

Day 2 Hackathon Report: Structuring the Technical Framework 🚀

1. Technical Plan in Alignment with Business Objectives

Comforty's technical strategy is designed to establish a smooth e-commerce experience by prioritizing:

- **User-Centric Design:** A responsive and intuitive UI/UX.
- **Secure Transactions:** Implementation of data encryption and reliable payment gateways.
- **Optimized Logistics:** Real-time order tracking and scheduled delivery functionality.

2. System Architecture Overview

The architecture comprises:

- **Frontend:** Developed using Next.js and Tailwind CSS.
- **Backend:** Sanity CMS for content management.
- **Third-Party Integrations:**
 - Payment Gateways (Stripe, PayPal).
 - Shipment Tracking for real-time logistics updates.

Workflows Implemented:

- **E-Commerce Operations:** Browsing, cart management, and seamless order processing.

A downloadable **System Architecture Diagram** has been created. Access it using the link below:
Download System Architecture Diagram

3. Comprehensive API Documentation

Example API Endpoints:

1. Products API:

- **Endpoint:** /products
 - **Method:** GET
 - **Response:**
- ```
2. [
3. {
4. "id": "101",
5. "name": "Arm Chair",
6. "price": 120,
7. "stock": 50,
8. "category": "Furniture",
9. "description": "A stylish and comfortable armchair."
```

```
10. }
]
```

#### 11. Orders API:

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

```
12. {
13. "customerId": "202",
14. "products": [
15. { "productId": "101", "quantity": 1 },
16. { "productId": "102", "quantity": 2 }
17.],
18. "totalPrice": 320,
19. "deliveryAddress": "456 Oak Lane"
 }
```

- **Response:**

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

## 4. Sanity CMS Schema Development

### Example Schema: Product

```
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. Incorporating Collaborative Feedback

- Feedback from mentors contributed to refining API structures and schema design.
- Enhancements made to frontend workflows for a more seamless user experience.

## 6. Portfolio-Ready Documentation

The finalized documentation is now prepared for:

- **Startup Pitches:** Showcasing scalability and innovation.
- **Job Applications:** Demonstrating technical proficiency with real-world implementation.