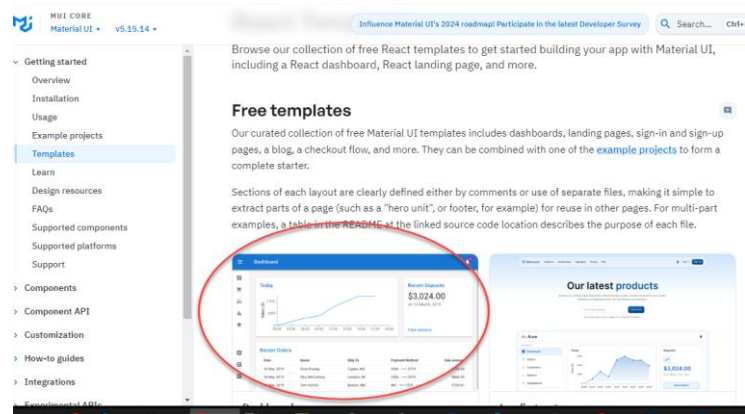


6. Using Material UI for Web Apps Dashboard

To shorten the time, we can use an interface library such as Material UI

You can see example here : <https://mui.com/material-ui/getting-started/templates/>



Open last project (5. Add Login Protection in Web Apps)

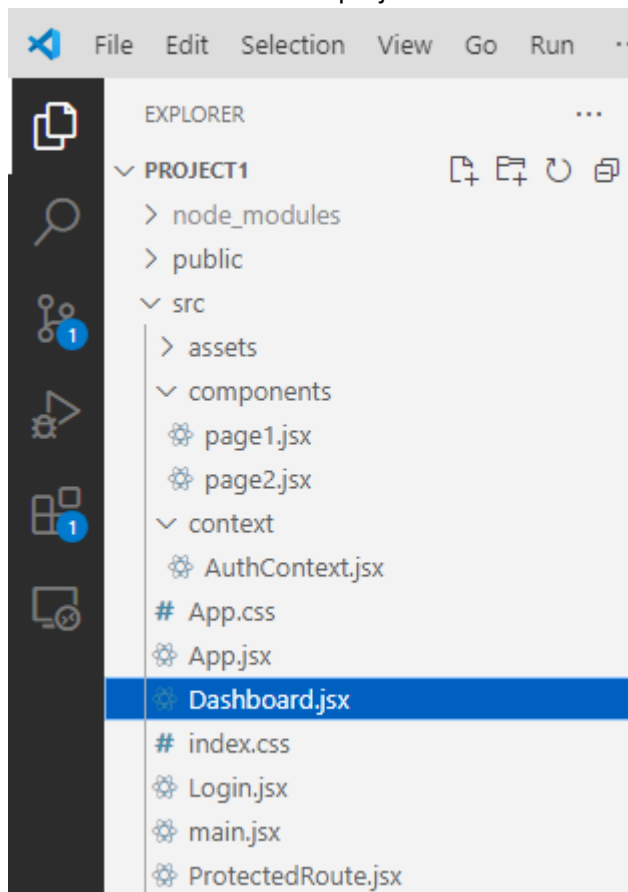
In last tutorial we give the component folder name with **routes**. The aim is to clarify the function of the folder. But now we must rename **routes** folder name to **components**, to conform with standards used by many people.

First, rename "**src/routes**" to "**src/components**"

Then rename "**src/components/root.jsx**" to "**src/components/Dashboard.jsx**"

Move "**src/components/Dashboard.jsx**" to "**src/Dashboard.jsx**"

This is files structure of our project



Because routes folder has been changed. We must update code in App.jsx

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

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

import { createBrowserRouter, RouterProvider } from "react-router-dom";
import Dashboard from "../Dashboard";
import Page1 from "../components/page1";
import Page2 from "../components/page2";
import Login from "../Login";
import { AuthProvider } from "../context/AuthContext";
import { ProtectedRoute } from "../ProtectedRoute";

const router = createBrowserRouter([
  {
    path: "/",
    element: (
      <ProtectedRoute>
        <Dashboard />
      </ProtectedRoute>
    ),
    children: [
      {
        path: "page-one",
        element: <Page1 />,
      },
      {
        path: "page-two",
        element: <Page2 />,
      },
    ],
  },
  {
    path: "login",
    element: <Login />,
  },
]);

export default function App() {
  return (
    <AuthProvider>
      <RouterProvider router={router} />
    </AuthProvider>
  );
}
```

Open and put this code in **src/Dashboard.jsx**:

```
import * as React from "react";
import { Outlet, Link } from "react-router-dom";
import { useAuth } from "../context/AuthContext";
import { styled, createTheme, ThemeProvider } from "@mui/material/styles";
import CssBaseline from "@mui/material/CssBaseline";
import MuiDrawer from "@mui/material/Drawer";
import Box from "@mui/material/Box";
import MuiAppBar from "@mui/material/AppBar";
import Toolbar from "@mui/material/Toolbar";
```

