese n Chicken Submarine	1900.00	16%
B1023	Special Horgie Submarine	2800.00	-
B1024	MOS Special Submarine	3000.00	-
Fries			
B1025	Steak Fries (Large)	1200.00	-
B1026	Steak Fries (Medium)	600.00	-
B1027	French Fries (Large)	800.00	-
B1028	French Fries (Medium)	650.00	-
B1029	French Fries (Small)	450.00	-
B1030	Sweet Potato Fries (Large)	600.00	-
Pasta			
B1031	Chicken n Cheese Pasta	1600.00	15%
B1032	Chicken Penne Pasta	1700.00	-
B1033	Ground Turkey Pasta Bake	2900.00	10%
B1034	Creamy Shrimp Pasta	2000.00	-
B1035	Lemon Butter Pasta	1950.00	-
B1036	Tagliatelle Pasta	2400.00	1%

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B1037	Baked Ravioli	2000.00	1%
Chicken			
B1038	Fried Chicken (Small)	1200.00	-
B1039	Fried Chicken (Regular)	2300.00	10%
B1040	Fried Chicken (Large)	3100.00	5%
B1041	Hot Wings (Large)	2400.00	-
B1042	Devilled Chicken (Large)	900.00	-
B1043	BBQ Chicken (Regular)	2100.00	-
Beverages			
B1044	Pepsi (330ml)	990.00	5%
B1045	Coca-Cola (330ml)	1230.00	-
B1046	Sprite (330ml)	1500.00	3%
B1047	Mirinda (330ml)	850.00	7%

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