Grid API

API reference docs for the React Grid component. Learn about the props, CSS, and other APIs of this exported module.

Demos

> ✅ For examples and details on the usage of this React component, visit the component demo pages:
>
> - **Grid**

Import

```
import Grid from '@mui/material/Grid';
// or
import { Grid } from '@mui/material';
```

Learn about the difference by [reading this guide on minimizing bundle size](#).

Props

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Props of the native component are also available.

Name	Type	Default	Description
children	node	-	The content of the component.

Name	Type	Default	Description
classes	`object`	-	See [CSS classes API](#) below for more details.

columns	`Array<number>`
	`| number`
	`| object`
		`12`	The number of columns.

columnSpacing	`Array<number`
	`| string>`
	`| number`
	`| object`
	`| string`
		-	Defines the horizontal space between the type `item` components. It overrides the value of the `spacing` prop.

component	`elementType`	-	
container	`bool`	`false`	If `true`, the component will have the flex *container* behavior. You should be wrapping *items* with a *container*.

direction	`'column-reverse'`
	`| 'column'`
	`| 'row-reverse'`
	`| 'row'`
	`| Array<'column-reverse'`
	`| 'column'`
	`| 'row-reverse'`
	`| 'row'>`
	`| object`
		`'row'`	Defines the `flex-direction` style property. It is applied for all screen sizes.

item	`bool`	`false`	

lg	`'auto'`
	`| number`
	`| bool`
		`false`	If a number, it sets the number of columns the grid item uses. It can't be greater than the total number of columns of the container (12 by default). If 'auto', the grid item's width matches its content. If false, the prop is ignored. If true, the grid item's width grows to use the space available in the grid container. The value is applied for the `lg` breakpoint and wider screens if not overridden.

Name	Type	Default	Description

md	`'auto'`
	`| number`
	`| bool`
		`false`	If a number, it sets the number of columns the grid item uses. It can't be greater than the total number of columns of the container (12 by default). If 'auto', the grid item's width matches its content. If false, the prop is ignored. If true, the grid item's width grows to use the space available in the grid container. The value is applied for the `md` breakpoint and wider screens if not overridden.

rowSpacing	`Array<number`
	`| string>`
	`| number`
	`| object`
	`| string`
		-	Defines the vertical space between the type `item` components. It overrides the value of the `spacing` prop.

sm	`'auto'`
	`| number`
	`| bool`
		`false`	If a number, it sets the number of columns the grid item uses. It can't be greater than the total number of columns of the container (12 by default). If 'auto', the grid item's width matches its content. If false, the prop is ignored. If true, the grid item's width grows to use the space available in the grid container. The value is applied for the `sm` breakpoint and wider screens if not overridden.

spacing	`Array<number`
	`| string>`
	`| number`
	`| object`
	`| string`
		`0`	Defines the space between the type `item` components. It can only be used on a type `container` component.

sx	`Array<func`
	`| object`
	`| bool>`
	`| func`
	`| object`
		-	See the [`sx` page](#) for more details.

wrap	`'nowrap'`
	`| 'wrap-reverse'`
	`| 'wrap'`
		`'wrap'`	Defines the `flex-wrap` style property. It's applied for all screen sizes.

Name	Type	Default	Description
xl	`'auto' | number | bool`	`false`	If a number, it sets the number of columns the grid item uses. It can't be greater than the total number of columns of the container (12 by default). If 'auto', the grid item's width matches its content. If false, the prop is ignored. If true, the grid item's width grows to use the space available in the grid container. The value is applied for the `xl` breakpoint and wider screens if not overridden.
xs	`'auto' | number | bool`	`false`	If a number, it sets the number of columns the grid item uses. It can't be greater than the total number of columns of the container (12 by default). If 'auto', the grid item's width matches its content. If false, the prop is ignored. If true, the grid item's width grows to use the space available in the grid container. The value is applied for all the screen sizes with the lowest priority.
zeroMinWidth	`bool`	`false`	

As a CSS utility, the Grid component also supports all `system` properties. You can use them as props directly on the component.

> The `ref` is forwarded to the root element.

Theme default props

You can use `MuiGrid` to change the default props of this component **with the theme**.

CSS classes

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These class names are useful for styling with CSS. They are applied to the component's slots when specific states are triggered.

Class name	Rule name	Description
.MuiGrid-container	`container`	Styles applied to the root element if `container={true}`.
.MuiGrid-direction-xs-column	`direction-xs-column`	Styles applied to the root element if `direction="column"`.
.MuiGrid-direction-xs-column-reverse	`direction-xs-column-reverse`	Styles applied to the root element if `direction="column-reverse"`.
.MuiGrid-direction-xs-row-reverse	`direction-xs-row-reverse`	Styles applied to the root element if `direction="row-reverse"`.
.MuiGrid-grid-xs-1	`grid-xs-1`	
.MuiGrid-grid-xs-10	`grid-xs-10`	
.MuiGrid-grid-xs-11	`grid-xs-11`	
.MuiGrid-grid-xs-12	`grid-xs-12`	
.MuiGrid-grid-xs-2	`grid-xs-2`	
.MuiGrid-grid-xs-3	`grid-xs-3`	
.MuiGrid-grid-xs-4	`grid-xs-4`	
.MuiGrid-grid-xs-5	`grid-xs-5`	
.MuiGrid-grid-xs-6	`grid-xs-6`	
.MuiGrid-grid-xs-7	`grid-xs-7`	
.MuiGrid-grid-xs-8	`grid-xs-8`	
.MuiGrid-grid-xs-9	`grid-xs-9`	

Class name	Rule name	Description
.MuiGrid-grid-xs-auto	`grid-xs-auto`	
.MuiGrid-grid-xs-true	`grid-xs-true`	
.MuiGrid-item	`item`	Styles applied to the root element if `item={true}`.
.MuiGrid-root	`root`	Styles applied to the root element.
.MuiGrid-spacing-xs-1	`spacing-xs-1`	
.MuiGrid-spacing-xs-10	`spacing-xs-10`	
.MuiGrid-spacing-xs-2	`spacing-xs-2`	
.MuiGrid-spacing-xs-3	`spacing-xs-3`	
.MuiGrid-spacing-xs-4	`spacing-xs-4`	
.MuiGrid-spacing-xs-5	`spacing-xs-5`	
.MuiGrid-spacing-xs-6	`spacing-xs-6`	
.MuiGrid-spacing-xs-7	`spacing-xs-7`	
.MuiGrid-spacing-xs-8	`spacing-xs-8`	
.MuiGrid-spacing-xs-9	`spacing-xs-9`	
.MuiGrid-wrap-xs-nowrap	`wrap-xs-nowrap`	Styles applied to the root element if `wrap="nowrap"`.
.MuiGrid-wrap-xs-wrap-reverse	`wrap-xs-wrap-reverse`	Styles applied to the root element if `wrap="reverse"`.
.MuiGrid-zeroMinWidth	`zeroMinWidth`	Styles applied to the root element if

Class name	Rule name	Description
		`zeroMinWidth={true}`.

You can override the style of the component using one of these customization options:

- With a **global class name**.
- With a rule name as part of the component's `styleOverrides` **property** in a custom theme.

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