

Box

The Box component is a generic, theme-aware container with access to CSS utilities from MUI System.



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Introduction



The Box component is a generic container for grouping other components. It's a fundamental building block when working with Material UI—you can think of it as a `<div>` with extra built-in features, like access to your app's theme and the `sx` prop.

Usage



The Box component differs from other containers available in Material UI in that its usage is intended to be multipurpose and open-ended, just like a `<div>`. Components like [Container](#), [Stack](#) and [Paper](#), by contrast, feature usage-specific props that make them ideal for certain use cases: Container for main layout orientation, Stack for one-dimensional layouts, and Paper for elevated surfaces.

Basics



```
import Box from '@mui/material/Box';
```

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The Box component renders as a `<div>` by default, but you can swap in any other valid HTML tag or React component using the `component` prop. The demo below replaces the `<div>` with a `<section>` element:

This Box renders as an HTML section element.

```
import Box from '@mui/material/Box';

export default function BoxBasic() {
  return (
    <Box component="section" sx={{ p: 2, border: '1px dashed grey' }}>
      This Box renders as an HTML section element.
    </Box>
  );
}
```

Customization

With the sx prop

Use the [sx prop](#) to quickly customize any Box instance using a superset of CSS that has access to all the style functions and theme-aware properties exposed in the MUI System package. The demo below shows how to apply colors from the theme using this prop:



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```
import Box from '@mui/material/Box';
import { ThemeProvider } from '@mui/material/styles';

export default function BoxSx() {
  return (
    <ThemeProvider
      theme={{
        palette: {
          primary: {
            main: '#007FFF',
            dark: '#0066CC',
          },
        },
      }}
    >
      <Box
        sx={{
          width: 100,
          height: 100,
          borderRadius: 1,
          bgcolor: 'primary.main',
          '&:hover': {
            bgcolor: 'primary.dark',
          },
        }}
      />
    </ThemeProvider>
  );
}
```

```

    },
  }}
  />
</ThemeProvider>
);
}

```

With MUI System props



i System props are deprecated and will be removed in the next major release. Please use the `sx` prop instead.

```

- <Box mt={2} />
+ <Box sx={{ mt: 2 }} />

```

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Anatomy



The Box component is composed of a single root `<div>` element:

```

<div className="MuiBox-root">
  <!-- contents of the Box -->
</div>

```

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API



See the documentation below for a complete reference to all of the props and classes available to the components mentioned here.

- [<Box />](#)

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