

MODUL 2: PRAKTIK

Langkah 1: Setup Environment

Buat project Baru dengan nama praktik-2

```
npm create vite@latest praktik-2 -- --template react
```

```
npm install
```

```
npm run dev
```

Langkah 2: Basic JSX Practice

File: src/App.jsx



```
App.jsx

import React from 'react';
import './App.css';

function App() {
    // Data dinamis
    const student = {
        name: "Ahmad Rizki",
        nim: "12345678",
        major: "Teknik Informatika"
    };

    const courses = ["Pemrograman React", "Algoritma", "Basis Data"];

    // Function untuk menampilkan data
    const getCurrentTime = () => {
        return new Date().toLocaleTimeString();
    };

    return (
        <div className="App">
            {/* Data statis */}
            <h1>Belajar JSX di React</h1>

            {/* Menampilkan data dinamis */}
            <div className="student-info">
                <h2>Informasi Mahasiswa</h2>
                <p>Nama: {student.name}</p>
                <p>NIM: {student.nim}</p>
                <p>Jurusan: {student.major}</p>
            </div>

            {/* Menampilkan array */}
            <div className="courses">
                <h3>Mata Kuliah:</h3>
                <ul>
                    {courses.map((course, index) => (
                        <li key={index}>{course}</li>
                    ))}
                </ul>
            </div>

            {/* Menampilkan function result */}
            <div className="time">
                <p>Waktu saat ini: {getCurrentTime()}</p>
            </div>

            {/* Conditional rendering */}
            <div className="status">
                <p>Status: {student.nim ? "Terdaftar" : "Belum terdaftar"}</p>
            </div>
        );
    }

    export default App;
}
```

Langkah 3: Practice dengan Fragment dan Conditional

File: src/components/UserProfile.js



The screenshot shows a code editor window with a dark theme. The file is named 'UserProfile.js'. The code implements a conditional rendering logic using the Fragment API.

```
import React from 'react';

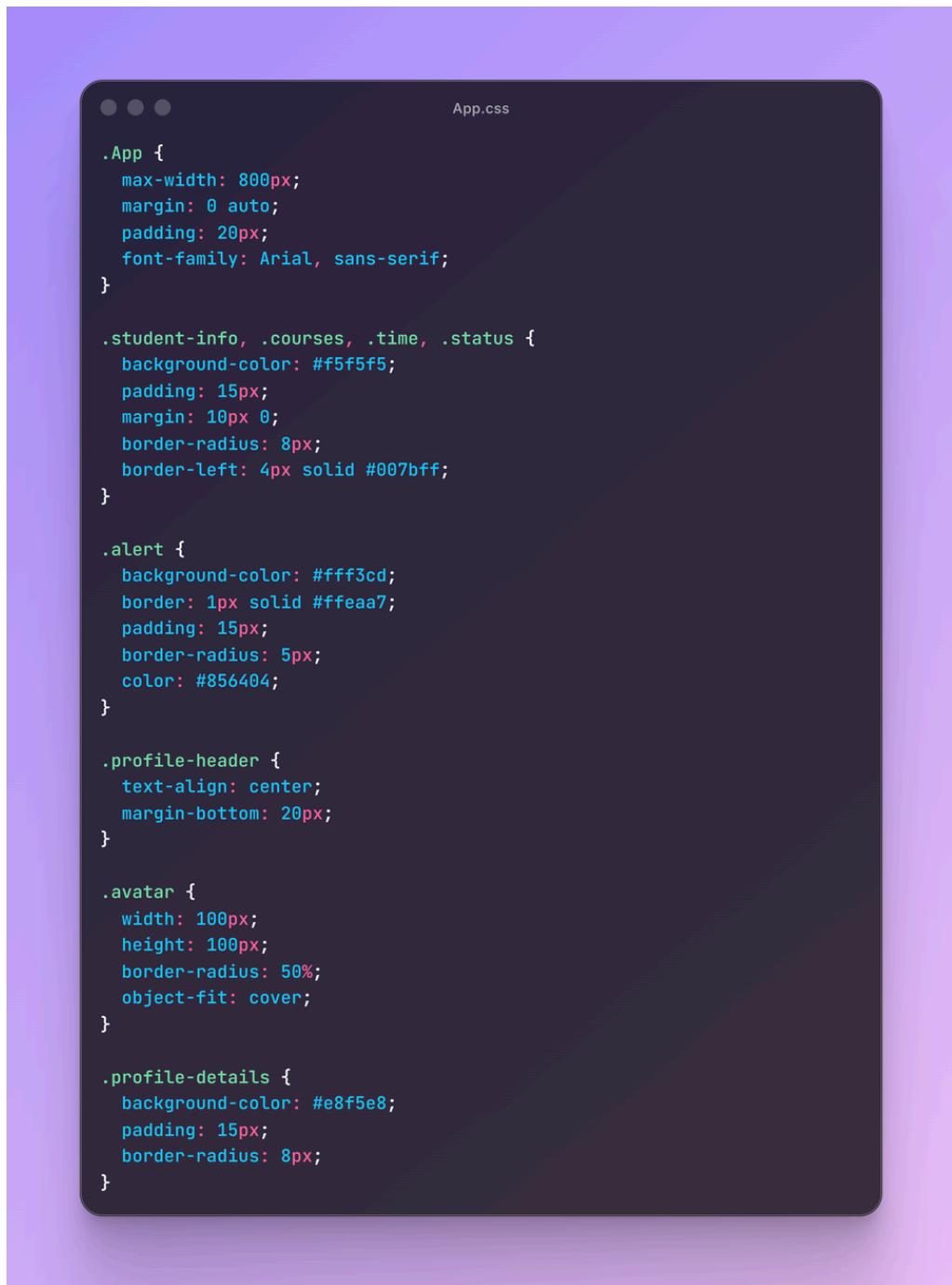
const UserProfile = ({ user, isLoggedIn }) => {
    // Jika tidak login, tampilkan pesan
    if (!isLoggedIn) {
        return (
            <div className="alert">
                <p>Silakan login terlebih dahulu</p>
            </div>
        );
    }

    // Jika login, tampilkan profile menggunakan Fragment
    return (
        <>
            <div className="profile-header">
                <h2>Profile Pengguna</h2>
                <img
                    src={user.avatar || "/default-avatar.png"}
                    alt="Avatar"
                    className="avatar"
                />
            </div>
            <div className="profile-details">
                <p><strong>Nama:</strong> {user.name}</p>
                <p><strong>Email:</strong> {user.email}</p>
                <p><strong>Bergabung sejak:</strong> {new Date(user.joinDate).toLocaleDateString()}</p>
            </div>
        </>
    );
};

export default UserProfile;
```

