# **E-commerce Application**

## **Overview**

This E-commerce application is a full-stack project developed using Spring Boot for the backend and Angular 10 for the frontend. It features OAuth2 authentication and integrates modern technologies to build a scalable web application.

## **Features**

* **User Authentication**: Secure login and registration using OAuth2.
* **Product Management**: Browse, search, and manage products.
* **Shopping Cart**: Add products to the cart and proceed to checkout.
* **Order Processing**: Manage orders and view order history.
* **Responsive Design**: Optimized for various devices.

## **Technologies Used**

* **Backend**: Spring Boot
* **Frontend**: Angular 10
* **Authentication**: OAuth2
* **Database**: MySQL
* **Deployment**: Render/Vercel

## **Installation**

### **Prerequisites**

* [Node.js](https://nodejs.org/)
* Angular CLI
* [Java JDK](https://www.oracle.com/java/technologies/javase-jdk11-downloads.html)
* [MySQL](https://www.mysql.com/)

### **Backend Setup**

1. Clone the repository:

bash

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git clone <https://github.com/yourusername/ecommerce-app.git>

1. Navigate to the backend directory:

bash

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cd ecommerce-app/backend

1. Configure the database in application.properties:

properties

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spring.datasource.url=jdbc:mysql://localhost:3306/your\_database  
spring.datasource.username=your\_username  
spring.datasource.password=your\_password

1. Build and run the backend application:

bash

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mvn spring-boot:run

### **Frontend Setup**

1. Navigate to the frontend directory:

bash

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cd ecommerce-app/frontend

1. Install dependencies:

bash

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npm install

1. Run the frontend application:

bash

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ng serve

1. Open your browser and navigate to <http://localhost:4200>