Day 2: Planning the Technical Foundation
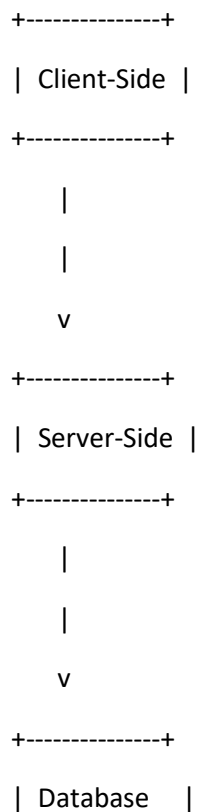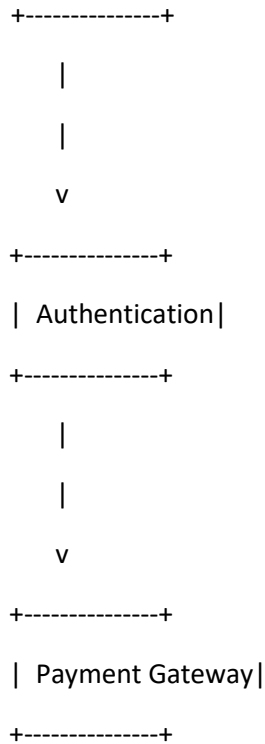
Technical Requirements

Requirement	Description
Frontend Framework	React.js
Backend Framework	Node.js with Express.js
Database	MongoDB
Authentication	Google OAuth
Payment Gateway	Stripe

System Architecture

[Insert System Architecture Diagram]

```
+--------------+
|  Client-Side  |
+--------------+
       |
       |
       v
+--------------+
|  Server-Side  |
+--------------+
       |
       |
       v
+--------------+
|  Database    |
```

```
+---------------+
        |
        |
        v
+---------------+
|  Authentication|
+---------------+
        |
        |
        v
+---------------+
|  Payment Gateway|
+---------------+
```

API Endpoints

Endpoint	Method	Description
/users	POST	Create new user
/users	GET	Retrieve all users
/users/:id	GET	Retrieve user by ID
/users/:id	PATCH	Update user
/users/:id	DELETE	Delete user
/products	POST	Create new product
/products	GET	Retrieve all products
/products/:id	GET	Retrieve product by ID
/products/:id	PATCH	Update product
/products/:id	DELETE	Delete product

| /orders | POST | Create new order |

| /orders | GET | Retrieve all orders |

| /orders/:id | GET | Retrieve order by ID |

| /orders/:id | PATCH | Update order |

| /orders/:id | DELETE | Delete order |

Technical Challenges

1. Implementing authentication with Google OAuth

2. Integrating Stripe payment gateway

3. Designing scalable database schema

4. Handling errors and exceptions in application