Langkah 4: Styling dengan JSX

File: src/App.css



A screenshot of a code editor window titled "App.css". The code is written in CSS and defines several classes for styling a user profile component.

```
.App {  
  max-width: 800px;  
  margin: 0 auto;  
  padding: 20px;  
  font-family: Arial, sans-serif;  
}  
  
.student-info, .courses, .time, .status {  
  background-color: #f5f5f5;  
  padding: 15px;  
  margin: 10px 0;  
  border-radius: 8px;  
  border-left: 4px solid #007bff;  
}  
  
.alert {  
  background-color: #fff3cd;  
  border: 1px solid #ffea7;  
  padding: 15px;  
  border-radius: 5px;  
  color: #856404;  
}  
  
.profile-header {  
  text-align: center;  
  margin-bottom: 20px;  
}  
  
.avatar {  
  width: 100px;  
  height: 100px;  
  border-radius: 50%;  
  object-fit: cover;  
}  
  
.profile-details {  
  background-color: #e8f5e8;  
  padding: 15px;  
  border-radius: 8px;  
}
```

Langkah 5 :

Hapus kode `import './index.css'` dari file : main.jsx, dan lihat jalankan server / lihat hasil (browser).

Belajar JSX di React

Informasi Mahasiswa

Nama: Ahmad Rizki

NIM: 12345678

Jurusan: Teknik Informatika

Mata Kuliah:

- Pemrograman React
- Algoritma
- Basis Data

Waktu saat ini: 6:52:58 AM

Status: Terdaftar

Langkah 6: Update App.jsx untuk Testing



The screenshot shows a code editor window with a dark theme. The title bar says "App.jsx". The code inside the file is as follows:

```
App.jsx

import React, { useState } from 'react';
import './App.css';
import UserProfile from './components/UserProfile';

function App() {
  const [isLoggedIn, setIsLoggedIn] = useState(false);

  const userData = {
    name: "Sarah Johnson",
    email: "sarah@example.com",
    avatar: "/vite.svg",
    joinDate: "2023-01-15"
  };

  return (
    <div className="App">
      <h1>Demo JSX dan Rendering</h1>

      {/* Toggle login state */}
      <button onClick={() => setIsLoggedIn(!isLoggedIn)}>
        {isLoggedIn ? 'Logout' : 'Login'}
      </button>

      {/* Component dengan conditional rendering */}
      <UserProfile user={userData} isLoggedIn={isLoggedIn} />

      {/* Dynamic styling */}
      <div style={{
        padding: '20px',
        margin: '10px 0',
        backgroundColor: isLoggedIn ? '#d4edda' : '#f8d7da',
        border: `2px solid ${isLoggedIn ? '#c3e6cb' : '#f5c6cb'}`,
        borderRadius: '5px'
      }}>
        Status: {isLoggedIn ? '✅ Berhasil login' : '❌ Belum login'}
      </div>
    </div>
  );
}

export default App;
```

Latihan Mandiri

Tugas untuk Mahasiswa:

1. Buat component **ProductCard** yang menerima props:
 - o name (string)
 - o price (number)
 - o isAvailable (boolean)
2. Tampilkan data dengan kondisi:
 - o Jika produk available, tampilkan harga normal
 - o Jika tidak available, tampilkan "Stok Habis" dengan style gray
 - o Format harga menjadi Rp. 1.000.000
3. Gunakan **Fragment** untuk struktur