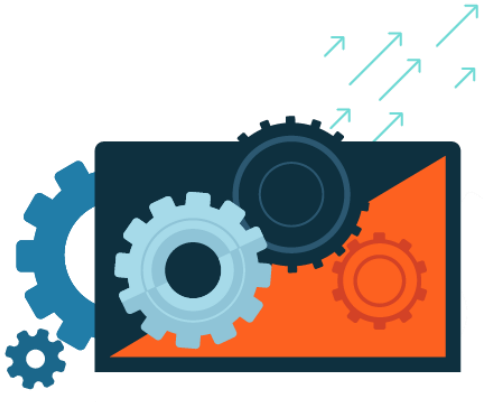


MODULE-8
BOOTSTRAP SCROLLSPY, JQUERY AND JQUERY UI

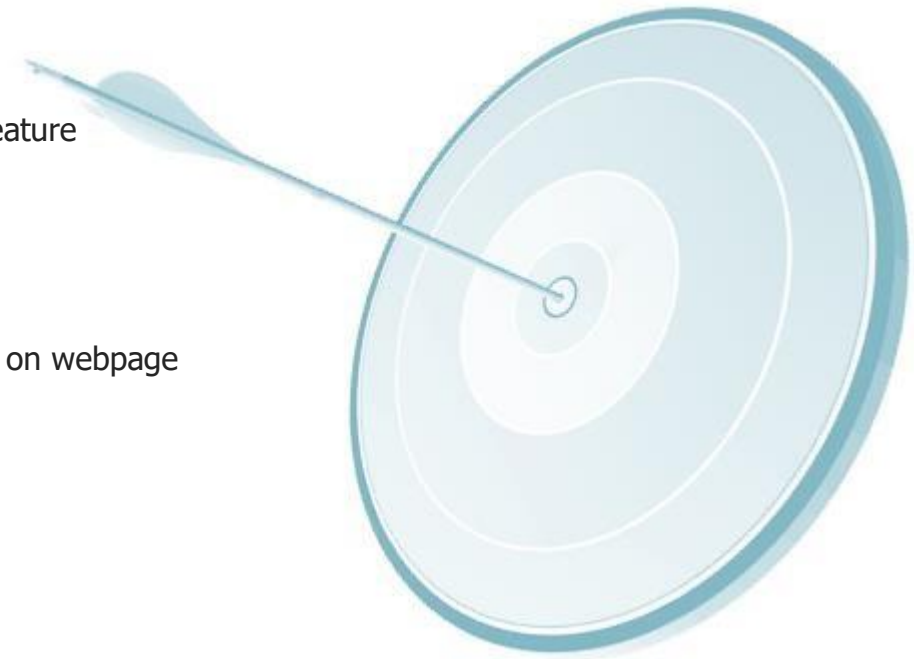
Course Topics

- → Module 1
  - » Deploying the first Website to Amazon S3
- → Module 2
  - » Creating web pages with HTML5
- → Module 3
  - » Styling web pages using CSS
- → Module 4
  - » CSS3 effects and animations
- → Module 5
  - » Handling events with JavaScript
- → Module 6
  - » Twitter Bootstrap 3
- → Module 7
  - » Twitter Bootstrap 3 Project
- → Module 8
  - » **Bootstrap ScrollSpy, jQuery and jQuery UI**
- → Module 9
  - » Ajax, Google APIs, Social Plugins
- → Module 10
  - » Project - Building Website Tour

Objectives

At the end of this module, you will be able to:

- → Learn how to use Bootstrap 3 ScrollSpy component
- → Create a single page website using Bootstrap ScrollSpy feature
- → Introduction to jQuery
- → Write jQuery code in webpages
- → Use DatePicker and Spinner element from jQuery UI
- → Use jQuery countdown plugin to show countdown timers on webpage
- → Work with jQuery content hover plugin

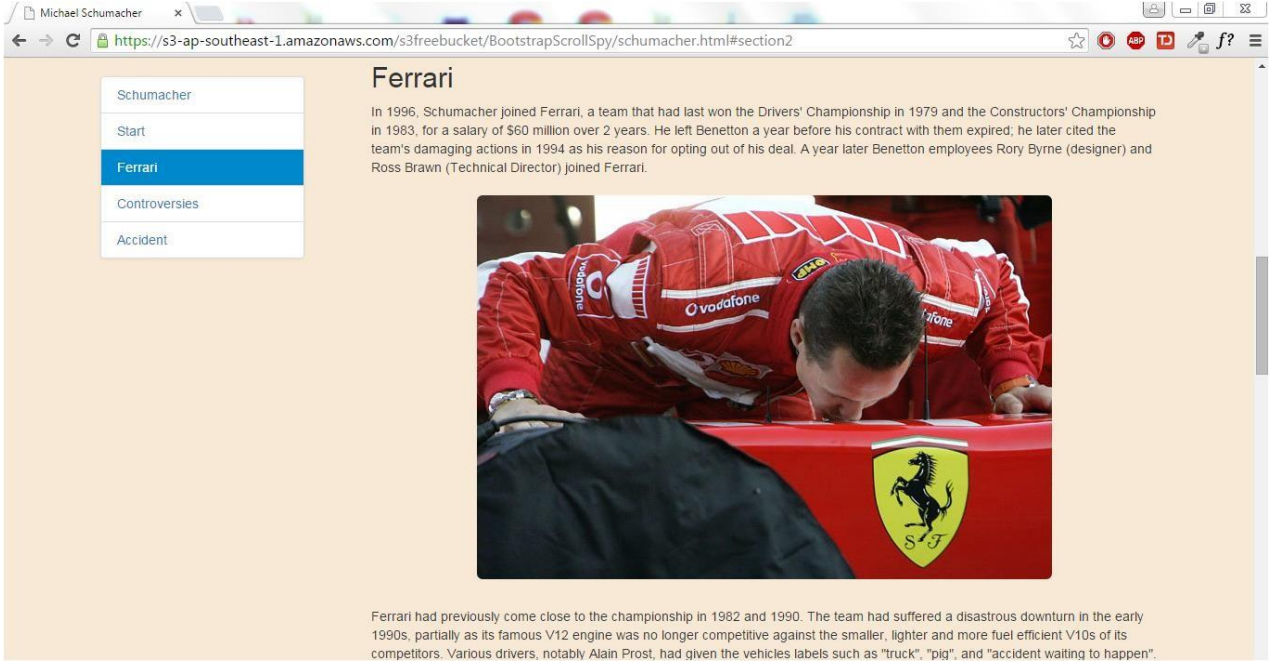


Bootstrap ScrollSpy

→ Bootstrap provides ScrollSpy which can be used to automatically update links in a navigation list based on your scroll position

→ While using ScrollSpy, navigation links get updated automatically when you scroll down, to point your current position on the page and you can directly jump to a section of a long page by just clicking on the navigation links

Bootstrap ScrollSpy (Contd.)



