Transitions

The theme key enables you to customize the durations and easings of the various transitions used across MUI components, and offers a utility for creating custom transitions.

API

`theme.transitions.create(props, options) => transition`

Arguments

1. `props` (*string* | *string[]*): Defaults to `['all']` . Provides a CSS property, or a list of CSS properties that should be transitioned.
2. `options` (*object* [optional]):

- `options.duration` (*string* | *number* [optional]): Defaults to `theme.transitions.duration.standard` . Provides the duration of the transition.
- `options.easing` (*string* [optional]): Defaults to `theme.transitions.easing.easeInOut` . Provides the easing for the transition.
- `options.delay` (*string* | *number* [optional]): Defaults to `0` . Provides the delay for the transition.

Returns

`transition` : A CSS transition value, which composes all CSS properties that should be transitioned, together with the defined duration, easing and delay.

Use the `theme.transitions.create()` helper to create consistent transitions for the elements of your UI.

```
theme.transitions.create(['background-color', 'transform']);
```

Example

{{"demo": "TransitionHover.js", "defaultCodeOpen": false}}

`theme.transitions.getAutoHeightDuration(height) => duration`

Arguments

1. `height` (*number*): The height of the component.

Returns

`duration` : The calculated duration based on the height.

Durations

You can change some or all of the duration values, or provide your own (for use in the `create()` helper). This example shows all the default values (in milliseconds), but you only need to provide the keys you wish to change or add.

```
const theme = createTheme({
  transitions: {
    duration: {
      shortest: 150,
```

```
      shorter: 200,
      short: 250,
      // most basic recommended timing
      standard: 300,
      // this is to be used in complex animations
      complex: 375,
      // recommended when something is entering screen
      enteringScreen: 225,
      // recommended when something is leaving screen
      leavingScreen: 195,
    },
  },
});
```

Easings

You can change some or all of the easing values, or provide your own, by providing a custom CSS `transition-timing-function` value.

```
const theme = createTheme({
  transitions: {
    easing: {
      // This is the most common easing curve.
      easeInOut: 'cubic-bezier(0.4, 0, 0.2, 1)',
      // Objects enter the screen at full velocity from off-screen and
      // slowly decelerate to a resting point.
      easeOut: 'cubic-bezier(0.0, 0, 0.2, 1)',
      // Objects leave the screen at full velocity. They do not decelerate when off-
screen.
      easeIn: 'cubic-bezier(0.4, 0, 1, 1)',
      // The sharp curve is used by objects that may return to the screen at any
time.
      sharp: 'cubic-bezier(0.4, 0, 0.6, 1)',
    },
  },
});
```

References

Check out the [Transitions](#) page to explore the transition components that are included with MUI.