

# **MIT- WORLD PEACE UNIVERSITY T.Y. B TECH**

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**Panel: C**

**Semester: V**

**Subject: Full Stack Development (FSD)**

## **FSD ASSIGNMENT 08**

### **[REPORT]**

**Creating a Electronics Store named Gadget Galaxy using Next.js, Sanity.io and Stripe and deploying it on Vercel involves combining various technologies to implement the ecommerce store. Below is a report that outlines the key components and steps involved in building such a store.**

#### **Title:**

**Full Stack Ecommerce website using Next.js, Sanity.io, Stripe and deploying it on Vercel.**

#### **Introduction:**

**Gadget Galaxy, an e-commerce platform integrated with Next.js, Sanity, and Stripe, introduces a comprehensive Full Stack solution. This project aims to replicate essential features and user interface elements. It utilizes React for the frontend, Tailwind CSS for styling, Next.js for server-side rendering, Prisma for database interaction, MongoDB as the database solution, NextAuth for authentication, and Vercel for streamlined deployment.**

#### **Technologies Used:**

##### **1. Next.js:**

- Used for building the user interface components and managing the state of the application.
- Components are structured in a way to make the layout, including the homepage, cart, product details and a custom checkout page.

## **2. Tailwind CSS:**

- Employed for styling the application with a focus on responsiveness and achieving a design similar to ecommerce website.

- Utilized Tailwind's utility-first approach for quick and efficient styling.

## **3. Next.js:**

- Chose for server-side rendering, providing improved performance and SEO optimization.

- Implemented routing for seamless navigation between pages.

## **4. Vercel:**

- Chosen as the deployment platform for its ease of use and seamless

integration with Next.js.

- Enabled continuous deployment for efficient updates and scaling.

## **Key Features:**

1. User-friendly one stop website for all your electronic products.
2. Dynamic Content Management: Utilize Sanity CMS for managing and updating product information easily with its intuitive interface.
3. Secure Payment Processing: Integrate Stripe for secure and seamless payment processing, allowing customers to make purchases using various payment methods securely.
4. Customizable and Scalable Design: Leverage Next.js's flexibility to create a highly customizable and scalable design, ensuring a unique look and feel for your website while accommodating future growth.
5. Enhanced User Experience: Implement features like real-time product updates, personalized recommendations, and a user-friendly interface to enhance the overall shopping experience.
6. Mobile Optimization: Utilize Next.js's responsive design capabilities to ensure your website performs well across various devices, providing a seamless experience for mobile users.

## **Deployment:**

Deployed the application on Vercel for its simplicity and integration with Next.js. The continuous deployment pipeline ensures that updates are automatically deployed, providing a seamless experience for users.

## **Challenges and Future Enhancements:**

### **1. Challenges:**

- Integrating and configuring multiple technologies required careful consideration to ensure seamless functionality.

### **2. Future Enhancements:**

- Explore additional features such as user preferences, recommendations, and a more personalized user experience.

## **Conclusion:**

In conclusion, our e-commerce website, powered by Next.js, Sanity, and Stripe, embodies a robust platform that prioritizes performance, flexibility, and security. Leveraging Next.js for its server-side rendering capabilities, the site ensures a fast and responsive user experience. The integration of Sanity CMS allows for efficient content management, while Stripe guarantees secure and seamless payment processing.

Our focus on customizable design, scalability, and SEO optimization enables a unique and engaging shopping experience. Real-time updates, personalized recommendations, and mobile optimization enhance user satisfaction. Overall, our e-commerce solution combines cutting-edge technologies to deliver a feature-rich platform that excels in performance, user experience, and security, catering to the dynamic needs of modern online retail.