```

import List from "@mui/material/List";
import Typography from "@mui/material/Typography";
import Divider from "@mui/material/Divider";
import IconButton from "@mui/material/IconButton";
import Container from "@mui/material/Container";
import Grid from "@mui/material/Grid";
import Paper from "@mui/material/Paper";

import MenuIcon from "@mui/icons-material/Menu";
import ChevronLeftIcon from "@mui/icons-material/ChevronLeft";
import ListItemButton from "@mui/material/ListItemButton";
import ListItemIcon from "@mui/material/ListItemIcon";
import ListItemText from "@mui/material/ListItemText";
import LogoutIcon from "@mui/icons-material/Logout";
import ListAltIcon from "@mui/icons-material/ListAlt";

const drawerWidth = 240;

const AppBar = styled(MuiAppBar, {
  shouldForwardProp: (prop) => prop !== "open",
})(({ theme, open }) => ({
  zIndex: theme.zIndex.drawer + 1,
  transition: theme.transitions.create(["width", "margin"], {
    easing: theme.transitions.easing.sharp,
    duration: theme.transitions.duration.leavingScreen,
  }),
  ...(open && {
    marginLeft: drawerWidth,
    width: `calc(100% - ${drawerWidth}px)`,
    transition: theme.transitions.create(["width", "margin"], {
      easing: theme.transitions.easing.sharp,
      duration: theme.transitions.duration.enteringScreen,
    }),
  }),
})));

const Drawer = styled(MuiDrawer, {
  shouldForwardProp: (prop) => prop !== "open",
})(({ theme, open }) => ({
  "& .MuiDrawer-paper": {
    position: "relative",
    whiteSpace: "nowrap",
    width: drawerWidth,
    transition: theme.transitions.create("width", {
      easing: theme.transitions.easing.sharp,
      duration: theme.transitions.duration.enteringScreen,
    }),
    boxSizing: "border-box",
    ...(!open && {
      overflowX: "hidden",
      transition: theme.transitions.create("width", {
        easing: theme.transitions.easing.sharp,
        duration: theme.transitions.duration.leavingScreen,
      }),
      width: theme.spacing(7),
      [theme.breakpoints.up("sm")]: {
        width: theme.spacing(9),
      }
    })
  }
})));

```

```

    },
  })),
},
}));

```

```

const defaultTheme = createTheme();

```

```

export default function Dashboard() {
  const [open, setOpen] = React.useState(true);
  const toggleDrawer = () => {
    setOpen(!open);
  };

  const { handleLogout } = useAuth();

  const logout = () => {
    handleLogout();
  };

  return (
    <ThemeProvider theme={defaultTheme}>
      <Box sx={{ display: "flex" }}>
        <CssBaseline />
        <AppBar position="absolute" open={open}>
          <Toolbar
            sx={{
              pr: "24px", // keep right padding when drawer closed
            }}
          >
            <IconButton
              edge="start"
              color="inherit"
              aria-label="open drawer"
              onClick={toggleDrawer}
              sx={{
                marginRight: "36px",
                ...(open && { display: "none" }),
              }}
            >
              <MenuIcon />
            </IconButton>
            <Typography
              component="h1"
              variant="h6"
              color="inherit"
              noWrap
              sx={{ flexGrow: 1 }}
            >
              Dashboard
            </Typography>
          </Toolbar>
        </AppBar>
        <Drawer variant="permanent" open={open}>
          <Toolbar
            sx={{
              display: "flex",
              alignItems: "center",

```

```

        justifyContent: "flex-end",
        px: [1],
      }}
    >
      <IconButton onClick={toggleDrawer}>
        <ChevronLeftIcon />
      </IconButton>
    </Toolbar>
    <Divider />
    <List component="nav">
      <ListItemButton>
        <ListItemIcon>
          <ListAltIcon />
        </ListItemIcon>
        <Link
          to={` /page-one`}
          style={{ textDecoration: "none" }}
        >
          Go to Page 1
        </Link>
      </ListItemButton>
      <ListItemButton>
        <ListItemIcon>
          <ListAltIcon />
        </ListItemIcon>
        <Link
          to={` /page-two`}
          style={{ textDecoration: "none" }}
        >
          Go to Page 2
        </Link>
      </ListItemButton>
      <ListItemButton>
        <ListItemIcon>
          <LogoutIcon />
        </ListItemIcon>
        <ListItemText onClick={logout} primary="Log Out" />
      </ListItemButton>
    </List>
  </Drawer>
  <Box
    component="main"
    sx={{
      backgroundColor: (theme) =>
        theme.palette.mode === "light"
          ? theme.palette.grey[100]
          : theme.palette.grey[900],
      flexGrow: 1,
      height: "100vh",
      overflow: "auto",
    }}
  >
    <Toolbar />
    <Container maxWidth="lg" sx={{ mt: 4, mb: 4 }}>
      <Grid container spacing={3}>
        <Grid item xs={12}>

```

```

        <Paper
          sx={{
            p: 2,
            display: "flex",
            flexDirection: "column",
          }}
        >
          <Outlet />
        </Paper>
      </Grid>
    </Grid>
  </Container>
</Box>
</Box>
</ThemeProvider>
);
}

```

Run this project:

npm run dev

