

# ShopEZ

## ShopEZ Project Report

### 1. Introduction

- **Project Title:** ShopEZ - Your One-Stop E-Commerce Solution
  - **Team Members:**
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    - Arihanth Parshwanath A
    - Hariram S
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    - Sri Hariprasad
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### 2. Project Overview

- **Purpose:** ShopEZ simplifies online shopping with a user-friendly interface, personalized recommendations, and a secure checkout process, catering to both buyers and sellers.
  - **Features:**
    - Seamless checkout process.
    - Effortless product discovery.
    - Personalized shopping experience.
    - Efficient order management for sellers.
    - Insightful analytics for business growth.
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### 3. Architecture

- **Frontend:** React.js manages the user interface with reusable components for authentication, product listings, cart, and profile pages.
- **Backend:** Node.js with Express.js provides robust RESTful APIs for managing users, products, orders, and authentication.

- **Database:** MongoDB stores collections for users, carts, orders, and products, integrated with Mongoose for schema definitions and CRUD operations.
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## 4. Setup Instructions

- **Prerequisites:**

- Node.js & npm: [Download Node.js](#)
- MongoDB: [Download MongoDB](#)
- Git: [Download Git](#)
- IDE: [Visual Studio Code](#)

- **Installation:**

1. Clone the repository:

```
bash
Copy code
git clone [repository link]
cd ShopEZ-e-commerce-App-MERN
```

2. Install dependencies:

```
bash
Copy code
npm install
```

3. Configure environment variables in a `.env` file.
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## 5. Folder Structure

- **Client:**

- `src/`: Contains React components for UI (e.g., `Home`, `Cart`, `Profile`).
- `public/`: Static assets and index.html.

- **Server:**

- `routes/`: API endpoints for users, products, orders, etc.
  - `models/`: MongoDB schemas.
  - `controllers/`: Business logic for API endpoints.
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## 6. Running the Application

- **Frontend:**

```
bash
Copy code
cd client
npm start
```

- **Backend:**

```
bash
Copy code
cd server
npm start
```

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## 7. API Documentation

- **Endpoints:**

- `/api/users` :
    - **POST** `/register` : Register a new user.
    - **POST** `/login` : Authenticate a user.
  - `/api/products` :
    - **GET** `/` : Retrieve all products.
    - **GET** `/:id` : Get product details by ID.
  - `/api/orders` :
    - **POST** `/create` : Create a new order.
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## 8. Authentication

- JWT (JSON Web Tokens) secures authentication.
  - Tokens are issued upon login and validated for API access.
  - Admins and users have distinct roles for authorization.
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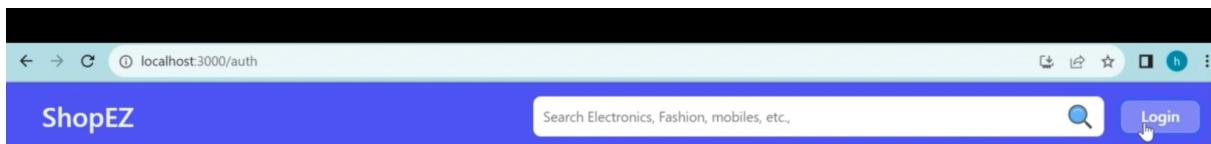
## 9. User Interface

- The UI is responsive and visually appealing, with easy navigation for users.
  - Features:
    - Product filtering by category, price, and style.
    - Personalized recommendations.
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## 10. Testing

- **Strategy:**
    - Unit tests for components using Jest.
    - Integration tests for API endpoints with Postman.
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## 11. Screenshots



localhost:3000/profile

# ShopEZ

Search Electronics, Fashion, mobiles, etc.,

Username: hola  
Email: hola@gmail.com  
Orders: 3

[Logout](#)

## Orders

**Iphone 12**  
Apple Iphone with 8GB ram and 256GB storage. It has the best processor suitable for all your needs.  
Size: S   Quantity: 2   Price: ₹ 135998   Payment method: upi  
Address: New Jersey   Pincode: 42391   Ordered on: Wed Aug 30  
Order status: In-transit

[Cancel](#)