Note : As you scroll down navigation links get updated automatically to point your current position on the page

Creating a ScrollSpy

→ Follow below steps to create a ScrollSpy

- » Use class data-spy="scroll" on the element that should be used as the scrollable area (e.g. <body> element)
- » To connect the navbar with the scrollable area, use the data-target attribute with a value of the id or the class name of the navigation bar
- » Make sure scrollable elements have the same ID of the links as navbar's list items

Note : The element with data-spy="scroll" (e.g. <body data-spy="scroll">) requires the CSS position property to be set to "relative" to work properly

Creating a ScrollSpy (Contd.)

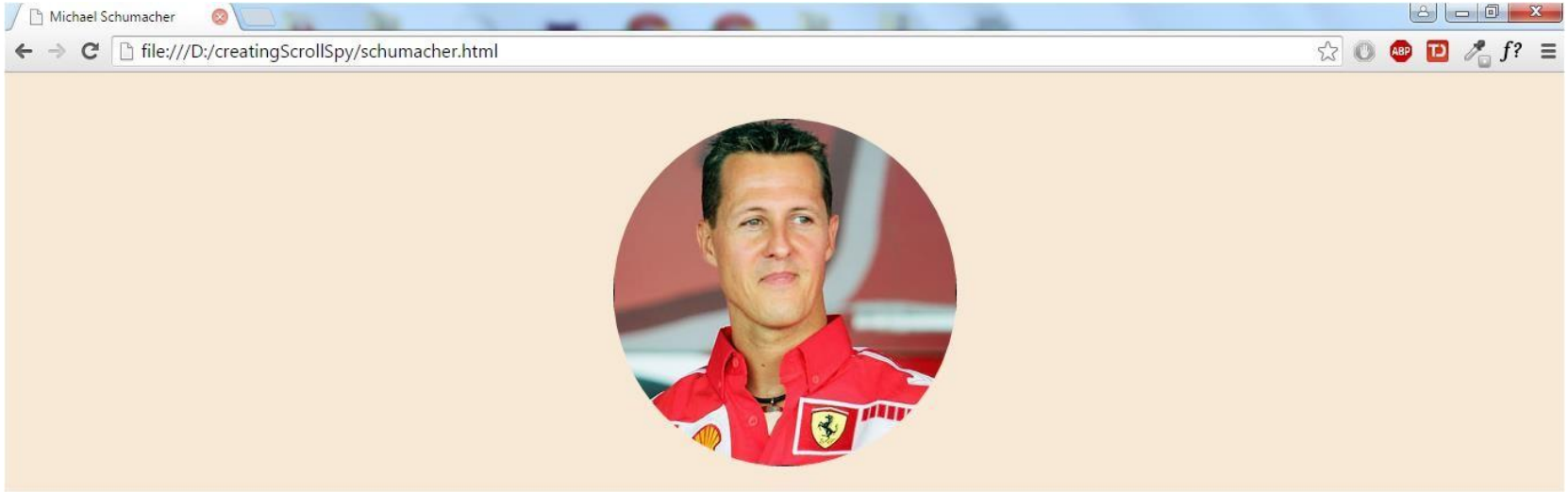
→ Below we have set data-spy to scroll and data-target to id myScrollSpy which is the id of navigation bar that we will define next

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>Michael Schumacher</title>
    <link rel="stylesheet" href="bootstrap/css/bootstrap.min.css"/>
    <script src="bootstrap/js/jquery-1.11.3.js"></script>
    <script src="bootstrap/js/bootstrap.min.js"></script>
<style type="text/css">
/* CSS Styles */
body{
    position: relative;
}
body{background:#F8E9D6}
</style>
</head>

  <body  data-spy="scroll" data-target="#myScrollspy">
  <br/><br/>
   <div class="container">
     <div class="row">
      <div class="col-md-12">
       <img src="michael_schumacher.jpg" class="img-responsive center-block img-circle">
      </div>
    </div>
   </div>

