

Using Material UI as Component User Interface Library

Web apps use HTML & CSS as source code for their interface. But it is a bit troublesome to create CSS styles for each component you want to create.

Luckily, now User interface libraries has been created to make it easier to create interfaces. For example: Tailwind, Bootstrap, and Material UI.

Now we will use Material UI for this project because of its ease of use.

We need to install Material UI in our project.

Open our last project ("Simple Login Page with CSS in React JS") with VS Code.

Run this command in VS Code terminal:

```
npm install @mui/material @emotion/react @emotion/styled
```

```
npm install @fontsource/roboto
```

```
npm install @mui/icons-material
```

For complete documentation about Material UI, you can visit this URL :

<https://mui.com/material-ui/getting-started/>

Open **src/main.jsx** file



```
src > main.jsx
1  import React from "react";
2  import ReactDOM from "react-dom/client";
3  import Login from "../Login.jsx";
4  import "../index.css";
5
6  ReactDOM.createRoot(document.getElementById("root")).render(
7    <React.StrictMode>
8      <Login />
9    </React.StrictMode>
10 );
11
```

Remove line 4, so last CSS created file not interfered with new installed library

Open and replace **src/Login.jsx** with this code:

```
import * as React from "react";

import Button from "@mui/material/Button";
import CssBaseline from "@mui/material/CssBaseline";
import TextField from "@mui/material/TextField";
import Paper from "@mui/material/Paper";
import Box from "@mui/material/Box";
import Grid from "@mui/material/Grid";
import Typography from "@mui/material/Typography";
import { createTheme, ThemeProvider } from "@mui/material/styles";
```

```

const defaultTheme = createTheme();

export default function Login() {
  return (
    <ThemeProvider theme={defaultTheme}>
      <Grid container component="main" sx={{ height: "100vh" }}>
        <CssBaseline />
        <Grid
          item
          xs={false}
          sm={4}
          md={7}
          sx={{
            backgroundImage:
              "url(https://source.unsplash.com/random?wallpapers)",
            backgroundRepeat: "no-repeat",
            backgroundColor: (t) =>
              t.palette.mode === "light"
                ? t.palette.grey[50]
                : t.palette.grey[900],
            backgroundSize: "cover",
            backgroundPosition: "center",
          }}
        />
        <Grid
          item
          xs={12}
          sm={8}
          md={5}
          component={Paper}
          elevation={6}
          square
        >
          <Box
            sx={{
              my: 8,
              mx: 4,
              display: "flex",
              flexDirection: "column",
              alignItems: "center",
            }}
          >
            </img>
            <Typography component="h1" variant="h5">
              Sign in
            </Typography>
            <Box component="form" noValidate sx={{ mt: 1 }}>
              <TextField
                margin="normal"
                required
                fullWidth
                id="email"
                label="Email Address"
                name="email"

```

```

        autoComplete="email"
        autoFocus
      />
      <TextField
        margin="normal"
        required
        fullWidth
        name="password"
        label="Password"
        type="password"
        id="password"
        autoComplete="current-password"
      />

      <Button
        type="submit"
        fullWidth
        variant="contained"
        sx={{ mt: 3, mb: 2 }}
      >
        Sign In
      </Button>
    </Box>
  </Box>
</Grid>
</Grid>
</ThemeProvider>
);
}

```

Type this command in VS Code terminal to run project.

npm run dev



```

PROBLEMS OUTPUT TERMINAL PORTS
▼ TERMINAL
○ PS C:\belajar\reactweb\project1> npm run dev

> project1@0.0.0 dev
> vite

VITE v5.1.6 ready in 261 ms

→ Local:   http://localhost:5173/
→ Network: use --host to expose
→ press h + enter to show help

```