

# Building a Modern Website for Baba Jewellery Using React.js

Nikhil G. Khodave<sup>1</sup>, Mohit Nitin Nalage<sup>2</sup>, Atharv Jagannath Bhosale<sup>3</sup>,  
Rahul Kumar Thakur<sup>4</sup>, Prem Vinod Dabhade<sup>5</sup>

Lecturer, Department of Computer Engineering (Diploma)<sup>1</sup>  
Students, Department of Computer Engineering (Diploma)<sup>2-6</sup>  
Rajarambapu Institute of Technology, Islampur, India

**Abstract:** This research paper describes the step-by-step development of a jewellery website for Baba Jewellery using React.js. The aim of this project was to provide a clean, elegant, and fully responsive web application that allows users to browse through a wide variety of gold and diamond jewellery. The Baba Jewellery website was designed to reflect the brand's legacy while embracing a digital future. The site was developed using modern web technologies such as Vite, React Router, and component-based architecture, with an emphasis on simplicity, performance, and maintainability.

**Keywords:** React.js, Jewellery Website, Gold and Diamond Jewellery, Responsive Design, React Router, Vite, User Interface

## I. INTRODUCTION

Jewellery is more than just an accessory; it is often a symbol of tradition, emotion, and identity. While many traditional jewellery businesses still rely heavily on in-store purchases, there is a growing demand for these businesses to establish their digital presence. Baba Jewellery, a reputed name known for its trust and craftsmanship since 1998, decided to go online with a React-based website to cater to this shift in consumer behavior.

In this paper, we document the development process of a jewellery website that allows users to explore collections, learn about the brand, and get in touch with the business. The interface and functionality were designed to deliver a modern, user-friendly experience while aligning with the aesthetics and values of Baba Jewellery.

## II. OBJECTIVE

The objective of this project was not just to create a visually appealing online presence, but to build a scalable, reusable, and component-based web application. The core goals included:

- Creating a clean and simple navigation system
- Displaying product collections in an organized grid layout
- Integrating filtering and sorting options for easier product discovery
- Designing dedicated sections like Home, About Us, Contact, and Collections
- Ensuring mobile responsiveness and accessibility

## III. TECHNOLOGIES AND TOOLS USED

To bring this project to life, the following tools and technologies were used:

- React.js – for building reusable UI components
- Vite – for fast build and development environment
- React Router DOM – for seamless page navigation
- Tailwind CSS – for utility-first styling and responsive design
- React Icons – for visually enhancing the UI with scalable vector icons



- Git & GitHub – for version control and team collaboration

#### IV. WEBSITE ARCHITECTURE

The website was developed as a single-page application (SPA) with multiple routes. Each route corresponds to a specific view or section of the website:

- Home Page: Features a banner slider, highlights of latest arrivals, and customer favorites
- Collections Page: Displays all jewellery products with filters for category (e.g., Rings, Earrings, Pendants)
- About Page: Describes the history and mission of Baba Jewellery with photos and brand storytelling
- Contact Page: Simple form with name, email, and message, plus business contact details

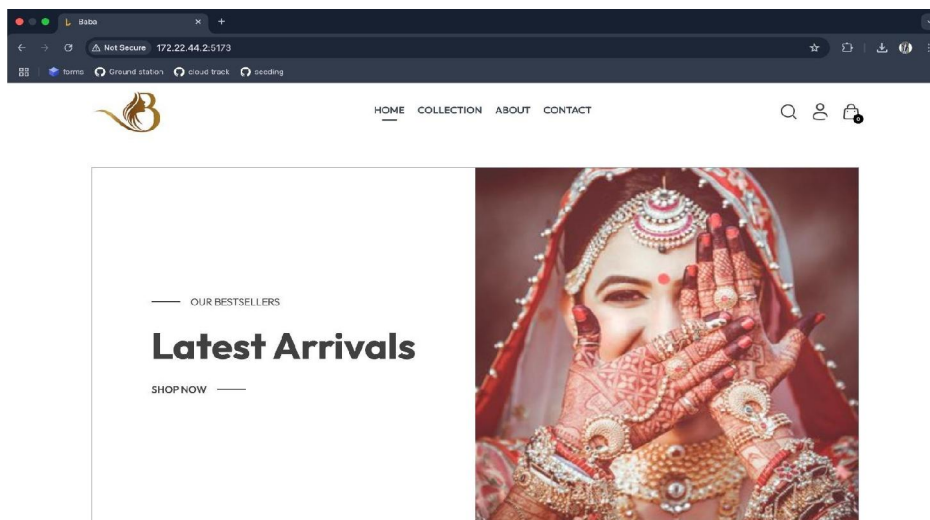
All major sections were designed as modular React components, making the codebase clean and maintainable.

