**Lab Experiment:10**

**Aim:** design an attractive Login and Registration form using Material-UI. Use Validations to validation the error and prompt the errors on the webpage.

**App.js**

*import* { useRef, useState } *from* "react";

*import* "./App.css";

*import* Login *from* "./components/Login";

function App() {

*return* <Login />;

}

*export* *default* App;

**components/login.js**

*import* React *from* "react";

*import* SignUp *from* "./SignUp";

const Login = () => {

*return* (

    <div>

      <SignUp />

    </div>

  );

};

*export* *default* Login;

**components/signup.js**

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

*import* LockOutlinedIcon *from* "@mui/icons-material/LockOutlined";

*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* 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*;

  };

  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

                  fullWidth

                  id="email"

                  label="Email Address"

                  name="email"

                  autoComplete="email"

                />

              </Grid>

              <Grid item xs={12}>

                <TextField

                  ref={password}

                  required

                  fullWidth

                  name="password"

                  label="Password"

                  type="password"

                  id="password"

                  autoComplete="new-password"

                />

              </Grid>

              <Grid item xs={12}>

                <FormControlLabel

                  control={

                    <Checkbox value="allowExtraEmails" color="primary" />

                  }

                  label="I want to receive inspiration, marketing promotions and updates via email."

                />

              </Grid>

            </Grid>

            <Button

              type="submit"

              fullWidth

              variant="contained"

              sx={{ mt: 3, mb: 2 }}

              onClick={handleButtonSubmit}

            >

              Sign Up

            </Button>

            <Grid container justifyContent="flex-end">

              <Grid item>

                <Link href="#" variant="body2">

                  Already have an account? Sign in

                </Link>

              </Grid>

            </Grid>

          </Box>

        </Box>

      </Container>

    </ThemeProvider>

  );

}

**utils/validate.js**

*export* const checkValidData = (*email*, *password*) => {

  const isEmailValid = /*^*([a-zA-Z0-9.\_%-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,})*$*/.test(

*email*

  );

  const isPasswordValid =

    /*^*(?=.\*\d)(?=.\*[a-z])(?=.\*[A-Z])(?=.\*[a-zA-Z]).{8,}*$*/.test(*password*);

*if* (!isPasswordValid) *return* "Password is not valid";

*if* (!isEmailValid) *return* "Email ID is not valid";

*return* null;

};

Output:

