Webpro-1727

This project is a simple full-stack e-commerce application built as part of the **Web Programming '23 Project**. It consists of a backend powered by Node.js and Express, and a frontend built with Vite + React.

The application allows users to manage products (add, view, update, and delete).

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How to Run the Project

Prerequisites

Before running this project, ensure you have the following installed:

- Node.js: Version 16 or higher (Download Node.js)
- **npm**: Node Package Manager (comes bundled with Node.js)
- Git: For cloning the repository (Download Git)

Usage Steps

1. Clone the Repository

Clone this repository to your local machine:

```
git clone https://github.com/wounderfvl/webpro-1727.git
cd webpro-1727
```

2. Install Dependencies

Install all required dependencies for both the backend and frontend:

Backend

```
cd backend
npm install
```

Frontend

```
cd ../frontend/eccomerce-frontend
npm install
```

3. Run the Backend Application

Start the backend server:

```
node index.js
```

The backend will run on port 3001. You can access it at:

```
http://localhost:3001
```

4. Run the Frontend Application

Start the frontend development server:

```
npm run dev
```

The frontend will run on port 5173. You can access it at:

```
http://localhost:5173
```

Project Structure

The project is organized into two main directories: backend and frontend.

API Endpoint List

Below is a list of available API endpoints in the backend:

1. GET /api/produk

- **Description**: Retrieves a list of all products.
- Example Response:

```
[
    {"id":3,"nama":"Azhka","harga":0},
    {"id":4,"nama":"Ansel","harga":0}
]
```

2. POST /api/products

- **Description**: Adds a new product.
- Request Body:

```
{
    "name": "Azhka",
    "harga": "0"
}
```

• Example Response:

```
{
    "id": 3,
    "name": "Azhka",
    "harga": "0"
}
```

3. GET /api/products/:id

- **Description**: Retrieves product details by ID.
- Example Response:

```
{
  "id": 1,
  "name": "Alhaitham",
  "harga": "0"
}
```

4. PUT /api/products/:id

- Description: Updates product data by ID.
- Request Body:

```
{
   "name": "Alhaitham C6R5",
   "harga": "0"
}
```

• Example Response:

```
{
  "id": 1,
  "name": "Alhaitham C6R5",
  "harga": "0"
}
```

5. DELETE /api/products/:id

- **Description**: Deletes a product by ID.
- Example Response:

```
{
    "message": "Product deleted successfully"
}
```

Technologies Used

This project leverages the following technologies:

Backend

- **Node.js**: JavaScript runtime environment.
- Express.js: Minimalist web framework for building APIs.

Frontend

- React: JavaScript library for building user interfaces.
- Vite: Fast build tool and development server for modern web projects.
- Tailwind CSS: Utility-first CSS framework for styling.

Screenshots

Here are some screenshots of the application:

1. Home Page



The home page displays a list of products and provides options to add, edit, or delete products.

2. Add Product Form



A form for adding new products with fields for name and price.

3. Edit Product Form



A form for updating existing product details.

Contribution

We welcome contributions! If you would like to contribute, please follow these steps:

- 1. Fork the repository.
- 2. Create a new branch (git checkout -b feature/YourFeatureName).
- 3. Commit your changes (git commit -m "Add YourFeatureName").
- 4. Push to the branch (git push origin feature/YourFeatureName).
- 5. Submit a pull request with a clear explanation of the changes.

If you encounter any issues or have suggestions, feel free to open an issue in this repository.