

Experiment 10

Aim: Design an attractive Login and Registration form using Material-UI. Use Validations to validate the errors and prompt the errors on the webpage

1. In components folder, make Signup.js, and design the Registration page -

```
src > Components > JS Signup.js © Copyright
1 import * as React from "react";
2 import Avatar from "@mui/material/Avatar";
3 import Button from "@mui/material/Button";
4 import CssBaseline from "@mui/material/CssBaseline";
5 import TextField from "@mui/material/TextField";
6 import FormControlLabel from "@mui/material/FormControlLabel";
7 import Checkbox from "@mui/material/Checkbox";
8 import Link from "@mui/material/Link";
9 import Grid from "@mui/material/Grid";
10 import Box from "@mui/material/Box";
11 import LockOutlinedIcon from "@mui/icons-material/LockOutlined";
12 import Typography from "@mui/material/Typography";
13 import Container from "@mui/material/Container";
14 import { createTheme, ThemeProvider } from "@mui/material/styles";
15 import { checkValidData } from "../utils/validate";
16
17 function Copyright(props) {
18   return (
19     <Typography
20       variant="body2"
21       color="text.secondary"
22       align="center"
23       {...props}
24     >
25       {`Copyright © `}
26       <Link color="inherit" href="https://mui.com/">
27         Your Website
28       </Link>{` `}
29       {new Date().getFullYear()}
30       {` `}
31     </Typography>
32   );
33 }
34
35 // TODO remove, this demo shouldn't need to reset the theme.
36
37 const defaultTheme = createTheme();
38
39 export default function Signup() {
40   const [errorMsg, setErrorMsg] = React.useState(null);
41
42   const firstName = React.useRef(null);
43   const lastName = React.useRef(null);
44   const email = React.useRef(null);
45   const password = React.useRef(null);
46
47   const handleButtonSubmit = () => {
48     console.log(password);
49     const msg = checkValidData(email.current.value, password.current.value);
50     setErrorMsg(msg);
51     if (msg) return;
52   };
53   const handleSubmit = (event) => {
54     event.preventDefault();
55     const data = new FormData(event.currentTarget);
56     console.log({
57       email: data.get("email"),
58       password: data.get("password"),
59     });
60   };
61
62   return (
63     <ThemeProvider theme={defaultTheme}>
64       <Container component="main" maxWidth="xs">
65         <CssBaseline />
66         <Box
67           sx={{
68             margin: 8,
69             display: "flex",
70             flexDirection: "column",
71             alignItems: "center",
72           }}
73         >
74           <Avatar sx={{ m: 1, bgcolor: "secondary.main" }} />
75           <LockOutlinedIcon />
76           <Typography component="h1" variant="h5">
77             Sign up
78           </Typography>
79           <Box
80             component="form"
81             noValidate
82             onSubmit={handleSubmit}
83             sx={{ mt: 3 }}
84           >
85             <Grid container spacing={2}>
86               <Grid item xs={12} sm={6}>
87                 <TextField
```

```

88               ref={firstName}
89               autoComplete="given-name"
90               name="firstName"
91               required
92               fullWidth
93               id="firstName"
94               label="First Name"
95               autoFocus
96             />
97           </Grid>
98           <Grid item xs={12} sm={6}>
99             <TextField
100               ref={lastName}
101               required
102               fullWidth
103               id="lastName"
104               label="Last Name"
105               name="lastName"
106               autoComplete="family-name"
107             />
108           </Grid>
109           <Grid item xs={12}>
110             <TextField
111               ref={email}
112               required
113               fullWidth
114               id="email"
115               label="Email Address"
116               name="email"
117               autoComplete="email"
118             />
119           </Grid>
120           <Grid item xs={12}>
121             <TextField
122               ref={password}
123               required
124               fullWidth
125               name="password"
126               label="Password"
127               type="password"
128               id="password"
129             />
130           </Grid>
131           <Grid item xs={12}>
132             <FormControllabel
133               control={
134                 <Checkbox value="allowExtraEmails" color="primary" />
135               }
136               label="I want to receive inspiration, marketing promotions and
137                 updates via email."
138             />
139           </Grid>
140           <Grid>
141             <Button
142               type="submit"
143               fullWidth
144               variant="contained"
145               sx={{ mt: 3, mb: 2 }}
146               onClick={handleButtonSubmit}
147             />
148             Sign up
149           </Grid>
150           <Grid container justify-content="flex-end">
151             <Grid item>
152               <Link href="#" variant="body2">
153                 Already have an account? Sign in
154               </Link>
155             </Grid>
156           </Grid>
157         </Box>
158       </Container>
159     </ThemeProvider>
160   );
161 }
162
163
```

