Backend Development Stack

Overview

The backend will provide APIs for the frontend and mobile app to interact with the database. It will be developed using modern technologies to ensure scalability and performance.

Technologies

1. **NestJS**: A progressive Node.js framework for building efficient, reliable, and scalable server-side applications. It is built on top of Express.js and provides an out-of-the-box application architecture.
2. **PostgreSQL**: A relational database for storing data. It is designed for robustness, scalability, and support for complex queries.
3. **TypeORM**: An ORM (Object-Relational Mapping) library for TypeScript and JavaScript. It provides a schema-based solution to model data and interact with PostgreSQL.
4. **JWT**: JSON Web Tokens for authentication. It is a compact, URL-safe means of representing claims to be transferred between two parties.
5. **Docker**: Containerization for consistent development and deployment environments. It allows applications to be packaged with all their dependencies.

API Endpoints

1. **User Endpoints**

   - `POST /api/users/register`: Register a new user.
   - `POST /api/users/login`: Authenticate a user and return a token.
   - `GET /api/users/profile`: Get the profile of the authenticated user.
   - `PUT /api/users/profile`: Update the profile of the authenticated user.

2. **Product Endpoints**

   - `GET /api/products`: Get a list of all products.
   - `GET /api/products/:id`: Get details of a specific product.
   - `POST /api/products`: Create a new product.
   - `PUT /api/products/:id`: Update an existing product.
   - `DELETE /api/products/:id`: Delete a product.

3. **Order Endpoints**

   - `GET /api/orders`: Get a list of all orders.
   - `GET /api/orders/:id`: Get details of a specific order.
   - `POST /api/orders`: Create a new order.
   - `PUT /api/orders/:id`: Update an existing order.
   - `DELETE /api/orders/:id`: Delete an order.

4. **Payment Endpoints**

   - `POST /api/payments`: Process a payment.

  - `GET /api/payments/:id`: Get details of a specific payment.