## Assignment 04 - Web Programming

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After following the module's instruction of today's class, we have successfully followed the instruction as below:

1. Component Implementation The backend developer successfully created and integrated the "TambahProduk.tsx" component into their React application. This component provides a user interface for adding new products to the system. The implementation follows React's component-based architecture, allowing for modular code organization and reusability while maintaining a clean separation of concerns within the application structure.

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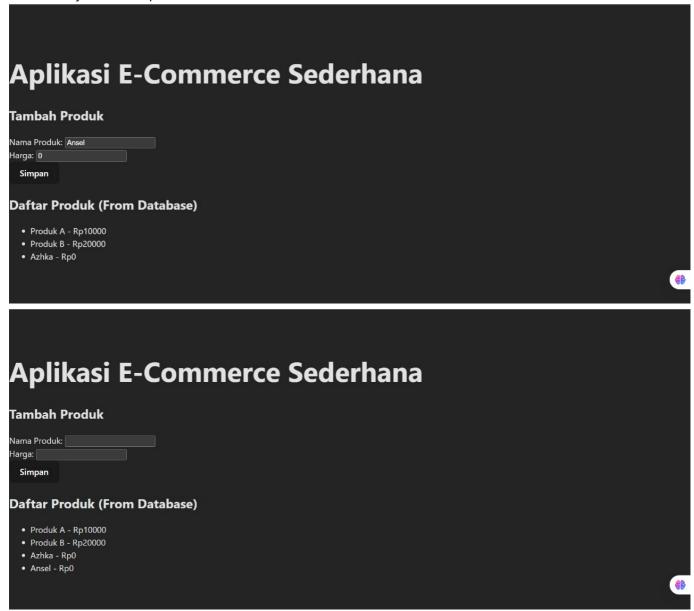
∨ OPEN EDITORS

           {} package.json fro.
                                       import React, { useState, FormEvent, ChangeEvent } from 'react'; import axios from 'axios';
                                       interface Produk {
       WEBPRO-1727
                                        nama: string;
        > backend
                                         harga: string;
                                        const [nama, setNama] = useState<string>('');
                                        const [harga, setHarga] = useState<string>('');
const [error, setError] = useState<string>('');

    ProdukList.tsx

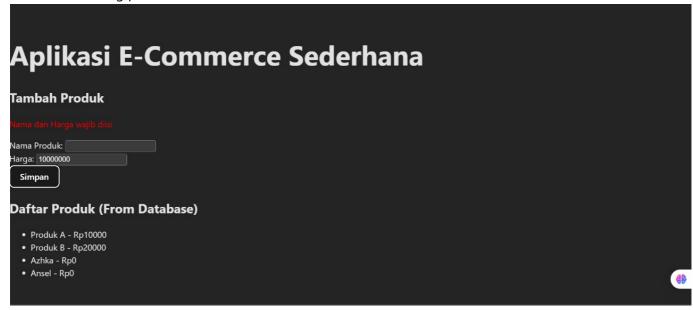
                                        const handleSubmit = (e: FormEvent<HTMLFormElement>) => {
                                           e.preventDefault();
                                         // Validasi
if (!nama || !harga) {
         .gitignore
        eslint.config.is
                                PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS
        index.html
                                                                                                                                                                        ≥ bash ecom.
        {} package-lock.json
                                Server berjalan di http://localhost:3001
                                $ node index.js
                                                                                                                                                                     ≥ bash backend
```

Successfully adds new product

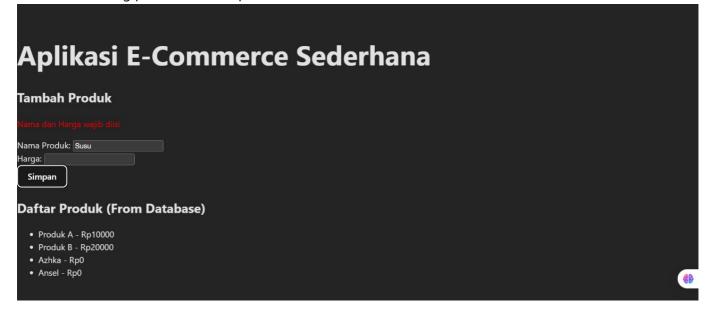


2. Form Validation Implementation The developer implemented simple yet effective form validation within the product addition workflow. This validation ensures data integrity by preventing submissions with empty fields, which could otherwise lead to incomplete or corrupted database entries. The system properly displays error messages to guide users when input requirements are not met, enhancing the overall user experience and application reliability.

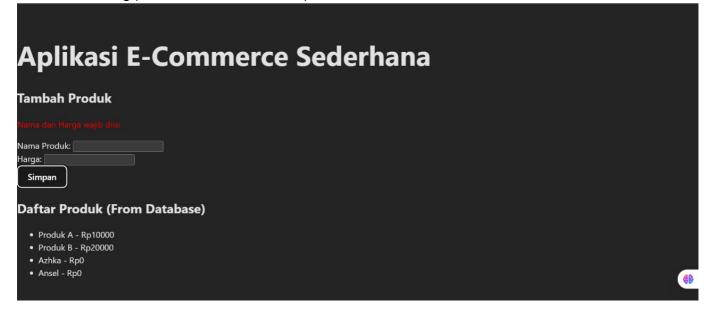
Error when adding product without name



Error when adding product without price



Error when adding product without name and price



3. Database Integration The developer established successful database connectivity, enabling the application to persistently store newly added product data. The submitted form data was correctly processed, transmitted to the backend, and stored in the database. This confirms the end-to-end functionality of the application's data flow, from user input through the React frontend to storage in the backend database system.

```
Pretty-print [ [{"id":1,"name": "Produk A","harga":18988),{"id":2,"nama": "Produk B","harga":28888),{"id":3,"nama": "Azhka", "harga":8},{"id":4,"nama": "Ansel", "harga":8}]
```