</body>
</html>
```

Note that body position is set to relative which is required for scrollspy to work properly

Creating a ScrollSpy (Contd.)

→ Currently we just have circular image positioned in center of the page. Next we are going to write the markup for navigation bars



Creating a ScrollSpy (Contd.)

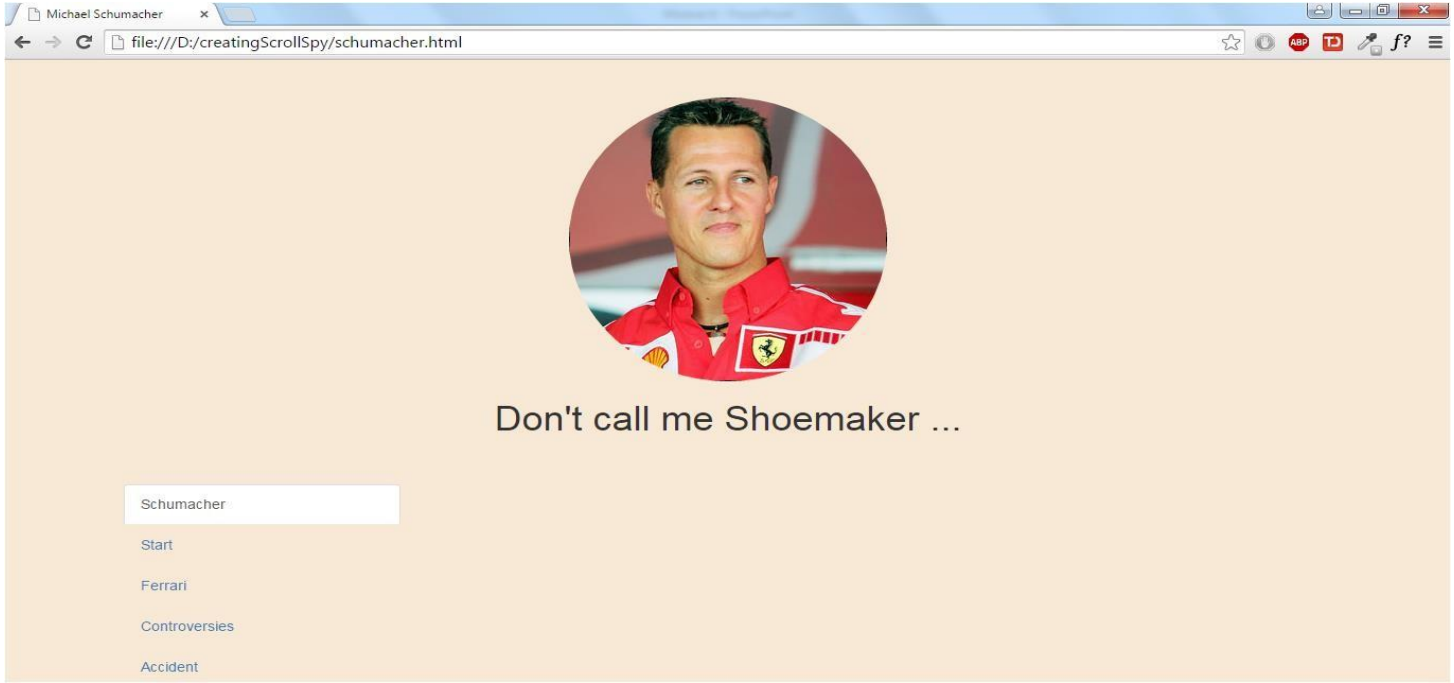
→ Below is the markup for the navigation bar. Note that for navigation bar we have used column size of 3, we will use the remaining column size of 9 for the actual content

```
<div class="container">
  <h1 class="text-center">Don't call me Shoemaker ...</h1><br/><br/>
  <div class="row">
     <div class="col-sm-3" id="myScrollspy">
        <ul class="nav nav-tabs nav-stacked" data-offset-top="120" data-spy="affix">
            <li class="active"><a href="#section1">Schumacher</a></li>
            <li><a href="#section2">Start</a></li>
            <li><a href="#section3">Ferrari</a></li>
            <li><a href="#section4">Controversies</a></li>
            <li><a href="#section5">Accident</a></li>
        </ul>
     </div>
   </div>
</div>
```

→ We have set the navigation links to section1, section2, section3 and so on which will match the id for content sections

Creating a ScrollSpy (Contd.)

→ After the Navigation bar your page will look like as shown below



Creating a ScrollSpy (Contd.)

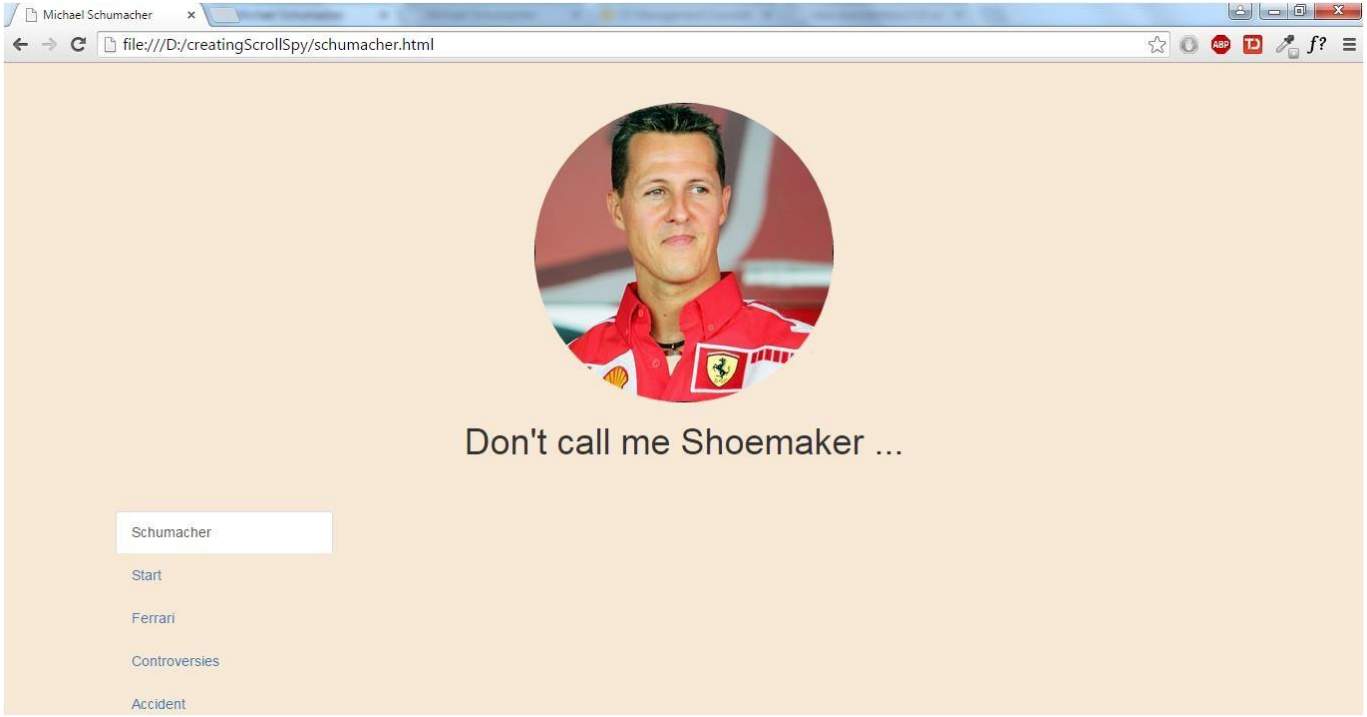
→ Our Navigations links are too big, next we will write CSS3 media queries to define style rules for different media types/devices

