



Materialize



tutorialspoint

S I M P L Y E A S Y L E A R N I N G

www.tutorialspoint.com



<https://www.facebook.com/tutorialspointindia>



<https://twitter.com/tutorialspoint>

About the Tutorial

Materialize is a UI component library created with CSS, JavaScript, and HTML. Materialize UI components help in constructing attractive, consistent, and functional web pages and web apps, while adhering to modern web design principles such as browser portability, device independence, and graceful degradation. It helps in creating faster, beautiful, and responsive websites. It is inspired from Google Material Design.

Audience

This tutorial is meant for professionals who would like to learn the basics of Materialize and how to use it to create faster, beautiful, and responsive web pages and apps. This tutorial explains all the fundamental concepts of Materialize.

Prerequisites

Before proceeding with this tutorial, you should have a basic understanding of HTML, CSS, JavaScript, Document Object Model (DOM), and any text editor. In addition, it will help if you know how web-based applications work.

Execute Materialize Online

For most of the examples given in this tutorial, you will find a **Try-it** option. Use this option to execute your Materialize programs on the spot and enjoy your learning. Try the following example using the **Try-it** option available at the top right corner of the following sample code box.

```
<!DOCTYPE html>
<html>
  <head>
    <title>The Materialize Example</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material+Icons">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/css/materialize.min.css">
    <script type="text/javascript" src="https://code.jquery.com/jquery-
2.1.1.min.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/js/materialize.min.js"></scrip
t>
  </head>
  <body>
    <div class="card-panel teal lighten-2"><h3>Hello World!</h3></div>
  </body>
</html>
```

Copyright & Disclaimer

© Copyright 2017 by Tutorials Point (I) Pvt. Ltd.

All the content and graphics published in this e-book are the property of Tutorials Point (I) Pvt. Ltd. The user of this e-book is prohibited to reuse, retain, copy, distribute or republish any contents or a part of contents of this e-book in any manner without written consent of the publisher.

We strive to update the contents of our website and tutorials as timely and as precisely as possible, however, the contents may contain inaccuracies or errors. Tutorials Point (I) Pvt. Ltd. provides no guarantee regarding the accuracy, timeliness or completeness of our website or its contents including this tutorial. If you discover any errors on our website or in this tutorial, please notify us at contact@tutorialspoint.com

Table of Contents

About the Tutorial.....	i
Audience	i
Prerequisites	i
Execute Materialize Online	i
Copyright & Disclaimer.....	ii
Table of Contents	iii
1. MATERIALIZE – OVERVIEW	1
2. MATERIALIZE – ENVIRONMENT SETUP	3
How to Use Materialize?	3
Local Installation	3
CDN Based Version.....	4
3. MATERIALIZE – COLORS.....	6
4. MATERIALIZE – GRIDS.....	11
Columns for Small Screen Devices	11
Columns for Medium Screen Devices	12
Columns for Large Screen Devices	12
5. MATERIALIZE – HELPERS.....	16
6. MATERIALIZE – MEDIA.....	21
7. MATERIALIZE – SHADOWS.....	24
8. MATERIALIZE – TABLES.....	29
9. MATERIALIZE – TYPOGRAPHY	35
10. MATERIALIZE – BADGES	38
11. MATERIALIZE – BUTTONS	41

12. MATERIALIZE – BREADCRUMB.....	45
13. MATERIALIZE – CARDS.....	48
14. MATERIALIZE – CHIPS	54
15. MATERIALIZE – COLLECTIONS.....	57
16. MATERIALIZE – FOOTER	63
17. MATERIALIZE – FORM.....	66
Important Input Controls	69
Selects	70
Switches	73
File	75
Range	77
DatePicker	78
Character Counter	79
18. MATERIALIZE – ICONS	82
19. MATERIALIZE – NAVBAR	86
20. MATERIALIZE – PAGINATION	91
21. MATERIALIZE – PRELOADER.....	94
22. MATERIALIZE – COLLAPSIBLE.....	97
23. MATERIALIZE – DIALOGS	103
24. MATERIALIZE – DROPDOWNS.....	106
25. MATERIALIZE – TABS	109
26. MATERIALIZE – WAVES.....	112

1. MATERIALIZE – OVERVIEW

Materialize is a UI component library created with CSS, JavaScript, and HTML. Materialize reusable UI components help in constructing attractive, consistent, and functional web pages and web apps while adhering to modern web design principles such as browser portability, device independence, and graceful degradation.

