Workshop Documentation: React Login Page Development

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Project Setup

Initial Setup

```
# Clone repository
git clone https://github.com/agunggema-debug/frontend-react-app.git
cd frontend-react-app
```

Dependencies Installation

The project requires several dependencies that were installed:

```
# Core dependencies
npm install @mui/material @emotion/react @emotion/styled
npm install react-router-dom
npm install @mui/icons-material
```

Project Structure

```
frontend-react-app/
├── src/
│   ├── components/
│   ├── pages/
│   │   ├── Login.js
│   │   └── Welcome.js
│   ├── App.js
│   └── App.css
├── public/
└── package.json
```

Component Development

1. Login Page (src/pages/Login.js)

The Login page features:

- Modern Material-UI design
- Form validation
- Error handling
- Responsive layout
- Username/Password authentication
- Navigation to Welcome page

Key features:

- Username: admin
- Password: admin
- Error messages for invalid credentials
- Smooth transitions
- Professional UI/UX design

2. Welcome Page (src/pages/Welcome.js)

The Welcome page includes:

- Success message
- Return to login button
- Clean, modern design
- Responsive layout

3. App Configuration (src/App.js)

Main application setup:

- React Router configuration
- Material-UI theme setup
- Route definitions
- Base layout structure

Styling

Global Styles (App.css)

```css
.App {
  min-height: 100vh;
  background: linear-gradient(135deg, #00bcd4, #2196f3);
  display: flex;
  flex-direction: column;
}

body {
  margin: 0;
  font-family: 'Roboto', sans-serif;
}
```

Material-UI Theme

```js
const theme = createTheme({
  palette: {
    primary: {
      main: '#1976d2',
      dark: '#115293',
    },
  },
});
```

Running the Application

Development Mode

```
npm start
```

Access the application at: http://localhost:3000/agunggema-debug/React-page

Login Credentials

- Username: admin
- Password: admin

Features

1. **Login Page**

   - Form validation
   - Error messages
   - Responsive design
   - Modern UI elements

2. **Welcome Page**

   - Success message
   - Navigation
   - Clean interface

Version Control

GitHub Repository

- Repository: frontend-react-app
- Owner: agunggema-debug
- Branch: main

Deployment

The application is configured for GitHub Pages deployment with the following scripts in package.json:

```
{
  "scripts": {
    "predeploy": "npm run build",
    "deploy": "gh-pages -d build"
  }
}
```

Conclusion

This workshop successfully demonstrated the creation of a modern React application with:

- Professional login interface
- Material-UI components
- React Router navigation
- Responsive design
- Clean project structure
- Version control integration

Next Steps

1. Add more features like:

   - User registration
   - Password recovery
   - Remember me functionality

2. Enhance security
3. Add more pages and functionality
4. Implement backend integration

End of Documentation