```
@media screen and (min-width: 992px) and (max-width: 1199px){
    ul.nav-tabs{
        width: 180px; /*  nav width on medium devices */
    }
}
@media screen and (min-width: 1200px){
    ul.nav-tabs{
        width: 220px; /*  nav width on large devices */
    }
}
```

CSS3 media rules for small and large devices

Creating a ScrollSpy (Contd.)

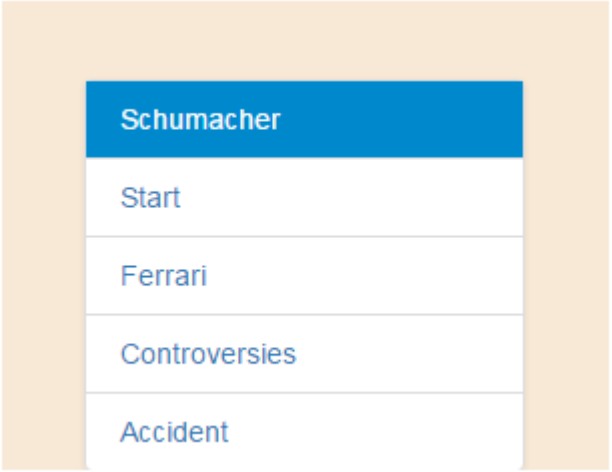
→ You can see the change in length of navigation links after media queries



Creating a ScrollSpy (Contd.)

→ Next we are going to write some CSS to style the navigation bar

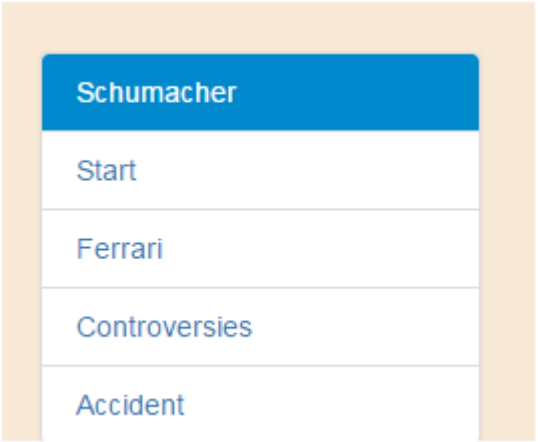
```
ul.nav-tabs {
    width: 140px;
    margin-top: 20px;
    border-radius: 4px;
    background: #fff;
    z-index: 999;
    border: 1px solid #ddd;
    box-shadow: 0 1px 4px rgba(0, 0, 0, 0.067);
}
ul.nav-tabs li {
    margin: 0;
    border-top: 1px solid #ddd;
}
ul.nav-tabs li:first-child {
    border-top: none;
}
ul.nav-tabs li a {
    margin: 0;
    padding: 8px 16px;
    border-radius: 0;
}
ul.nav-tabs li.active a, ul.nav-tabs li.active a:hover {
    color: #fff;
    background: #0088cc;
    border: 1px solid #0088cc;
}
```



Creating a ScrollSpy (Contd.)

→ Lets give the first navigation link a circular border

```
ul.nav-tabs li:first-child a {
    border-radius: 4px 4px 0 0;
}
ul.nav-tabs li:last-child a {
    border-radius: 0 0 4px 4px;
}
```



Creating a ScrollSpy (Contd.)

→ We are done with the navigation bar lets define the actual content which they will be linked to

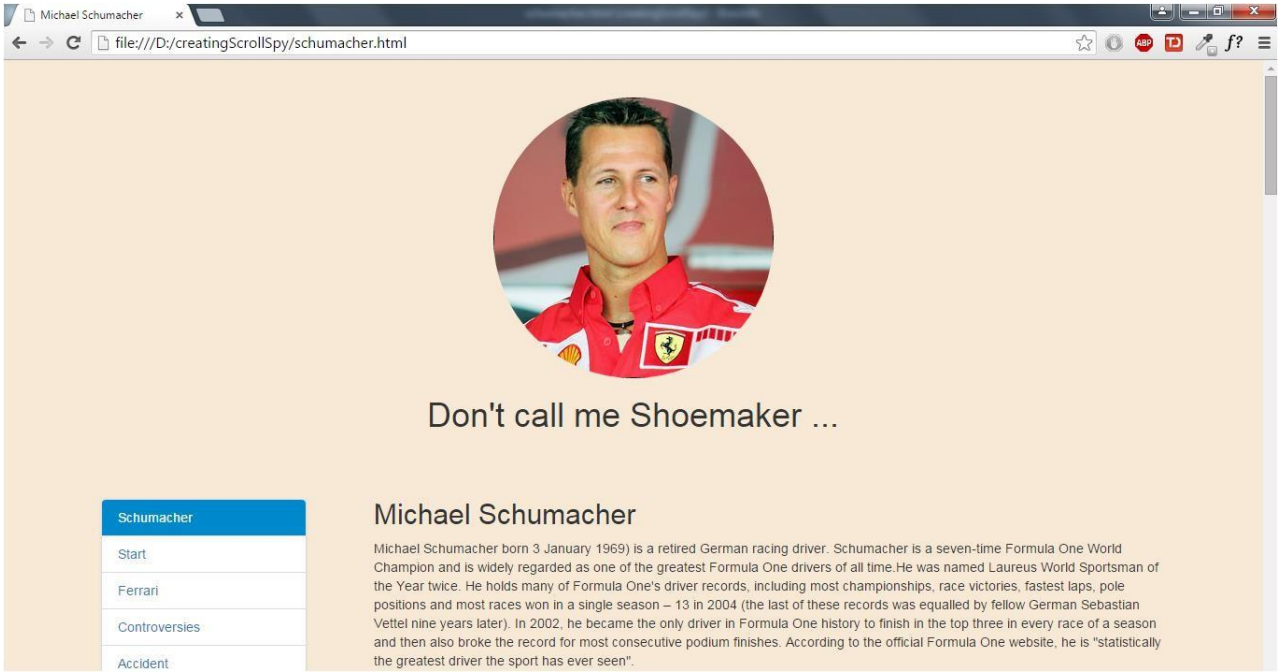
» Below we have defined 5 div elements with id section1, section2 and so on

» These id's matches with the links referenced by navigation bar

