

Day 2: Planning the Technical Foundation

Think Openly—Innovation Has No Boundaries!

On Day 2, the focus is on setting up the technical foundation for the project. The goal is to select the right technologies that will allow flexibility, scalability, and a smooth development process. After careful consideration, the following stack has been chosen:

1. **Next.js:** This framework will be used for building the front-end. Next.js provides fast server-side rendering, excellent SEO capabilities, and dynamic routing. It will help us create a responsive and optimized user interface for the marketplace.
2. **TypeScript:** TypeScript will be used to add type safety and improve the overall development experience. It helps prevent runtime errors and ensures better code quality and maintainability.
3. **Tailwind CSS:** For styling the website, Tailwind CSS will be used. It is a utility-first CSS framework that allows for rapid development of custom designs, making it easy to create a responsive and visually appealing marketplace.
4. **Sanity (CMS):** Sanity.io will serve as the content management system (CMS) for the marketplace. It allows us to manage product data, categories, stock levels, images, and other content efficiently. With its flexible structure and real-time updates, Sanity is perfect for dynamic content management.

User Authentication and Payment

In addition to managing products, the next steps involve integrating two key features:

1. **User Login:** Allowing users to log in to their accounts will enable them to track their orders, save favorite products, and complete purchases. Implementing a secure login system using **Auth.js** or **Clerk** will ensure users can safely authenticate with either email/password or third-party authentication services (like Google, Facebook, etc.).
2. **Payment System:** For the checkout process, integrating a payment gateway like **Stripe** or **local payment options** will allow users to make secure payments. This is crucial for completing transactions and ensuring a smooth buying experience.

Ensuring a Bug-Free Experience:

As development continues, it's important to ensure that the website is bug-free and runs smoothly across all devices and browsers. Testing will be done regularly to catch and fix bugs early. The goal is to have a fully functional and stable website that users can trust to handle their purchases securely.

This includes:

- Testing user authentication flows (login, logout, session management).
- Ensuring the payment process is secure and error-free.
- Performing cross-browser testing to ensure compatibility.

- Continuously refining the user experience based on feedback.

With these technologies and features in place, the project is set to progress towards building a powerful and seamless online marketplace for handcrafted wooden furniture. On Day 3, we'll focus on implementing the front-end, integrating Sanity for managing product data, and starting with basic routing.