Some of its salient features are as follows:

- In-built responsive designing.
- Standard CSS with minimal footprint.
- New versions of common user interface controls such as buttons, checkboxes, and text fields adapted to follow Material Design concepts.
- Enhanced and specialized features such as cards, tabs, navigation bars, toasts, and so on.
- Free to use and requires jQuery JavaScript library to function properly.
- Cross-browser, and can be used to create reusable web components.

Responsive Design

Materialize has in-built responsive designing so that the website created using Materialize will redesign itself as per the device size. Materialize classes are created in such a way that the website can fit any screen size.

The websites created using Materialize are fully compatible with PC, tablets, and mobile devices.

Extensible

Materialize is by design very minimal and flat. It is designed considering the fact that it is much easier to add new CSS rules than to overwrite the existing CSS rules. It supports shadows and bold colors. The colors and shades remain uniform across various platforms and devices.

And most important of all, it is absolutely free to use.

2. MATERIALIZE – ENVIRONMENT SETUP

How to Use Materialize?

There are two ways to use Materialize:

Local Installation - You can download the **materialize.min.css** and **materialize.min.js** files on your local machine and include it in your HTML code.

CDN Based Version - You can include the **materialize.min.css** and **materialize.min.js** files into your HTML code directly from the Content Delivery Network (CDN).

Local Installation

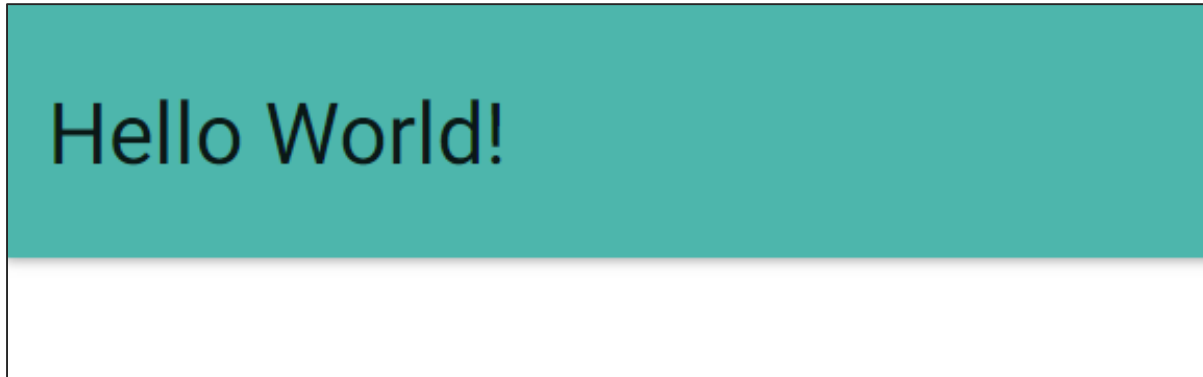
- Go to <http://materializecss.com/getting-started.html> to download the latest version available.
- Then, put the downloaded **materialize.min.js** file in a directory of your website, e.g. /js and **materialize.min.css** in /css.

Example

Include the **css** and **js** file in your HTML file as follows.

```
<!DOCTYPE html>
<html>
  <head>
    <title>The Materialize Example</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material+Icons">
    <link rel="stylesheet" href="materialize.min.css">
    <script type="text/javascript" src="https://code.jquery.com/jquery-
2.1.1.min.js"></script>
    <script src="materialize.min.js"></script>
  </head>
  <body>
    <div class="card-panel teal lighten-2"><h3>Hello World!</h3></div>
  </body>
</html>
```

It will produce the following result.



CDN Based Version

You can include the **materialize.min.js** and **materialize.min.css** files into your HTML code directly from the Content Delivery Network (CDN). **cdnjs.cloudflare.com** provides content for the latest version.

We are using cdnjs.cloudflare.com CDN version of the library throughout this tutorial.

