VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY
HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING

Web Programming

Lab

Individual Web

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1   Introduction

This project is a music store website designed to allow users to search for, view details of, and purchase music records and related merchandise. The website features a modern, user-friendly interface with integrated functionalities such as a shopping cart, product management for administrators, and smart search capabilities.

2   Features and Technologies Used

2.1   Key Features

- **User Authentication**: Allows users to register and log in to access features like the shopping cart and admin management.

- **Product Search**: A smart search bar with real-time suggestions based on user input. If you are on product page, the result will be displayed direct on the page.

- **Detailed Product View**: Displays product name, price, description, and image.

- **Shopping Cart**: Users can add, update, and remove products from their cart, with real-time updates via AJAX.

- **Admin Product Management**: Administrators can add, edit, and delete products through a dashboard.

- **Responsive Design**: The website is optimized for both desktop and mobile devices.

2.2   Technologies Used

- **Frontend**: HTML, CSS, Bootstrap 5, jQuery.

- **Backend**: PHP 7.4+, MySQL.

- **Database**: MySQL with tables for accounts, products, categories, and cart.

- **AJAX**: Used for dynamic content loading, such as search suggestions, pagination, and cart updates without page reloads.

3 Work Done, Design Decisions, and Challenges

3.1 Work Done

- **Building the Interface**: Utilized Glassmorphism CSS to create a modern, translucent design with a focus on user experience.

- **Integrating Smart Search**: Implemented a search bar that provides product suggestions as users type, enhancing usability.

- **Shopping Cart Management**: Developed a dynamic shopping cart system that allows users to manage their selections without page reloads.

- **Admin Dashboard**: Created a user-friendly interface for administrators to manage products efficiently.

3.2 Design Decisions

- **Glassmorphism Style**: Chosen for its modern aesthetic and ability to create a visually appealing, lightweight interface.

- **AJAX Implementation**: Used to improve user experience by enabling seamless interactions without full page reloads.

- **Relative Paths**: Ensured compatibility across different deployment environments by using relative paths for resources.

3.3 Challenges Faced

A significant challenge was integrating the Google API for the store locator feature. Due to payment issues during the API registration process, I was unable to obtain a valid API key. In addition, I'm doing capstone project so I do not have enough time to finish the last feature: Google map intergration.

4 How to Run the Website

I used MAMP to develop my website, in order to run the website locally or on a server (MAMP), follow these steps:

1. **Extract the Project Folder**: Unzip the project folder into the server's root directory (e.g., htdocs for MAMP).

2. **Create a MySQL Database**: Create a database name: **music_store**.

3. **Import the SQL File**: Import the `product_account.sql` file into the database.

4. **Configure Database Connection**: Update the `db_connect.php` file with the correct database details:

```
$host = 'localhost';
$dbname = 'music_store';
$username = 'root';
$password = 'root';  // password mac dinh tren MAMP
```

5. **Access the Website**: Open a browser and navigate to `http://localhost/Web/index.php` (or the corresponding domain).

6. **Test Accounts**:

   - Admin: `admin@sample.com` / Password: `Admin123@`
   - User: `user@sample.com` / Password: `User123@`

References

[1] My website is available at: https://github.com/tuannguyen62/WEB_PROGRAMMING_HCMUT_HK242_LAB.git