2. Project

Project Name: QuickPick E-Commerce Website

- ## Introduction:

The "E-Commerce Website named "QuickPick" is a Full Stack Web Development Project created using programming Languages that is;

- **Frontend:** HTML, CSS, Bootstrap, JavaScript (Later HTML is used as EJS template engine).
- **Backend:** NodeJS, ExpressJS, MongoDB.

QuickPick is a robust E-Commerce platform developed using modern web technologies, including Node.js, Express.js, MongoDB, and the EJS Template Engine. Designed to cater to both administrators and customers, the platform offers a seamless experience for managing and interacting with a variety of products.

- ## Features:

- **User Registration and Login:**
  - Users can register using their name, username, email, and password.
  - Login functionality with session-based authentication ensures secure access.
- **Admin Registration and Login:**
  - Admins can register with additional fields such as admin ID to differentiate them from regular users.
  - Secure login for admins with session handling.
  - Product Management by Admin:
    1. Admins can upload new products to the platform.
    2. These products are made visible to registered users for browsing and purchase.
- **User Shopping Experience:**

- Users can browse products across multiple categories such as furniture, shoes, bags, and more.
- Features like add to cart, wishlist, and product comparison enhance the shopping experience.
- **Profile Management:**
- Both users and admins can update their personal details:
- **Users**: Update name, username, and password.
- **Admins**: Update name, username, admin ID, and password.
- **Project Images:**
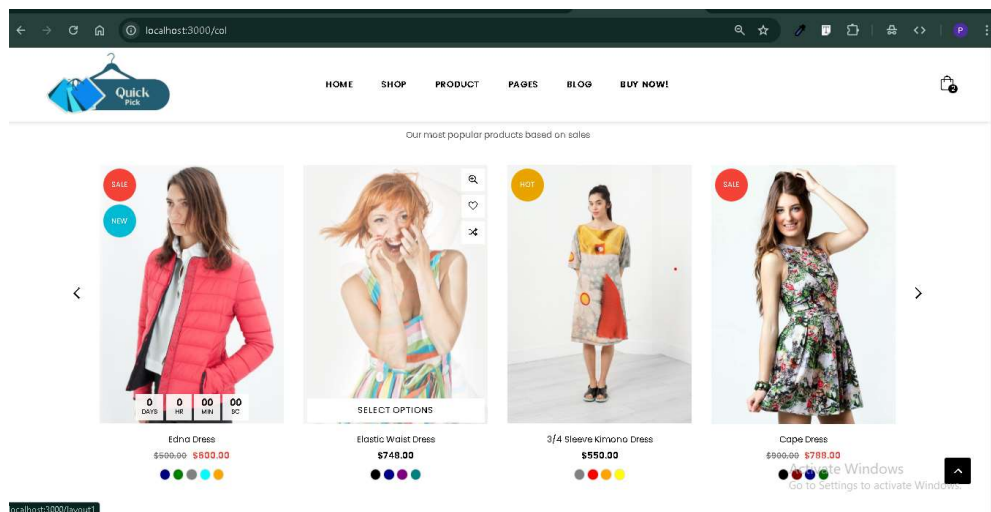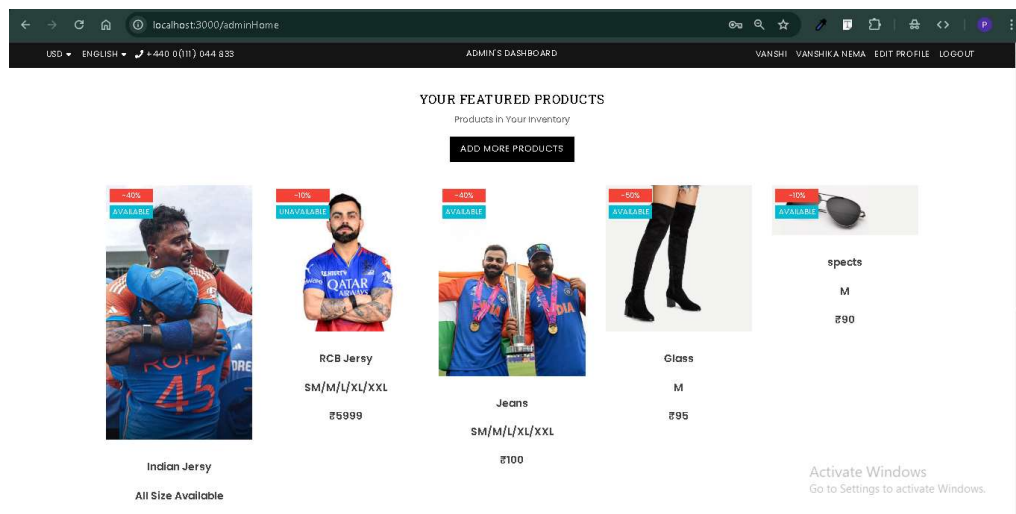
- ## Dynamic Routes:

Over 20 dynamic routes implemented for user and admin functionalities, ensuring modular and maintainable code.

- o **Flash Messaging:** Real-time feedback for users and admins during actions like login, registration, and profile updates.
- o **Session Management:** Efficient session handling for users and admins, ensuring a secure and personalized experience.
- o **Responsive EJS Templates:** Dynamic pages for different functionalities such as login, registration, product browsing, cart management, and admin dashboard.
- o **Core Technologies:**
  1. **Backend**: Node.js, Express.js.
  2. **Frontend**: EJS Template Engine for rendering dynamic content**.**
  3. **Database**: MongoDB.
  4. **Authentication**: Session-based login for users and admins.
  5. **Flash Messaging**: Feedback system for user interactions.
- o **Commands used:**
  > **Epxress Generator:**
  > express AppName –view=ejs
  > npm install
- o **Hosting:**
  1. **GitHub :** For Code Distribution.
  2. **Render:** For Backend Hosting.
  3. **MongoDb Atlas:** For Distributive Database String.

- o **GitHub Repository Link;**

https://github.com/princebhatt03/QuickPick-E-Commerce-Website

- o **Official Hosting Link (Using Render)**

https://quickpick-ba3l.onrender.com

- **Routes Overview:**
  - **User Routes:**
    1. **/** – User home page with product listings
    2. **/userProfile** – Manage user profile details
    3. **/cart** – View and manage cart
    4. **Multiple category**-specific routes for browsing products.

  - **Admin Routes:**
    1. **/adminHome** – Admin dashboard
    2. **/adminProfile** - Manage admin profile details
    3. **/dashboard** – Overview of products uploaded by the admin.

  - **Shared Routes:**

    /logout – Logout functionality for both users and admins.

  - **Security Measures:**
    1. Session-based authentication for secure login/logout.
    2. Validation checks during registration and profile updates.
    3. Prevention of duplicate usernames and admin IDs.

- **Conclusion:** QuickPick is a fully functional e-commerce platform that combines modern web development practices with user-friendly interfaces. It offers comprehensive features for both users and administrators, ensuring an engaging and efficient shopping experience. The modular architecture and dynamic templates make it easy to scale and customize for future requirements.