**Iphone 12**  
Apple Iphone with 8GB ram and 256GB storage. It has the best processor suitable for all your needs.  
Size: S   Quantity: 1   Price: ₹ 67999   Payment method: netbanking  
Address: Pulivendula   Pincode: 516390   Ordered on: 2023-08-29

localhost:3000/category/Fashion

# ShopEZ

Search Electronics, Fashion, mobiles, etc.,

## Fashion

### Filters

Sort By

- Popular
- Price (low to high)
- Price (high to low)
- Discount

Gender

- Men
- Women
- Unisex

### All Products



Blue shirt for men by Allen Solly  
Men Blue Slim Fit Solid Full S...  
₹ 1679 ~~2799~~ ( 40% off)



Men Black Suite from Allen Solly  
Men Black Slim Fit Solid Forma...  
₹ 11397 ~~13899~~ ( 18% off)

localhost:3000/product/64eedec0ae077fb1118c31d0

ShopEZ Search Electronics, Fashion, mobiles, etc., hola 0

← back

## MRF cricket bat

Popular willow wood cricket bat from MRF. Suitable for your all format plays in all conditions.

Choose size **M**

Quantity **1**

Price: ₹ 1308 ~~1699~~ (23% off)

Rating: 3.4/5

Free delivery in 5 days

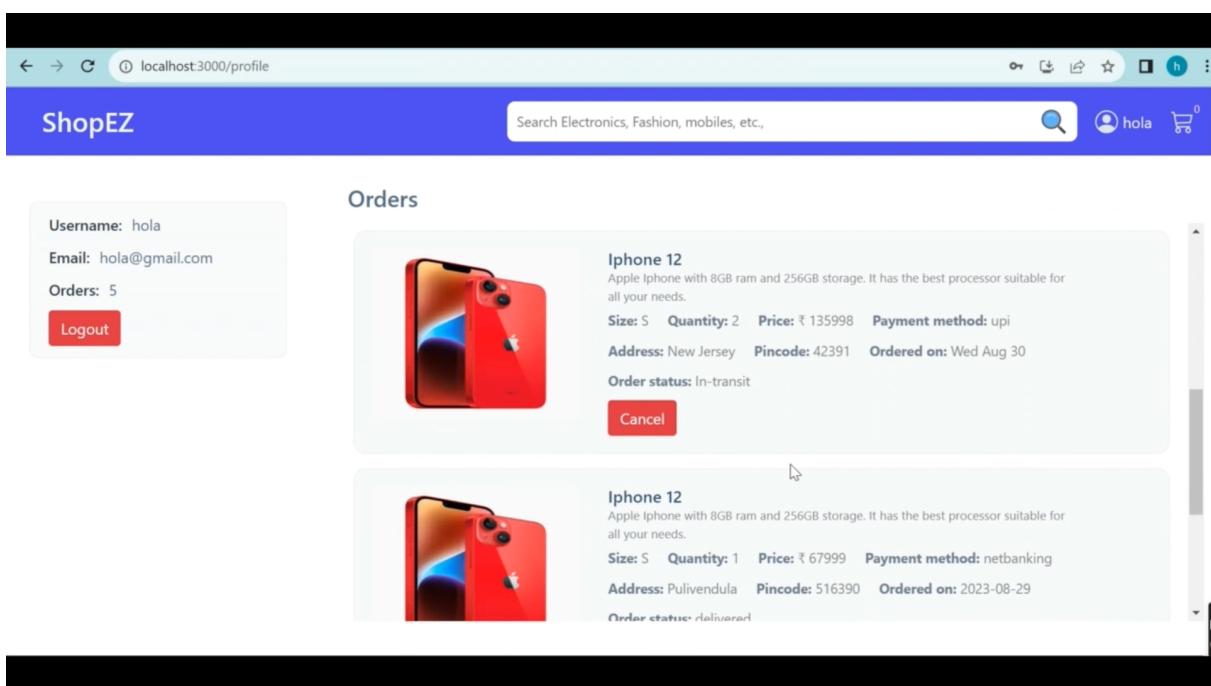
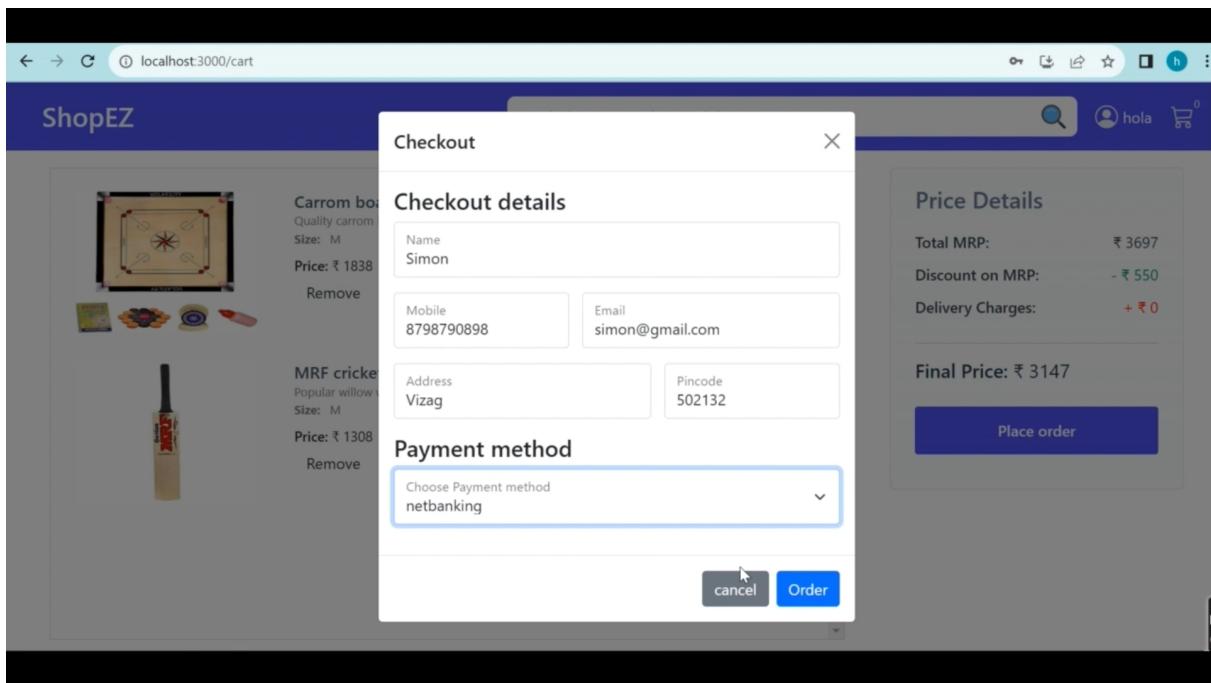
Buy now Add to cart



localhost:3000/cart

ShopEZ Search Electronics, Fashion, mobiles, etc., hola 0

 <p><b>MRF cricket bat</b> Popular willow wood cricket bat from MRF. Suitable for your all format plays in all conditions. Size: M Quantity: 1 Price: ₹ 1308 Remove</p>	<p><b>Price Details</b></p> <p>Total MRP: ₹ 1699 Discount on MRP: - ₹ 390 Delivery Charges: + ₹ 0</p> <p><b>Final Price:</b> ₹ 1309</p> <p>Place order</p>
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The screenshot shows the ShopEZ admin dashboard at [localhost:3000/admin](http://localhost:3000/admin). The top navigation bar includes links for Home, Users, Orders, Products, New Product, and Logout. Below the navigation are four summary cards: Total users (1), All Products (14), All Orders (6), and Add Product (new). A central modal window titled "Update banner" contains a "Banner url" input field and an "Update" button.

The screenshot shows the ShopEZ admin orders page at [localhost:3000/all-orders](http://localhost:3000/all-orders). The top navigation bar is identical to the dashboard. The main content area is titled "Orders" and displays two order details. Order 1: "Carrom board" (Quality carrom board along with necessary equipment to make your free time more joyful). Details: Size: M, Quantity: 2, Price: ₹ 1838, Payment method: netbanking. User: UserId: 64edcfad3631d148df3ce2e1, Name: Simon, Email: simon@gmail.com, Mobile: 8798790898. Ordered on: 2023-08-30, Address: Vizag, Pincode: 502132. Order status: order placed. Buttons: Update order status (dropdown), Update (blue), Cancel (red). Order 2: "MRF cricket bat" (Popular willow wood cricket bat from MRF. Suitable for your all format plays in all conditions). Details: Size: M, Quantity: 1, Price: ₹ 1308, Payment method: netbanking. User: UserId: 64edcfad3631d148df3ce2e1, Name: Simon, Email: simon@gmail.com, Mobile: 8798790898. Ordered on: 2023-08-30, Address: Vizag, Pincode: 502132.

## 12. Known Issues

- Occasional delays in loading recommendations.
- The admin dashboard needs additional user statistics.

## **13. Future Enhancements**

- Implement real-time notifications for order updates.
- Add advanced analytics for sellers.
- Develop a mobile app version of ShopEZ.