Example

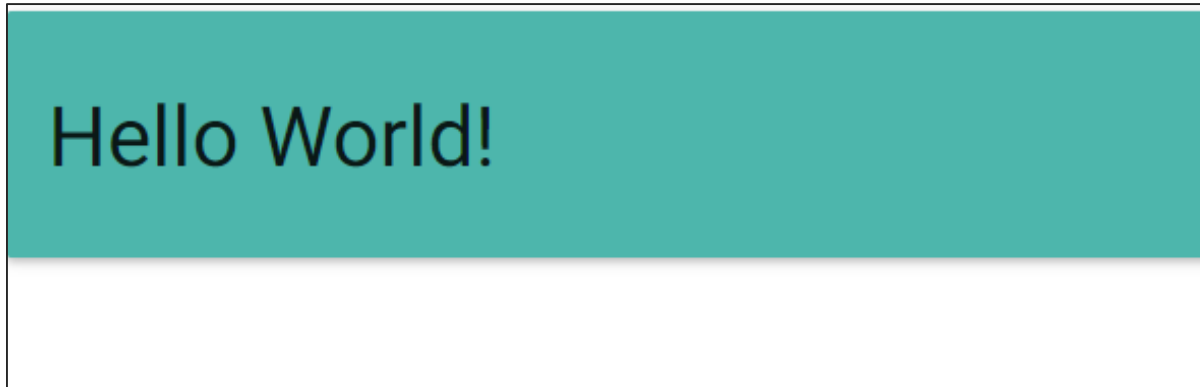
Rewrite the above example using **materialize.min.css** and **materialize.min.js** from cdnjs.cloudflare.com CDN.

```
<!DOCTYPE html>
<html>
  <head>
    <title>The Materialize Example</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material+Icons">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/css/materialize.min.css">
    <script type="text/javascript" src="https://code.jquery.com/jquery-2.1.1.min.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/js/materialize.min.js"></script>
  </head>
```



```
<body>  
  <div class="card-panel teal lighten-2"><h3>Hello World!</h3></div>  
</body>  
</html>
```

It will produce the following result.



3. MATERIALIZE – COLORS

Materialize supports a rich set of color classes. These color classes are inspired and developed considering the colors used in marketing, road signs, and sticky notes.

- red
- pink
- purple
- deep-purple
- indigo
- blue
- light-blue
- cyan
- teal
- green
- light-green
- lime
- yellow
- amber
- orange
- deep-orange
- brown
- grey
- blue-grey
- black
- white
- transparent

Usage

Following is the list of lightness/darkness classes, which can be used to vary the color applied.

- lighten-1
- lighten-2
- lighten-3
- lighten-4
- lighten-5
- darken-1
- darken-2
- darken-3
- darken-4
- accent-1
- accent-2
- accent-3
- accent-4

Example



The following example demonstrates how to use the above classes to render the background or to change the color of the text. In case of background, add the classes as such and in case of text, suffix '-text' to color class and prefix 'text-' to lightening class.

materialize_colors.htm

```
<!DOCTYPE html>
<html>
  <head>
    <title>The Materialize Colors Example</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material+Icons">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/css/materialize.min.css">
    <script type="text/javascript" src="https://code.jquery.com/jquery-2.1.1.min.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/js/materialize.min.js"></script>
  </head>
  <body>
    <h2>Color Theme Demo</h2>
    <hr/>
    <div class="card-panel">
      <div class="card-panel red lighten-2">
        <h1>Red Colored Theme</h1>
      </div>
      <span class="red-text text-darken-2">
        <h2>Red Colored Text</h2>
      </span>
      <ul>
        <li class="red lighten-5"><p>Using red lighten-5</p></li>
        <li class="red lighten-4"><p>Using red lighten-4</p></li>
        <li class="red lighten-3"><p>Using red lighten-3</p></li>
        <li class="red lighten-2"><p>Using red lighten-2</p></li>
        <li class="red lighten-1"><p>Using red lighten-1</p></li>
        <li class="red"><p>Using red</p></li>
      </ul>
    </div>
  </body>
</html>
```

```
<li class="red darken-1"><p>Using red darken-1</p></li>
<li class="red darken-2"><p>Using red darken-2</p></li>
<li class="red darken-3"><p>Using red darken-3</p></li>
<li class="red darken-4"><p>Using red darken-4</p></li>
<li class="red accent-1"><p>Using red accent-1</p></li>
<li class="red accent-2"><p>Using red accent-2</p></li>
<li class="red accent-3"><p>Using red accent-3</p></li>
<li class="red accent-4"><p>Using red accent-4</p></li>
</ul>
</div>
</body>
</html>
```

Result

Verify the result.

