

Day 2 Hackathon Report: Planning The Technical Foundation 🚀

1. Technical Plan Aligned with Business Goals

Comforty's technical plan reflects its goal to create a **seamless e-commerce platform** by focusing on:

- **Customer-centric design:** Responsive and intuitive UI/UX.
 - **Secure transactions:** Data encryption and trusted payment gateways.
 - **Streamlined logistics:** Real-time order tracking and scheduled delivery options.
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2. System Architecture Visualized

The architecture includes:

- **Frontend:** Built with Next.js and Tailwind CSS.
- **Backend:** Sanity CMS for content management.
- **Third-Party APIs:**
 - Payment Gateway (Stripe, PayPal).
 - Shipment Tracking for real-time updates.

Workflows:

- **General E-Commerce:** Browsing, cart management, and order placement.

A downloadable **System Architecture Diagram** has been created. You can download it from the link below:

Download System Architecture Diagram

3. Detailed API Requirements Documented

Example APIs:**1. Products API:**

- **Endpoint:** /products
- **Method:** GET
- **Response:**

```
json
CopyEdit
[
  {
    "id": "101",
    "name": "Arm Chair",
    "price": 120,
    "stock": 50,
    "category": "Furniture",
    "description": "A stylish and comfortable armchair."
  }
]
```

2. Orders API:

- **Endpoint:** /orders
- **Method:** POST
- **Payload:**

```
json
CopyEdit
{
  "customerId": "202",
  "products": [
    { "productId": "101", "quantity": 1 },
    { "productId": "102", "quantity": 2 }
  ]
}
```

```
    ],  
    "totalPrice": 320,  
    "deliveryAddress": "456 Oak Lane"  
  }  
}
```

- **Response:**

```
json  
CopyEdit  
{  
  "orderId": "98765",  
  "status": "Order placed",  
  "estimatedDelivery": "2025-01-20"  
}
```

4. Sanity Schemas Drafted

Example Schema: Product

```
typescript  
CopyEdit  
export default {  
  name: 'product',  
  type: 'document',  
  title: 'Product',  
  fields: [  
    { name: 'name', type: 'string', title: 'Product Name' },  
    { name: 'price', type: 'number', title: 'Price' },  
    { name: 'stock', type: 'number', title: 'Stock' },  
    { name: 'category', type: 'string', title: 'Category' },  
    { name: 'image', type: 'image', title: 'Image', options: { hotspot: true } },  
    { name: 'description', type: 'text', title: 'Description' }  
  ]  
}
```

```
]
};
```

5. Collaborative Feedback Incorporated

- Feedback from mentors helped refine the **API designs** and **schema structure**.
 - Adjustments made to **frontend workflows** to improve user experience.
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6. Portfolio-Ready Submission

The polished documentation is ready for:

- **Startup presentations** to showcase scalability.
 - **Job interviews** as an example of technical competency.
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