```
<div class="col-sm-9">
  <div id="section1">
      <h2>Michael Schumacher</h2>
      <p>
      Michael Schumacher born 3 January 1969) is a retired German racing driver.
      Schumacher is a seven-time Formula One World Champion and is widely regarded as one of the greatest Formula One drivers
      of all time.He was named Laureus World Sportsman of the Year twice.
      He holds many of Formula One's driver records, including most championships, race victories, fastest laps, pole positions
      and most races won in a single season - 13 in 2004 (the last of these records was equalled by fellow German Sebastian
      Vettel nine years later).
      In 2002, he became the only driver in Formula One history to finish in the top three in every race of a season and then
      also broke the record for most consecutive podium finishes.
      According to the official Formula One website, he is "statistically the greatest driver the sport has ever seen".
      </p>
  </div>
  <hr>
  <div id="section2"> ··· </div>
  <hr>
  <div id="section3"> ··· </div>
  <hr>
  <div id="section4"> ··· </div>
  <hr>
  <div id="section5"> ··· </div>
</div>
```

Creating a ScrollSpy (Contd.)

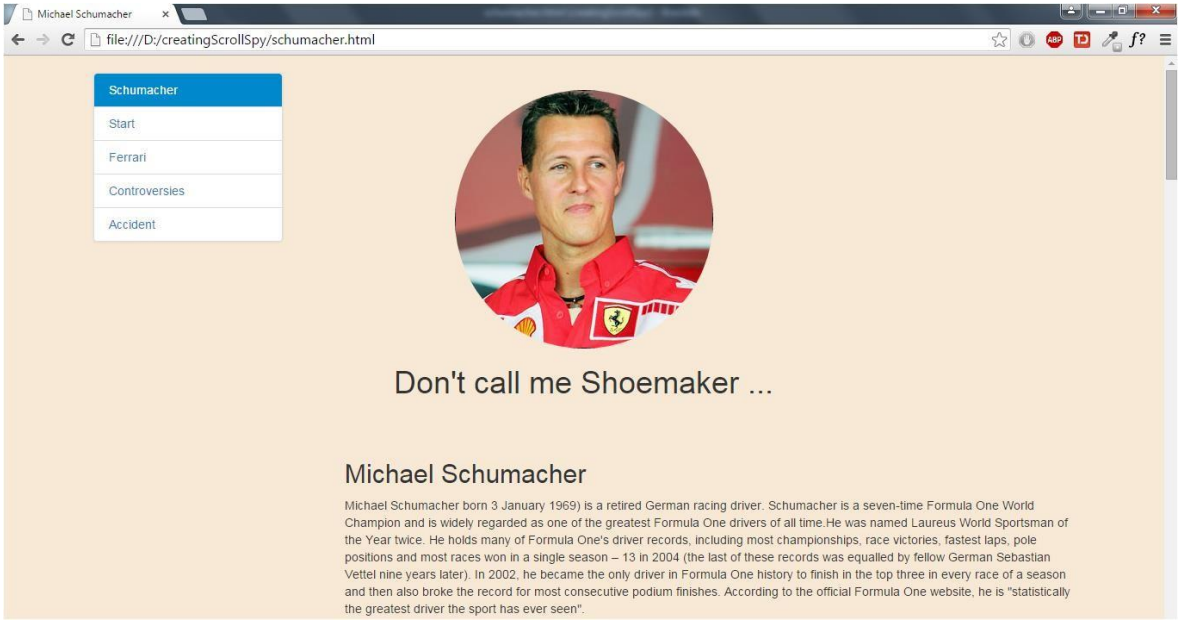
→ Once we linked the content div and navigation bar you will see as you scroll down in page navigation link will be updated automatically and you can directly jump to a specific section by just clicking on the navigation link



Creating a ScrollSpy (Contd.)

→ Note that we have set data-offset=120 if you don't specify data-offset, navigation bar will be shown at the top