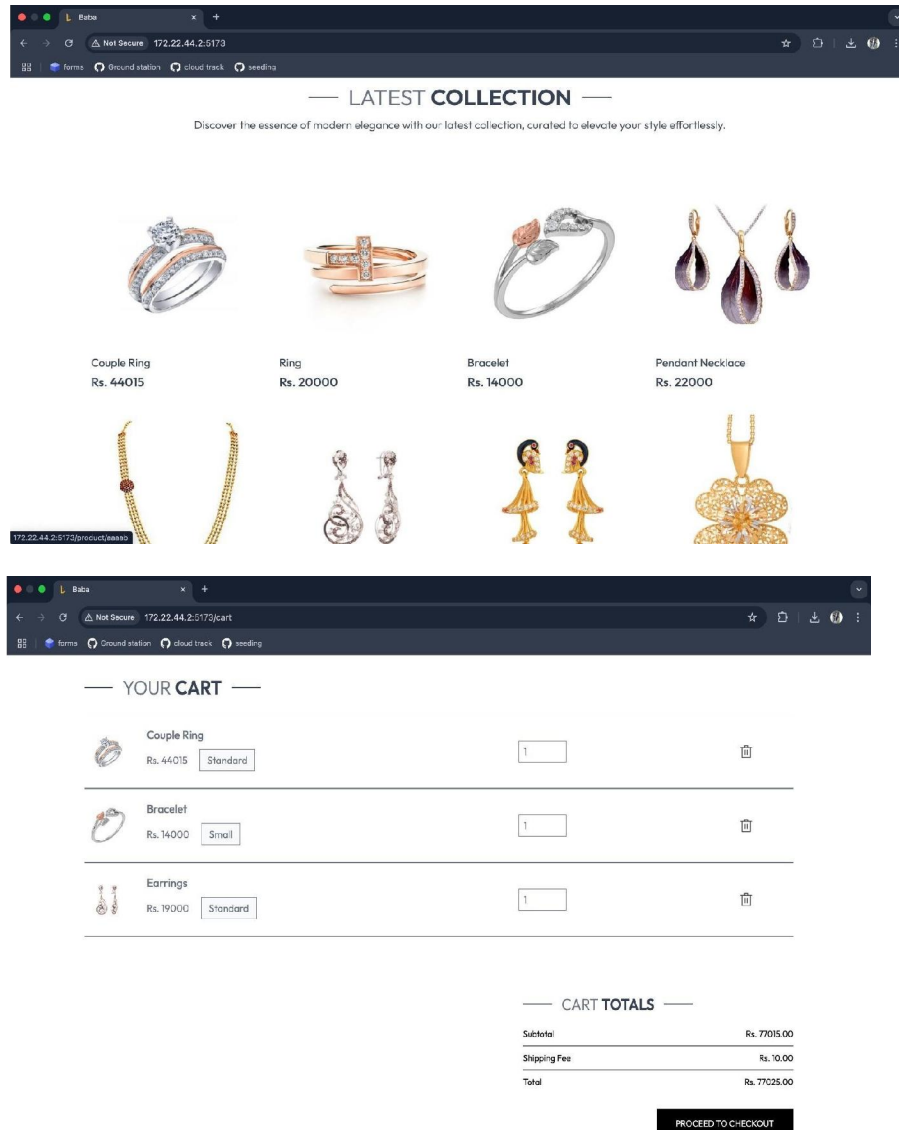
#### V. DESIGN AND USER EXPERIENCE

Design decisions were guided by simplicity, elegance, and accessibility. A golden-themed color palette was chosen to reflect the essence of luxury. The layout was kept spacious with minimal text to ensure focus on product visuals.

The design also emphasized:

- Mobile-first responsiveness
- Consistent navigation
- Engaging visuals for every product
- Easy-to-use filters and sorting





## VI. KEY FEATURES IMPLEMENTED

- Product Listing Grid: Items displayed in a responsive card layout
- Category Filters: Allows users to filter by product type (checkbox based)
- Reusable Components: Header, Footer, Product Card, Layout Wrapper
- Cart Indicator (in future version): Shows total items selected
- Routing: Built with React Router for SPA navigation

## VII. CHALLENGES AND FUTURE IMPROVEMENTS

One of the main challenges was handling filtering logic on the frontend without a backend database. This was managed using React's useState and useEffect hooks. Also, managing responsiveness for varying screen sizes involved several layout tweaks.

- In the future, the website can be enhanced by:



- Adding a backend with Node.js and MongoDB for real-time product management
- Integrating Stripe or Razorpay for secure payments
- Implementing login/authentication functionality
- Deploying the site on Netlify or Vercel

### VIII. CONCLUSION

The development of the Baba Jewellery website using React proves how traditional businesses can benefit from modern web technologies. The project reflects how a clean, structured, and responsive design can make a significant difference in customer engagement and reach. This platform provides Baba Jewellery a solid foundation for entering the online market.

### IX. ACKNOWLEDGMENT

We would like to thank the team at Baba Jewellery for trusting us with this digital transformation project and providing the resources and vision to bring it to life.

### REFERENCES

- [1]. React.js Documentation : <https://reactjs.org> ,
- [2]. Vite Guide : <https://vitejs.dev> ,
- [3]. Tailwind CSS Docs: <https://tailwindcss.com>

