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

```jsx
import * as React from "react";
import Avatar from "@mui/material/Avatar";
import Button from "@mui/material/Button";
import CssBaseline from
"@mui/material/CssBaseline";
import TextField from "@mui/material/TextField";
import FormControlLabel from
"@mui/material/FormControlLabel";
import Checkbox from "@mui/material/Checkbox";
import Link from "@mui/material/Link";
import Grid from "@mui/material/Grid";
import Box from "@mui/material/Box";
import LockOutlinedIcon from "@mui/icons-
material/LockOutlined";
import Typography from
"@mui/material/Typography";
import Container from "@mui/material/Container";
import { createTheme, ThemeProvider } from
"@mui/material/styles";
import { checkValidData } from
"../utils/validate";

function Copyright(props) {
  return (
    <Typography
      variant="body2"
      color="text.secondary"
      align="center"
      {...props}
    >
      {"Copyright © "}
      <Link color="inherit"
href="https://mui.com/">
        Your Website
      </Link>{" "}
      {new Date().getFullYear()}
      {"."}
    </Typography>
  );
}

// TODO remove, this demo shouldn't need to reset
the theme.

const defaultTheme = createTheme();

export default function SignUp() {
  const [errormsg, setErrormsg] =
React.useState(null);

  const firstName = React.useRef(null);
  const lastName = React.useRef(null);
  const email = React.useRef(null);
  const password = React.useRef(null);
  const handleButtonSubmit = () => {
    console.log(password);
    const msg =
checkValidData(email.current.value,
password.current.value);
    setErrormsg(msg);
    if (msg) return;
  };
```

```jsx
  const handleSubmit = (event) => {
    event.preventDefault();
    const data = new
FormData(event.currentTarget);
    console.log({
      email: data.get("email"),
      password: data.get("password"),
    });
  };

  return (
    <ThemeProvider theme={defaultTheme}>
      <Container component="main" maxWidth="xs">
        <CssBaseline />
        <Box
          sx={{
            marginTop: 8,
            display: "flex",
            flexDirection: "column",
            alignItems: "center",
          }}
        >
          <Avatar sx={{ m: 1, bgcolor:
"secondary.main" }}>
            <LockOutlinedIcon />
          </Avatar>
          <Typography component="h1"
variant="h5">
            Sign up
          </Typography>
          <Box
            component="form"
            noValidate
            onSubmit={handleSubmit}
            sx={{ mt: 3 }}
          >
            <Grid container spacing={2}>
              <Grid item xs={12} sm={6}>
                <TextField
                  ref={firstName}
                  autoComplete="given-name"
                  name="firstName"
                  required
                  fullWidth
                  id="firstName"
                  label="First Name"
                  autoFocus
                />
              </Grid>
              <Grid item xs={12} sm={6}>
                <TextField
                  ref={lastName}
                  required
                  fullWidth
                  id="lastName"
                  label="Last Name"
                  name="lastName"
                  autoComplete="family-name"
                />
              </Grid>
              <Grid item xs={12}>
                <TextField
```

```
        ref={email}                                    />
        required                                    </Grid>
        fullWidth                                  </Grid>
        id="email"                                 <Button
        label="Email Address"                        type="submit"
        name="email"                                 fullWidth
        autoComplete="email"                         variant="contained"
      />                                             sx={{ mt: 3, mb: 2 }}
    </Grid>                                           onClick={handleButtonSubmit}
    <Grid item xs={12}>                            >
      <TextField                                     Sign Up
        ref={password}                             </Button>
        required                                    <Grid container justifyContent="flex-
        fullWidth                               end">
        name="password"                              <Grid item>
        label="Password"                               <Link href="#" variant="body2">
        type="password"                                  Already have an account? Sign
        id="password"                             in
        autoComplete="new-password"                    </Link>
      />                                             </Grid>
    </Grid>                                         </Grid>
    <Grid item xs={12}>                          </Box>
      <FormControlLabel                         </Box>
        control={                             </Container>
          <Checkbox                         </ThemeProvider>
value="allowExtraEmails" color="primary" />    );
        }                                   }
        label="I want to receive
inspiration, marketing promotions and updates via
email."
```

2) Make the login page

```
JS Login.js U ●

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;
```

3) Adding a validation feature to check the inputs of the user
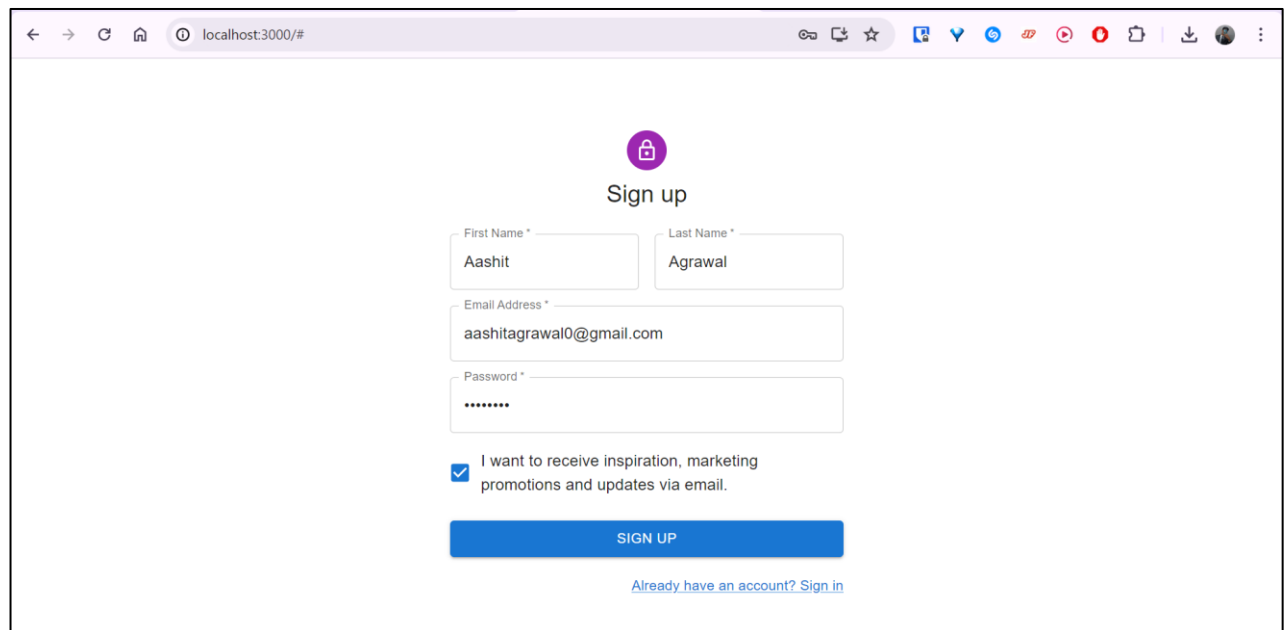
```
JS validate.js U ●

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

4) Update the *App.js*

```js
JS App.js 2, M  ●

src > JS App.js > ...
  1    import { useRef, useState } from "react";
  2    import "./App.css";
  3    import Login from "./components/Login";
  4
  5    function App() {
  6      return <Login />;
  7    }
  8
  9    export default App;
```

OUTPUT

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