NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY

Project

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Github: https://github.com/AYESHA19SIDDIQA/EmpowerMART-WebProject.git

EmpowerMART: A Multi-Vendor E-Commerce Platform Empowering Rural Women Entrepreneurs

Project Overview

EmpowerMART is a comprehensive multi-vendor e-commerce website built with **Laravel 9** for the backend and **React.js** for the frontend. This platform provides a marketplace where multiple vendors can sell products, and customers can browse, purchase, and place orders. The website is designed with the goal of empowering **rural women entrepreneurs** by offering them a digital platform that allows them to showcase and sell their products, gain essential skills, and connect with mentors, thus fostering economic independence and growth in underserved communities.

Relevance to Rural Women Entrepreneurs

Our platform addresses critical challenges faced by rural women entrepreneurs, including limited access to marketplaces, lack of training resources, and insufficient mentorship. **EmpowerMART** is specifically designed to help these women enter the world of e-commerce by overcoming geographical barriers and providing them with the tools needed to succeed in the digital marketplace.

- **Marketplace Access**: Empowering rural women by giving them a platform to sell their goods, which can range from handmade crafts to agricultural products.
- **Skill Development**: Offering resources and training modules that help rural women acquire both business and technical skills needed to thrive in the online marketplace.
- **Mentorship Opportunities**: Connecting women with experienced mentors who guide them in improving their products, enhancing their sales strategies, and growing their businesses.

Through these features, **EmpowerMART** serves as a vital tool for promoting social inclusion and economic empowerment among rural women, enabling them to contribute actively to their communities and the broader economy.

Frameworks and Technologies Used

The development of **EmpowerMART** utilizes a combination of modern frameworks and technologies:

- **Laravel 9**: Backend framework used for handling server-side logic, authentication, and database management.
- **React.js**: Frontend framework that powers dynamic, interactive user interfaces to ensure an engaging shopping experience.

- **Bootstrap**: A front-end framework that ensures a responsive and mobile-friendly design across various devices.
- **MySQL**: A robust relational database management system that stores all platform data, including user information, product details, categories, and transaction records.
- **GitHub**: A version control tool used to manage the codebase and collaborate with team members throughout the development process.

Key Features of the Platform

1. **Login and Signup Pages:**
   - User registration with distinct roles (Admin or Customer). This ensures that users can access the appropriate dashboard based on their role.

2. **Dashboard Overview:**
   - Both Admin and Customer dashboards are designed to streamline user interaction. The admin dashboard provides tools to manage categories, tags, and products, while the customer dashboard allows easy navigation and order management.

3. **Frontend Pages:**
   - **Homepage**: Displays featured categories and products to engage users right from the start.
   - **Shop Page**: Allows users to browse products, sorted by price or popularity. Filters help users narrow down their search according to specific criteria.
   - **Categories Page**: Displays products grouped by category, providing a clear organizational structure for users.

4. **Admin Dashboard:**
   - **Category Management**: Admins can manage categories by adding, editing, and deleting categories. The list includes category details like number, name, slug, product count, and image.
   - **Tag Management**: Admins can manage product tags by adding, editing, and deleting tags. Tag details include number, name, slug, and tag count.
   - **Product Management**: Admins can upload, edit, or delete products, which are linked to specific categories and tags. Product details include name, category, tag, price, quantity, description, and specifications.

Project Details

The project is a fully functional multi-vendor e-commerce website that is built using Laravel 9 and React.js. It is designed to enable vendors and customers to interact in an organized and secure online marketplace. The core components of the project include:

1. **Admin Dashboard:**
   - **Category Management**:
     - Displays a list of categories with the following fields: number, name, slug, product count, and image.
     - Actions: Edit, delete, and review category details.
   - **Tag Management**:
     - Displays a list of tags with the following fields: number, name, slug, and tag count.
     - Actions: Edit, delete, and view tag details.
   - **Product Management**:
     - Displays products with details such as name, category, tag, price, quantity, images, description, and specifications.
     - Actions: Edit, delete, and view product details.

2. **User Dashboard:**
   - Users can register as either **Admin** or **Customer**.
   - **Customer Features**:
     - Browse products by sorting them based on price or popularity.
     - Add products to the shopping cart.
     - Proceed to checkout and place orders.

3. **Frontend Pages:**
   - **Home Page**: Showcases featured categories and products, providing easy navigation to other sections of the site.
   - **Categories Page**: Displays a list of categories, making it easier for customers to find the products they are interested in.
   - **Shop Page**: Displays products sorted by various filters like price and popularity, allowing users to find products that match their preferences.

Development Process

1. **User Registration:**
   o The registration system allows users to sign up as **Admin** or **Customer**, which determines their access rights and functionality.

2. **Category and Tag Management:**
   o Admins can add, edit, and delete categories and tags, organizing the products into logical groups and improving navigation for customers.

3. **Product Management:**
   o Admins upload product details such as descriptions, specifications, and prices. Products are categorized and tagged for better discoverability.

4. **User Experience:**
   o The customer dashboard is designed for ease of navigation, providing quick access to browsing, cart management, and order placement.

5. **Data Persistence:**
   o All user actions (registration, product purchases, etc.) are stored in a MySQL database, ensuring data integrity and consistency.

Identifying and Resolving Conflicting Requirements

Challenges:

- Stakeholders had different priorities: NGOs wanted training modules, while users emphasized e-commerce features.
- Technical constraints, such as low internet bandwidth in rural areas, required balancing lightweight design with rich functionality.

