

Week 3

Section 4 - Grid System

grid.js

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';

const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));

export default function BasicGrid() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={8} sm={12} md={8}>
          <Item>Grid 1</Item>
        </Grid>
        <Grid item xs={4} sm={12} md={4}>
          <Item>Grid 2</Item>
        </Grid>
        <Grid item xs={4} sm={6} md={12}>
          <Item>Grid 3</Item>
        </Grid>
        <Grid item xs={8} sm={6} md={12}>
          <Item>Grid 4</Item>
        </Grid>
      </Grid>
    </Box>
  );
}
```

App.js

```
import React from 'react';
import BasicGrid from './grid.js'

class App extends React.Component {
  render() {
    return (
      <div>
        <BasicGrid />
      </div>
    );
  }
}

export default App;
```

Section 5 Content block in Material UI

blog.js

```

import * as React from "react";
import { styled } from "@mui/material/styles";
import Grid from "@mui/material/Grid";
import Paper from "@mui/material/Paper";
import Typography from "@mui/material/Typography";
import ButtonBase from "@mui/material/ButtonBase";

const Img = styled("img")({
  margin: "auto",
  display: "block",
  maxWidth: "100%",
  maxHeight: "100%"
});

export default function ComplexGrid() {
  return (
    <Paper
      sx={{
        p: 2,
        margin: "auto",
        maxWidth: 500,
        flexGrow: 1,
        backgroundColor: (theme) =>
          theme.palette.mode === "dark" ? "#1A2027" : "#fff"
      }}
    >
      <Grid container spacing={2}>
        <Grid item >
          <ButtonBase sx={{ width: 128, height: 128 }}>
            <Img
              alt="img text"
              src="https://images.unsplash.com/photo-1682695798522-6e208131916d?ixlib=rb-4.0.3&ixid=M3wxMjA3fDF8MHxwaG90by1wYWdlfHx8f6VufDB"
            />
          </ButtonBase>
        </Grid>

        <Grid item xs={12} sm container>
          <Grid item xs container direction="column" spacing={2}>
            <Grid item xs>
              <Typography gutterBottom variant="subtitle1">
                Standard license
              </Typography>
              <Typography variant="body2" gutterBottom>
                Full resolution 1920x1080 • JPEG
              </Typography>
              <Typography variant="body2" color="success.main">
                ID: 1030114
              </Typography>
            </Grid>
            <Grid>
              <Grid item>
                <Typography variant="subtitle1" component="div">
                  $19.00
                </Typography>
              </Grid>
            </Grid>
          </Grid>
        </Grid>
      </Paper>
    );
  }
}

```

App.js

```

import React from 'react';
import Blog from './blog.js'

class App extends React.Component {
  render() {
    return (
      <div>
        <Blog />
      </div>
    );
  }
}

```

```

    });
  }
}

export default App;

```

Section 6 Navigation in Material UI

Change the code in package.json

```

"scripts": {
  "start": "export SET NODE_OPTIONS=--openssl-legacy-provider && react-scripts start",
  "build": "export SET NODE_OPTIONS=--openssl-legacy-provider && react-scripts build"
},

```

index.js

```

import React from 'react';
import ReactDOM from 'react-dom/client';
import { BrowserRouter, Routes, Route } from 'react-router-dom';
import './index.css';
import App from './App';
import reportWebVitals from './reportWebVitals';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <BrowserRouter>
    <App />
  </BrowserRouter>
);

// If you want to start measuring performance in your app, pass a function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
reportWebVitals();

```

App.js

```

import React from 'react';
import BasicGrid from './grid.js'
import Blog from './blog.js'
import { BrowserRouter, Routes, Route, Link } from 'react-router-dom';

class App extends React.Component {
  render() {
    return (

      <div>
        <nav>
          <ul>
            <li>
              <Link to="/">Home</Link>
            </li>
            <li>
              <Link to="/Blog">Blogs</Link>
            </li>
            <li>
              <Link to="/BasicGrid">BasicGrid</Link>
            </li>
          </ul>

```

```

    </nav>
    <Routes>
      <Route path="/Blog" element={<Blog />} />
      <Route path="/BasicGrid" element={<BasicGrid />} />
    </Routes>

  </div>

  );
}
}

export default App;

```

Blog.js

```

import * as React from "react";
import { styled } from "@mui/material/styles";
import Grid from "@mui/material/Grid";
import Paper from "@mui/material/Paper";
import Typography from "@mui/material/Typography";
import ButtonBase from "@mui/material/ButtonBase";

const Img = styled("img")({
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export default function ComplexGrid() {
  return (
    <Paper
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        backgroundColor: (theme) =>
          theme.palette.mode === "dark" ? "#1A2027" : "fff"
      }}
    >
      <Grid container spacing={2}>
        <Grid item>
          <ButtonBase sx={{ width: 128, height: 128 }}>
            <Img
              alt="complex"
              src="https://images.unsplash.com/photo-1682695798522-6e208131916d?ixlib=rb-4.0.3&ixid=M3wxMjA3fDF8MHxwaG90by1wYWdlfHx8fGVufDB"
            />
          </ButtonBase>
        </Grid>
        <Grid item xs={12} sm container>
          <Grid item xs container direction="column" spacing={2}>
            <Grid item xs>
              <Typography gutterBottom variant="subtitle1" component="div">
                Standard license
              </Typography>
              <Typography variant="body2" gutterBottom>
                Full resolution 1920x1080 • JPEG
              </Typography>
              <Typography variant="body2" color="text.secondary">
                ID: 1030114
              </Typography>
            </Grid>
            <Grid item>
              <Typography sx={{ cursor: "pointer" }} variant="body2">
                Remove
              </Typography>
            </Grid>
          </Grid>
          <Grid item>
            <Typography variant="subtitle1" component="div">
              $19.00
            </Typography>
          </Grid>
        </Grid>
      </Grid>
    </Paper>
  );
}

```

```

    </Grid>
  </Paper>
);
}

```

grid.js

```

import * as React from 'react';
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  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));

export default function BasicGrid() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={8}>
          <Item>xs=8</Item>
        </Grid>
        <Grid item xs={4}>
          <Item>xs=4</Item>
        </Grid>
        <Grid item xs={4}>
          <Item>xs=4</Item>
        </Grid>
        <Grid item xs={8}>
          <Item>xs=8</Item>
        </Grid>
      </Grid>
    </Box>
  );
}

```