Color Theme Demo

Red Colored Theme

Red Colored Text



4. MATERIALIZE – GRIDS

Materialize provides a 12 column fluid responsive grid.

It uses the row and column style classes to define rows and columns respectively.

Sr. No.	Class Name & Description
1	row Specifies a padding-less container to be used for responsive columns. This class is mandatory for responsive classes to be fully responsive.
2	col Specifies a column with sub-classes.

col has several sub-classes meant for different types of screens.

Columns for Small Screen Devices

Following is a list of column-level styles for small screen devices, typically smartphones.

Sr. No.	Class Name & Description
1	s1 Defines 1 of 12 columns with width as 08.33%.
2	s2 Defines 2 of 12 columns with width as 16.66%.
3	s3 Defines 3 of 12 columns with width as 25.00%.
4	s4 Defines 4 of 12 columns with width as 33.33%.
s5 – s11	
12	s12 Defines 12 of 12 columns with width as 100%. Default class for small screen phones.

Columns for Medium Screen Devices

Following is a list of column-level styles for medium screen devices, typically tablets.

Sr. No.	Class Name & Description
1	m1 Defines 1 of 12 columns with width as 08.33%.
2	m2 Defines 2 of 12 columns with width as 16.66%.
3	m3 Defines 3 of 12 columns with width as 25.00%.
4	m4 Defines 4 of 12 columns with width as 33.33%.
m5 - m11	
12	m12 Defines 12 of 12 columns with width as 100%. Default class for medium screen phones.

Columns for Large Screen Devices

Following is a list of column-level styles for large screen devices, typically laptops.

Sr. No.	Class Name & Description
1	l1 Defines 1 of 12 columns with width as 08.33%.
2	l2 Defines 2 of 12 columns with width as 16.66%.
3	l3 Defines 3 of 12 columns with width as 25.00%.
4	l4 Defines 4 of 12 columns with width as 33.33%.
l5 – l11	
12	l12 Defines 12 of 12 columns with width as 100%. Default class for large screen devices.

Usage

Each subclass determines the number of columns of the grid to be used based on the type of a device. Consider the following HTML snippet.

```
<div class="row">
  <div class="col s2 m4 l3">
    <p>This text will use 2 columns on a small screen, 4 on a medium screen, and
3 on a large screen.</p>
  </div>
</div>
```

Default columns to be used are 12 on a device, if a sub-class is not mentioned in the class attribute of an HTML element.

Example

materialize_grids.htm

```
<!DOCTYPE html>
<html>
  <head>
    <title>The Materialize Grids Example</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material+Icons">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/css/materialize.min.css">
    <script type="text/javascript" src="https://code.jquery.com/jquery-2.1.1.min.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/js/materialize.min.js"></script>
  </head>
  <body>
    <div class="teal">
      <h2>Mobile First Design Demo</h2>
      <p>Resize the window to see the effect!</p>
    </div>
```



```

<hr/>
<div class="row">
  <div class="col m1 grey center">1</div>
  <div class="col m1 center">2</div>
  <div class="col m1 grey center">3</div>
  <div class="col m1 center">4</div>
  <div class="col m1 grey center">5</div>
  <div class="col m1 center">6</div>
  <div class="col m1 center grey">7</div>
  <div class="col m1 center">8</div>
  <div class="col m1 center grey">9</div>
  <div class="col m1 center">10</div>
  <div class="col m1 center grey">11</div>
  <div class="col m1 center">12</div>
</div>
<div class="row">
  <div class="col m4 l3 yellow">
    <p>This text will use 12 columns on a small screen, 4 on a medium
screen (m4), and 3 on a large screen (l3).</p>
  </div>
  <div class="col s4 m8 l9 grey">
    <p>This text will use 4 columns on a small screen (s4), 8 on a medium
screen (m8), and 9 on a large screen (l9).</p>
  </div>
</div>
</body>
</html>

```

Result

Verify the result.