```
<ul class="nav nav-tabs nav-stacked" data-offset-top="120" data-spy="affix"> ··· </ul>
```



jQuery

→ jQuery is a JavaScript library which makes writing JavaScript easy .

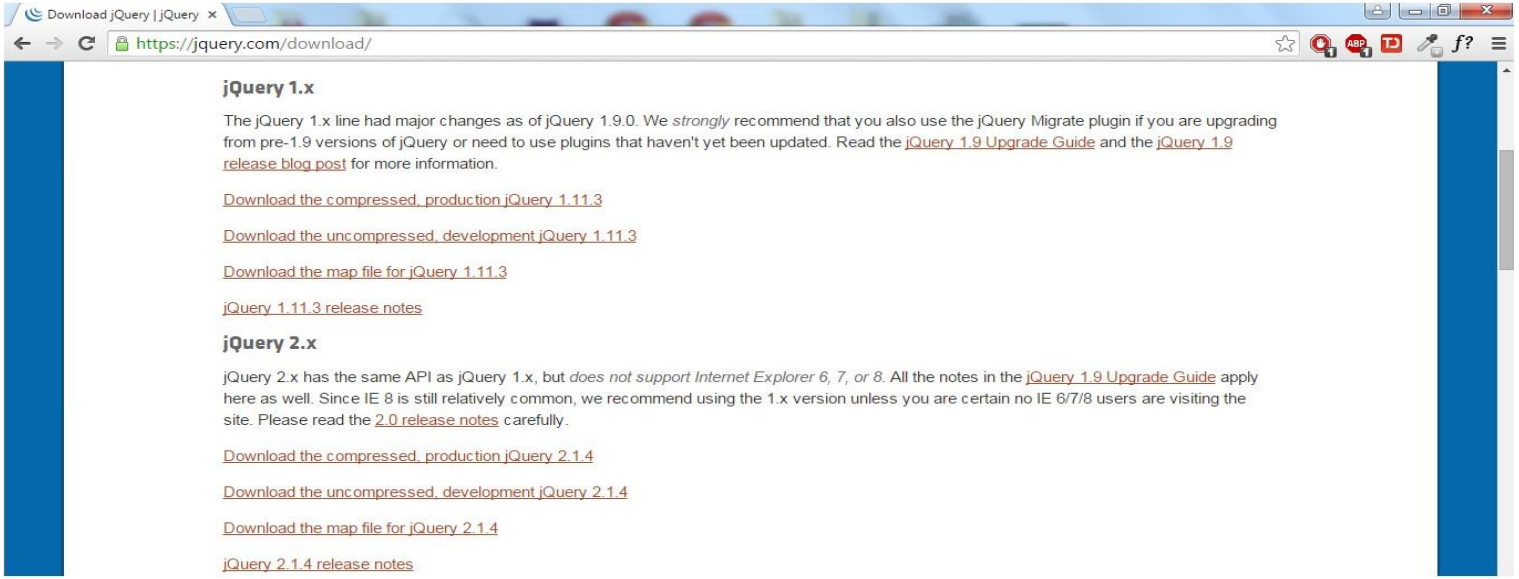
→ The great thing about jQuery is you can achieve a lot of functionality with less code

→ jQuery's tagline says it all write less, do more

Including jQuery – Download jQuery

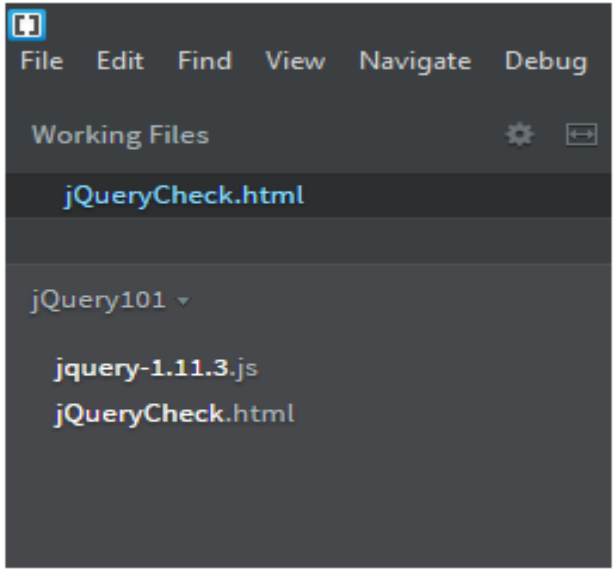
→ To use jQuery you need to include the jQuery file. There are two ways to include jQuery in your web page

» Download the jQuery file from https://jquery.com/download/ and reference the downloaded file from webpage



Including jQuery - Download jQuery (Contd.)

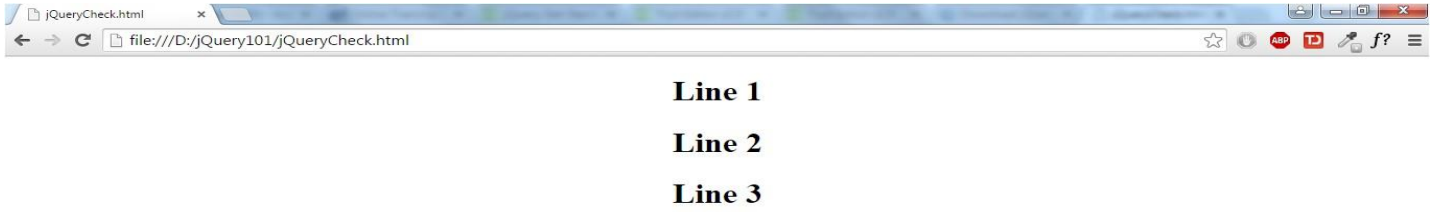
→ Once you downloaded the jQuery file just reference that js file from your webpage1

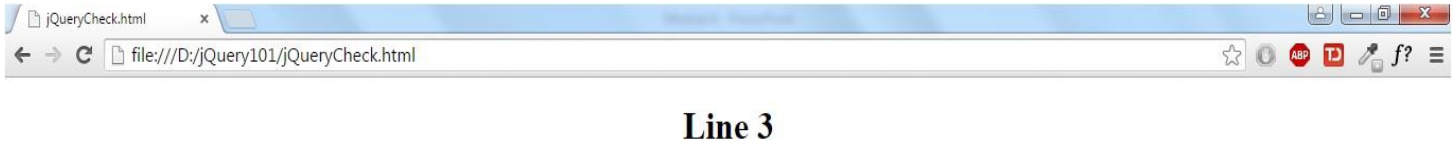



```
<!DOCTYPE html>
<html>
<head>
<script src="jquery-1.11.3.js"></script>
<script>
$(document).ready(function(){
    $("h1").click(function(){
        $(this).hide();
    });
});
</script>
</head>
<body>

<h1 align="center">Line 1</h1>
<h1 align="center">Line 2</h1>
<h1 align="center">Line 3</h1>

</body>
</html>
```

Including jQuery - Download jQuery (Contd.)

→ Below is how your webpage will look like and when you click on any header line it will disappear

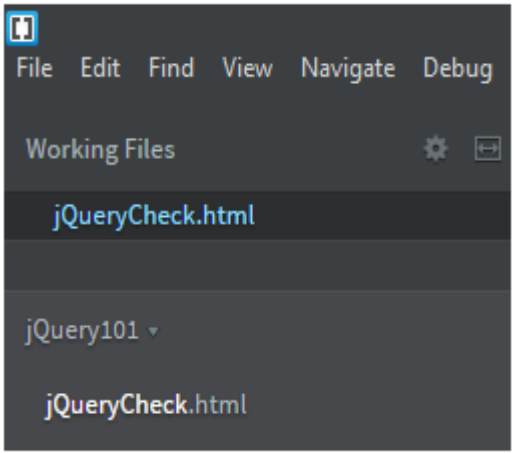




After clicking on first two lines

Including jQuery – CDN jQuery

→ The other way to include jQuery is referencing the jQuery file hosted on Content Delivery Network (CDN)




```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("h1").click(function(){
        $(this).hide();
    });
});
</script>
</head>
<body>

<h1 align="center">Line 1</h1>
<h1 align="center">Line 2</h1>
<h1 align="center">Line 3</h1>

</body>
</html>
```

One major advantage of using jQuery file hosted on CDN is that it is most likely that a user have already downloaded the jQuery while visiting some other site so next time the jQuery will be loaded from cache when they visit you site which leads to faster loading time

Code Explanation

→ With jQuery you select HTML elements and perform "actions" on them. As shown below we select h1 element and on clicking the h1 element we hide that element

```
$("h1").click(function(){
    $(this).hide();
});
```

```
$(document).ready(function(){
    $("h1").click(function(){
        $(this).hide();
    });
});
```

Note that our jQuery method is inside document ready event. This is to ensure that jQuery code runs after the page is finished loading

jQuery Selectors

→ jQuery selectors are used to select HTML elements based on their id, classes, types, attributes, values of attributes etc. You can use jQuery to select an element based on an element name, its id or class attribute

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
</head>
<body>

<h1 id="h1tag" class="first-class" align="center">Line 1</h1>

</body>
</html>
```

Note that all selectors in jQuery start with the dollar sign and parentheses: $()

jQuery Selectors (Contd.)