Resolution Strategies:

1. **User Research**: Surveys and focus groups were conducted to understand the most pressing needs of rural women entrepreneurs.
2. **Modular Design**: The project was built with flexibility in mind, allowing for incremental feature additions as needed.
3. **Stakeholder Engagement**: Regular meetings ensured alignment between the development team and stakeholders, addressing feedback continuously.
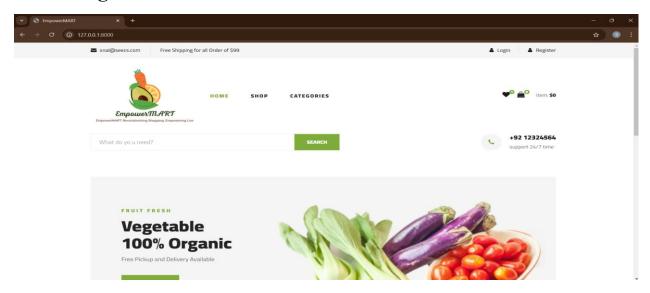
Conclusion

EmpowerMART is not just an e-commerce platform; it is a powerful tool designed to transform the lives of rural women entrepreneurs. By providing them with access to a global marketplace, skill development resources, and mentorship opportunities, the platform helps them build sustainable businesses and gain economic independence. Through **EmpowerMART**, these women can confidently enter the digital economy and make their mark in the world of e-commerce.
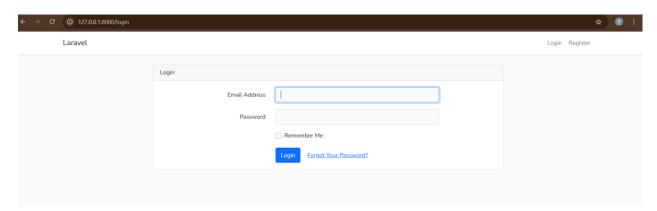
Screen Shots of Website:

Home Page:

Login Form:

Products:

Featured Product

Mango **$200**	Grapes **$400**	Bananas **$300**	Apple **$230**
Pineapple **$300**	Strawberry **$400**	Tomato **$100**	Cabbage **$500**

EmpowerMart
Home — Shop

Categories

Fruits
Vegetables
Dry Fruits
Juices

Tags

Organic
Imported   Fresh
Local   Natural

Sort By : Default sortii ⌄   4 Products found

Tomato **$100**	Cabbage **$500**	Eggplant **$400**
Cucumber **$500**		

Categories

Fruits

Vegetables

Dry Fruits

Juices

Tags

Organic

Imported   Fresh

Local   Natural

Sort By :   Default sortii ⌄   4 Products found

Almond

$200

Apricot

$300

Anjeer

$200

Pistachio

$900

Admin User:

tag List

No	Name	Slug	Tag Count	Action
1	Organic	organic	2	
2	Imported	imported	4	
3	Fresh	fresh	2	
4	Local	local	3	
5	Natural	natural	3	

product List

No	Name	Category	Tag	Price	Quantity	Image	Action
1	Mango	Fruits	Organic	$200.00	40		
2	Grapes	Fruits	Imported	$400.00	20		
3	Bananas	Fruits	Imported	$300.00	50		
4	Apple	Fruits	Organic	$230.00	30		
5	Pineapple	Fruits	Natural	$300.00	30		
6	Strawberry	Fruits	Local	$400.00	30		

Category List

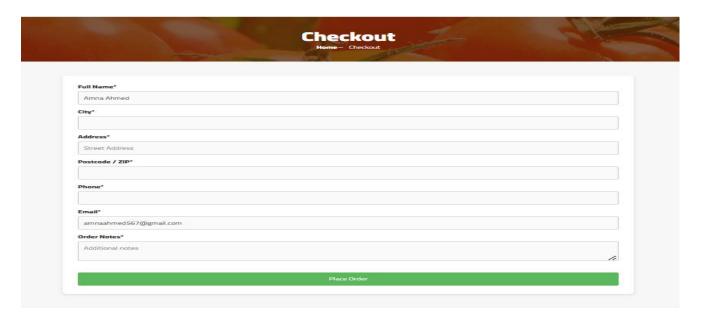| No	Name	Slug	Product Count	Image	Parent	Action
1	Fruits	fruits	6		Null	
2	Vegetables	vegetables	4		Null	
3	Dry Fruits	dry-fruits	4		Null	
4	Juices	juices	0		Null	

Shopping Cart:

Checkout:

Project Division:

Amna Ahmed: Frontend Developer & UI/UX Designer. Amna would be responsible for designing the user interface and ensuring the website is visually appealing and user-friendly. She would focus on the layout, responsiveness, and interactions, ensuring the front end integrates seamlessly with the backend functionality.

Ayesha Siddiq: Project Manager & Quality Assurance (QA). Ayesha would take on the role of managing the project by organizing tasks, coordinating between team members, and ensuring deadlines are met. Additionally, she would handle testing the website for bugs, functionality, and user experience to make sure it meets the project's requirements.

Navaal Iqbal: Backend Developer & Database Administrator. Navaal would be in charge of setting up the Laravel framework, creating the necessary models, controllers, and routes, and ensuring the backend integrates properly with the front end. Navaal would also manage the database, ensuring data is handled securely and efficiently across the platform, especially for vendor products and user transactions.