# Shop Website by using MERN Technology

* To develop a robust e-commerce platform leveraging modern technologies like React.js for the frontend, Node.js with Express.js for the backend, and MongoDB for the database, we aim to provide a seamless shopping experience across diverse categories. Our website will cater to three primary product segments: Kids, Men, and Women.
* Users will be able to effortlessly browse and explore products within each category. By clicking on a desired product, they can view detailed information and easily add the item to their shopping cart. This intuitive and responsive design ensures a user-friendly experience, driving engagement and satisfaction across all customer demographics.

# Procedure

To include your port and mongodb url in the.env file.

1. PORT - USER\_PORT

2. MONGODB\_URL - USER\_DATABASE\_URL

# DEPENDENCIES FOR BACKEND

1. express

2. nodemon

3. uuid

4. mongoose

5. body-parser

6. dotenv

7. cors

8. bcryptjs

9. jsonwebtoken

10. multer

# DEPENDENCIES FOR FRONTEND

1. react

2. react-dom

3. react-router-dom

4. react-toastify

5. axios

# REACT HOOKS

1. useState

2. useNavigate

3. useContext

4. useEffect

5. useParams

# EXPLANATION OF SHOP WEBSITE BY USING MERN

# 1. INTRODUCTION

To build a comprehensive and dynamic e-commerce website, we will utilize a modern tech stack, including React.js for the user interface, Node.js and Express.js for server-side logic, and MongoDB for efficient data management. Our platform will focus on three distinct product categories: Kids, Men, and Women.

# 2. TECHNOLOGIES USED

• Node.js

• Express.js

• MongoDB

• bcrypt for password hashing

• JSON Web Tokens (JWT) for authentication

• API Testing – Postman

# 3. TOOLS USED

• Visual Studio Code

• Postman

# 4. API ENDPOINTS

• User Registration

• User Login

• User Login Token Verify

• User logout

• Create Product

• View all the Product

• Delete the Product

• New Collection Product

• Popular Products

• Related Products in each Category

• Image Upload

# 5. KEY FEATURES

Category-Based Navigation:

* Users can browse through well-organized categories tailored for Kids, Men, and Women, ensuring they can quickly find products of interest.

Product Details and Viewing:

* Each product will have a dedicated page providing detailed information, enhancing the decision-making process for users.

Seamless Cart Integration:

* Users can add products to their cart with a single click, streamlining the shopping experience from product selection to checkout.

# 6. BENEFITS:

* Responsive and Engaging User Interface: React.js ensures a fast and dynamic browsing experience, adapting seamlessly to various devices.
* Scalable and Reliable Back-End: Node.js and Express.js offer a powerful environment for handling a high volume of transactions and real-time interactions.
* Flexible and Efficient Database: MongoDB provides a versatile and scalable solution for storing and retrieving data, accommodating the evolving needs of the business.

# 7. Conclusion

* User-Friendly Browsing: Easy navigation and detailed product views within the Kids, Men, and Women categories.
* Efficient Cart Management: Seamless integration of products into the shopping cart, simplifying the purchase process.

In summary, our website improves user satisfaction and engagement while setting the stage for expansion and innovation in the future. Our use of a scalable and adaptable tech stack, which includes Node.js, Express.js, React.js, and MongoDB, guarantees that the website can manage growing traffic and change to meet changing business requirements. This combination gives our customers a dynamic, high-quality e-commerce experience while putting us in a position to consistently meet market demands and add value over time.