**Adding icons**

There are many websites help you to add icons to your web page such:  
1) Font Awesome 4

2) Google icons  
3) Font Awesome 5

4) Bootstrap icons

**Note:** This is the general code for all icons:

**<I | span class= “icon name” ></I | span>**

**Firstly; Font Awesome 5:**

Font Awesome 5 contain [9430](tel:9430) icons, [1588](tel:1588) icons for free and [7842](tel:7842) icons pro edition (not free) in this class we will illustrate the free one.  
There two ways to use these icons in your web page:   
1- Download the Font Awesome library.

You can download the library from <https://fontawesome.com/how-to-use/on-the-web/setup/hosting-font-awesome-yourself> and linked it with your html page in <head>.

Ex: <link rel="stylesheet" href="fontawesome-free-5.14.0-web/css/all.css"/> then choose the icons you need from <https://fontawesome.com/icons?d=gallery>  
2- Use a Kit code.  
You can get kit code by singing in font awesome 5 website. Put this code in <head>  
Example:  
 <script src="http://kit.fontawesome.com/25a2e6c7e8.js" crossorigin="anonymous"></script>  
the next step is to choose the icons you need from <https://fontawesome.com/icons?d=gallery>

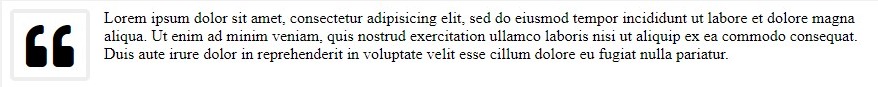
Some important points:

1. To add a border around the icon adds fa-border class to the icon class (beside icon name). Ex: <i class="glyphicon glyphicon-list fa-border">press on this icon to cancel</i>

**Note:** press on this icon to cancel also will be inside a border.

1. To pull icon to left or right add fa-pull-left and fa-pull-right classes. Ex: <i class="fas fa-quote-left fa-3x fa-pull-right fa-border"></i>

**Note:** these classes used with text.



1. To give fixed width to icons add fa-fw class to the icon class. Ex: <i class="fas fa-quote-left fa-border fa-fw"></i>

**Illustration:** Just like letters and other characters, icons can have different widths, and if you need to vertically align icons like in a list or a menu, this can be a problem.

1. To stack (combine) multiply icons add fa-stack class on **the parent**, the fa-stack-1x class for the regularly (smaller) sized icon, and fa-stack-2x for the larger icon.

Ex:

<span class="fa-stack fa-4x">

<i class="fas fa-circle fa-stack-2x"></i>

<i class="fab fa-twitter fa-stack-1x fa-inverse"></i>

</span>

**Note:** you can control the size of these multiply icons by adding one of size classes to the parent element.

1. To alternate (inverse) the icon color form white to black and the reverse add fa-reverse class to class icon. Ex: <i class="fab fa-twitter fa-stack-1x fa-inverse"></i>
2. To rotate the icon use fa-rotate-\* where: \* is the degree of rotation may be (0=360-default deg-, 90, 180, and 270). Ex: <i class="fas fa-horse fa-rotate-90"></i>
3. **Note:** we don’t write deg unit and any other value (like: 37) isn’t valid
4. To flip (position) the icon vertically or horizontally use fa-flip-\* where: \* is a keyword may be vertical or horizontal. Ex: <i class="fas fa-horse fa-flip-vertical"></i>
5. To rotate icon use fa-spin the rotation occurs without any steps Ex: <i class="fas fa-horse fa-spin"></i>
6. To rotate icon use fa-pluse the rotation occurs with 8 steps Ex: <i class="fas fa-horse fa-pulse"></i>
7. To edit icon size use fa-xs, fa-sm, fa-lg, fa-2x, fa-3x, fa-4x, fa-5x, fa-6x, fa-7x, fa-8x, fa-9x, or fa-10x **where**: fa-xs is the smallest size and fa-10x is the largest one.
8. The fa-ul and fa-li classes are used to replace default bullets in unordered lists. Where fa-ul is used inside <ul> and fa-li is used inside class icon (beside the icon name)

**Note:**

* fa-ul used to remove the default bullets.
* Fa-li used to position the icon form its position to bullets position (the first position of default bullets before removing it). To make sure add fa-li to the icon and remove the fa-ul from <ul> you will notice disappearing the icon (as both default bullet and the icon have the same position).

Ex:

<ul class="fa-ul">

<li><span class="fa-li"><i class="fas fa-check-square"></i></span>List Item</li>

<li><span class="fa-li"><i class="fas fa-spinner fa-pulse"></i></span>List Item</li>

<li><span class="fa-li"><i class="fas fa-square"></i></span>List Item</li>

</ul>

**Secondly; Font Awesome 4**  
to use the Font Awesome icons:

1. add the following line inside the <head> section of your HTML page:  
   <link rel="stylesheet" href="<https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css>">
2. Choose the icon you want from <https://fontawesome.com/v4.7.0/icons/>

Some important points:

* The fa-lg (33% increase), fa-2x, fa-3x, fa-4x, or fa-5x classes are used to increase the icon sizes relative to their container. Ex: <i class="fa fa-car fa-lg"></i>
* All other points exactly like the points in font Awesome 5. The difference that font Awesome 5 icons have **fas** prefix, but font Awesome 4 icons have **fa** prefix.

**Thirdly; Bootstrap icons:**

To use bootstrap icons:

1. Add this link in <head> <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
2. Use this cite to choose the icon name you want and put this name within icon class. <https://getbootstrap.com/docs/3.3/components/>

Ex:

<i class="glyphicon glyphicon-cloud"></i>

<span class="glyphicon glyphicon-map-marker" aria-hidden="true"></span>

**Note:** Glyphicons are not supported in Bootstrap 4.

**Secondly; Google icons**

To use Google icons:

1. add the following line inside the <head> section of your HTML page:

<link rel="stylesheet" href="https://fonts.googleapis.com/icon?family=Material+Icons">

1. Choose the **icon name** you want from <https://material.io/resources/icons/?icon=arrow_circle_up&style=baseline>

**Note:** Material icons size is 24px by default.