Element Selector

```
<script>
$(document).ready(function(){
    $("h1").click(function(){
        $(this).hide();
    });
});
</script>
```

#id Selector

```
<script>
$(document).ready(function(){
    $("#h1tag").click(function(){
        $(this).hide();
    });
});
</script>
```

Class Selector

```
<script>
$(document).ready(function(){
    $(".first-class").click(function(){
        $(this).hide();
    });
});
</script>
```

jQuery Selectors (Contd.)

→ Below are more examples of how we can use jQuery Selectors

$("*")	Selects all elements
$(this)	Selects the current HTML element
$("h1.header")	Selects all <h1> elements with class="header"
$("h1:first")	Selects the first <h1> element
$("ul li:first")	Selects the first <li> element of the first <ul>
$("[href]")	Selects all elements with an href attribute
$("a[target='_blank']")	Selects all <a> elements with a target attribute value equal to "_blank"
$("a[target!='_blank']")	Selects all <a> elements with a target attribute value NOT equal to "_blank"
$(":button")	Selects all <button> elements and <input> elements of type="button"

jQuery Events

→ An event points to the moment when something happens.

→ Examples

- Moving a mouse over an element (e.g. h1 element)
- Selecting a radio button
- Clicking on an element

Note that events can be generated in various ways from keyboard (e.g. pressing a key), mouse (e.g. hovering the mouse on an element) or window (e.g. resizing the page)

→ We have already handled click event when we hide the h1 element on click event

jQuery Events (Contd.)

→ Below we list down some most common events

Mouse Events	Keyboard Events	Form Events	Document/Window Events
Click	Keypress	Submit	Load
Dblclick	Keydown	Change	Resize
Mouseenter	Keyup	Focus	Scroll
Mouseleave		Blur	Unload

→ jQuery provides equivalent methods to handle the above events

jQuery Events – Double Click

→ Below we are handling the double click event, now h1 element will be hidden on double clicking the h1 element

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("h1").dblclick(function(){
        $(this).hide();
    });
});
</script>
</head>
<body>
<h1 align="center">Line 1</h1>
<h1 align="center">Line 2</h1>
<h1 align="center">Line 3</h1>
</body>
</html>
```

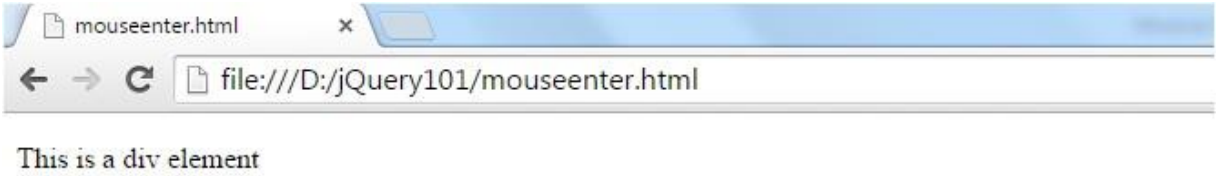
jQuery Events – Mouse Enter

→ Below we are handling the mouse enter event, we have defined a div element when user's mouse enters to the div element we are changing the div content using html function

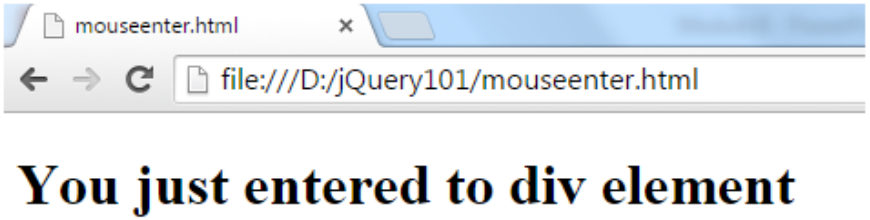
```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("#div1").mouseenter(function(){
        $("#div1").html("<h1>You just entered to div element</h1>");
    });
});
</script>
</head>
<body>

<div id="div1">This is a div element</div>

</body>
</html>
```

jQuery Events – Mouse Enter (Contd.)

mouseenter.html



When mouse enters to div element



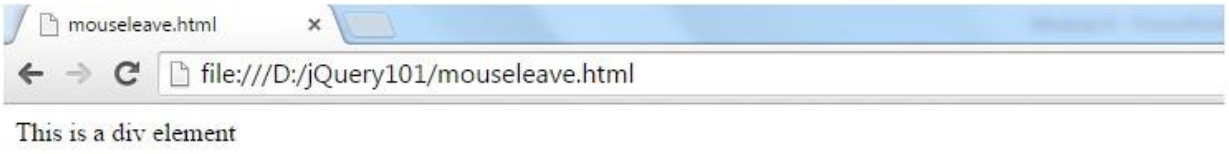
jQuery Events – Mouse Leave

→ Below we are handling the mouse leave event, we have defined a div element when user's mouse leaves the div element we are changing the div content using html function

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("#div1").mouseleave(function(){
        $("#div1").html("<h1>You just left div element</h1>");
    });
});
</script>
</head>
<body>

<div id="div1">This is a div element</div>

</body>
</html>
```

jQuery Events – Mouse Leave (Contd.)

mouseleave.html



When mouse leaves div element

jQuery Events – Mouse Down

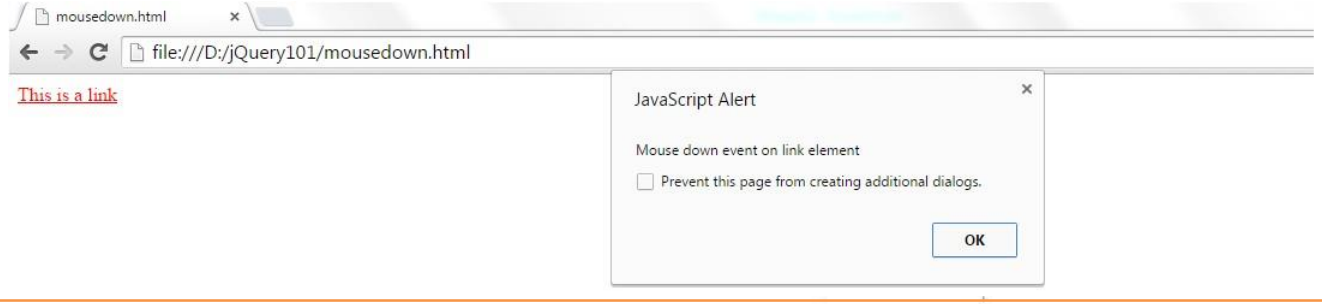
→ Below we are handling the mouse down event, we have defined an <a> element when user presses left, right or middle mouse button mousedown event get fired on <a>element. On mousedown event we are just showing an alert box