1) Make the login page

```
src > Components > JS Login.js > ...
1  import React from "react";
2  import SignUp from "../SignUp";
3
4  const Login = () => {
5    return (
6      <div>
7        <SignUp />
8      </div>
9    );
10 };
11
12 export default Login;
13
```

2) Adding a validation feature to check the inputs of the user

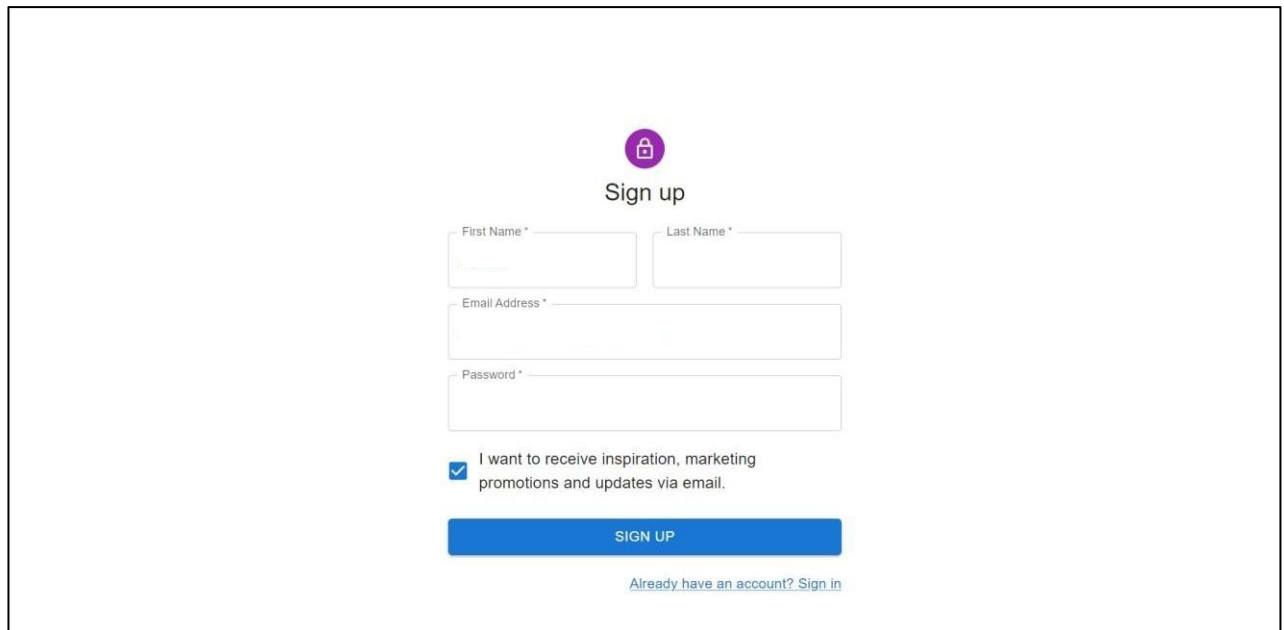
```
src > utils > JS validate.js > ...
1  export const checkValidData = (email, password) => {
2    const isValidEmail = /^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$/i.test(
3      email
4    );
5    const isValidPassword =
6      /^(?=.*\d)(?=.*[a-z])(?=.*[A-Z])(?=.*[a-zA-Z]).{8,}$/i.test(password);
7    if (!isValidPassword) return "Password is not valid";
8    if (!isValidEmail) return "Email ID is not valid";
9    return null;
10 };

```

3) Update the App.js

```
90  import { useRef, useState } from "react";
91  import "../App.css";
92  import Login from "../Components/Login";
93
94  function App() {
95    return <Login />;
96  }
97
98  export default App;
99
```

OUTPUT



A sign-up form with a purple lock icon at the top. The form is titled "Sign up". It contains four input fields: "First Name *" and "Last Name *" (side-by-side), "Email Address *" (wide), and "Password *" (wide). Below the fields is a checkbox with the text "I want to receive inspiration, marketing promotions and updates via email." and a blue "SIGN UP" button. At the bottom, there is a link: "Already have an account? Sign in".

Discussions:

This experiment explores the integration of Material-UI components for aesthetically pleasing login and registration forms while implementing validation to provide realtime error feedback.