Mobile First Design Demo

Resize the window to see the effect!

1 2 3 4 5 6 7 8 9 10 11 12

This text will use 12 columns on a small screen, 4 on a medium screen (m4), and 3 on a large screen (l3).

This text will use 4 columns on a small screen (s4), 8 on a medium screen (m8), and 9 on a large screen (l9).

5. MATERIALIZE – HELPERS

Materialize has several utility classes useful for day-to-day designing needs.

- **Color utility classes** – For example, .red, .green, .grey and so on
- **Alignment utility classes** – For example, .valign-wrapper, .left-align, .right-align, .center-align, .left, .right
- **Hiding Content utility classes as per device size** – For example, .hide, .hide-on-small-only, .hide-on-med-only, .hide-on-med-and-down, .hide-on-med-and-up and .hide-on-large-only
- **Formatting utility classes** – For example, truncate, hoverable

Example

materialize_utilities.htm

```
<!DOCTYPE html>
<html>
  <head>
    <title>The Materialize Example</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material+Icons">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/css/materialize.min.css">
    <script type="text/javascript" src="https://code.jquery.com/jquery-2.1.1.min.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/0.97.3/js/materialize.min.js"></script>
  </head>
  <body class="container">
    <h2>Materialize Utilities</h2>
    <hr/>
    <h3>Color Utilities Demo</h3>
    <div class="red">
```

```

    <p>The latest versions of Apple Safari, Google Chrome, Mozilla Firefox,
    and Opera all support many HTML5 features and Internet Explorer 9.0 will also have
    support for some HTML5 functionality.</p>

```

```

    </div>

```

```

    <div class="green">

```

```

        <p>The mobile web browsers that come pre-installed on iPhones, iPads, and
        Android phones all have excellent support for HTML5.</p>

```

```

    </div>

```

```

    <h3>Alignment Utilities Demo</h3>

```

```

    <div class="card-panel valign-wrapper">

```

```

        <p class="valign">Vertically Aligned Text</p>

```

```

    </div>

```

```

    <div class="card-panel">

```

```

        <div><p class="left-align">Left Aligned Text</p></div>

```

```

        <div><p class="right-align">Right Aligned Text</p></div>

```

```

        <div><p class="center-align">Center Aligned Text</p></div>

```

```

    </div>

```

```

    <h3>Hide Utilities Demo</h3>

```

```

    <div class="hide">

```

```

        <p>Hidden on all devices</p>

```

```

    </div>

```

```

    <div class="hide-on-small-only">

```

```

        <p>Hidden on mobile devices</p>

```

```

    </div>

```

```

    <h3>Formatting Utilities Demo</h3>

```

```

    <div class="card-panel">

```

```

        <p class="truncate">The latest versions of Apple Safari, Google Chrome,
        Mozilla Firefox, and Opera all support many HTML5 features and Internet Explorer
        9.0 will also have support for some HTML5 functionality.</p>

```

```

    </div>

```

```

    <div class="card-panel hoverable">

```

```

        <p>The mobile web browsers that come pre-installed on iPhones, iPads, and
        Android phones all have excellent support for HTML5.</p>

```

```

    </div>

```

```

    <h3>Center Utility Demo</h3>

```

```

    <div class="card-panel center">

```

```

```

```
    </div>  
  </body>  
</html>
```

Result

Verify the result.

Materialize Utilities

Color Utilities Demo

The latest versions of Apple Safari, Google Chrome, Mozilla Firefox, and Opera all support many HTML5 features and Internet Explorer 9.0 will also have support for some HTML5 functionality.

The mobile web browsers that come pre-installed on iPhones, iPads, and Android phones all have excellent support for HTML5.

Alignment Utilities Demo

Vertically Aligned Text

Left Aligned Text

Center Aligned Text

Right Aligned Text

Hide Utilities Demo

Hidden on mobile devices

Formatting Utilities Demo

The latest versions of Apple Safari, Google Chrome, Mozilla Firefox, and O...

The mobile web browsers that come pre-installed on iPhones, iPads, and Android phones all have excellent support for HTML5.

Center Utility Demo



End of ebook preview
If you liked what you saw...
Buy it from our store @ <https://store.tutorialspoint.com>