CISC 3140 Pre-Project Description - Summer 2023

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Project Title: "Aficionado" - Coffee Shop Delivery Website

1. Project Overview:

The "Aficionado" is a coffee shop delivery website offering users different coffee types. The website will target all coffee lovers and people who enjoy occasional but delicious coffee blends and unique brews from around the world. The main functionalities include user registration and login, browsing the coffee menu, adding items to the cart, and checking out.

2. Project Timeline:

I worked on making Aficio for about 2 weeks. During this time, I split the work into two phases, focusing on design, front-end development, back-end integration, and database implementation.

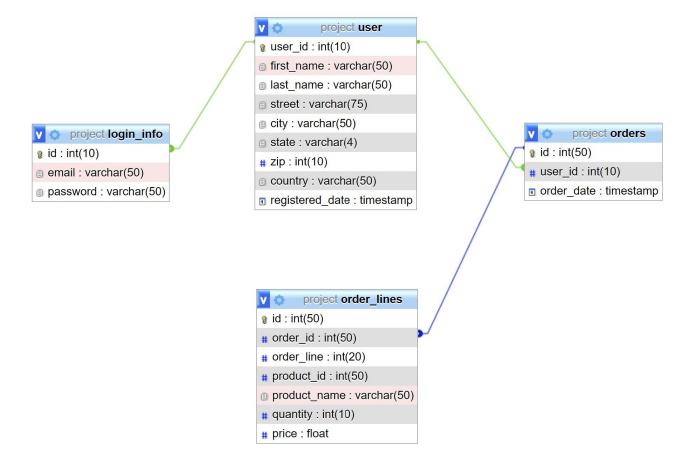
Phase 1: HTML, CSS, and Javascript - August 7-12

Phase 2: PHP, MySQL - August 13-16

3. Project Architecture:

My project has a regular client-server architecture. Users interact with the client-side interface developed using HTML, CSS, and JavaScript. The server side, PHP, handles user registration and login, cart management, order processing, and database communication. The data is stored in a MySQL database, organized into four tables: 'user', 'login_info', 'orders', and 'order_lines'. The tables are linked through primary and foreign key relationships. User navigation is performed through the home page, which includes about us and contact sections, and separate pages for the menu, login, registration, and account page.

Database schema:



4. User Interface (UI) Design:

For my project, I chose a dark theme, with a gold color for buttons, grey for borders, and white for text. The layout is responsive for different screen sizes. The website has smooth scrolling navigation and clearly defined sections for about, contact, menu, login, registration, and account. The use of media queries ensures that the UI remains functional across different devices.

5. Database Design:

The database architecture consists of four tables: 'user', 'login_info', 'orders', and 'order_lines'. The 'user' table stores user-related information - first name, last name, and address: street, city, state, zip, and country; 'login_info' contains email and password data, 'orders' has order information - order id and user id, and 'order_lines' stores details of individual order items: order id, order line, product id, product name, quantity, and price. The relationships between these tables are established through primary and foreign keys, to keep data integrity.

6. Functionality & Features:

- User Registration and Login: Users can register and log in to their accounts, providing necessary personal information.
- Cart Management: Users can add and remove items from their cart, website utilizes local storage to maintain the cart state.
- Checkout: The checkout process involves sending cart data from JavaScript LocalStorage which stores Product data to a PHP script using the POST method for further processing and storage in the database. If a user is not logged in, he will be redirected to the login page before placing the order.
- Responsive Design: No matter if you're using a phone or a computer, the website looks and works well.
- JavaScript is used for a variety of tasks besides storing and retrieving product information in local storage. Event handlers are utilized, redirection to other places, creation of additional HTML elements. One of them is if a user is logged in, show the logout button, otherwise, show the login button, and so on.

7. Technology Stack:

Front-end: HTML, CSS, JavaScript

• Back-end: Apache Server 2.4.33, PHP Version 8.0.1, MySQL 5.7

• Libraries: Font Awesome 6.1.1 (for special icons)

8. Challenges & Mitigation:

The primary challenges faced during the development process included implementing the cart logic using local storage and making sure that the data transfer is smooth from the local storage to the PHP script and storing it in the database. Additionally, handling object formatting in JSON was an issue while sending data from PHP to JavaScript.

9. References:

Local Storage Shopping cart:

□ Local storage shopping cart. | Insert, update, remove products from the browser's local st...

Session after login:

https://stackoverflow.com/questions/13400768/how-to-set-and-check-a-session-after-login

Connection to database:

https://www.w3schools.com/php/php mysql connect.asp