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("#link").mousedown(function(){
        alert("Mouse down event on link element");
    });
});
</script>
</head>
<body>

<a href="http://www.google.com" id="link">This is a link</p>

</body>
</html>
```

jQuery Events – Mouse Down (Contd.)

mousedown.html

When mouse button is pressed on <a> element



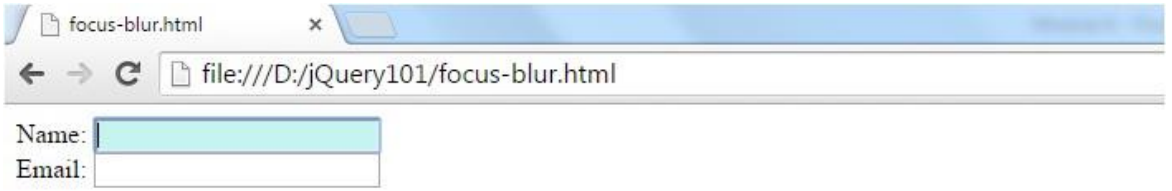
jQuery Events – Focus and Blur

→ Below we are using the jQuery focus() and blur() methods to handle the focus and blur event. focus() is called when the form field gets focus and blur() is called when form field loses focus

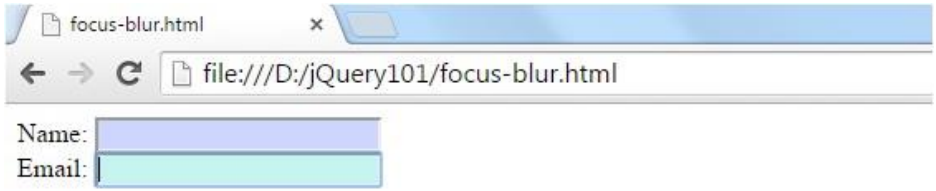
```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("input").focus(function(){
        $(this).css("background-color", "#c6f4f0");
    });
    $("input").blur(function(){
        $(this).css("background-color", "#ced5ff");
    });
});
</script>
</head>
<body>
<form>
Name: <input type="text" name="name"><br>
Email: <input type="text" name="email">
</form>
</body>
</html>
```

jQuery Events – Focus and Blur (Contd.)

name field gets focus



name field loses focus, email field gets focus



jQuery Effects – Hide/Show

→ We can provide some cool effects to an element using jQuery methods like hide(), show(), fadeIn(), fadeOut(), slideUp(), slideDown() etc. So lets get started

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("#hide").click(function(){
        $("#logo").hide();
    });
    $("#show").click(function(){
        $("#logo").show();
    });
});
</script>
</head>
<body>

<h1 align="center">Click show and hide button to show and hide the image</p>
<button id="hide">Hide</button>
<button id="show">Show</button>
<div>
<img id="logo" height="400" width="500" src="google-new-logo.jpg"/>
</div>
</body>
</html>
```

jQuery Effects – Hide/Show (Contd.)

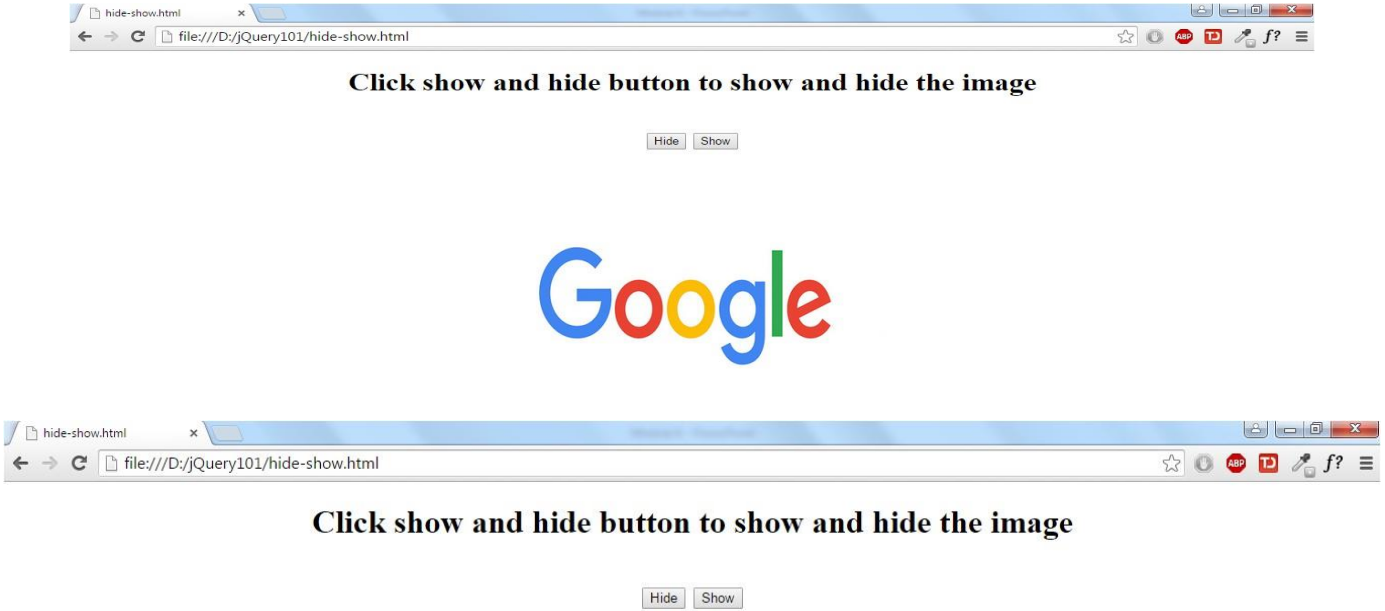


Image is hidden on clicking the Hide button

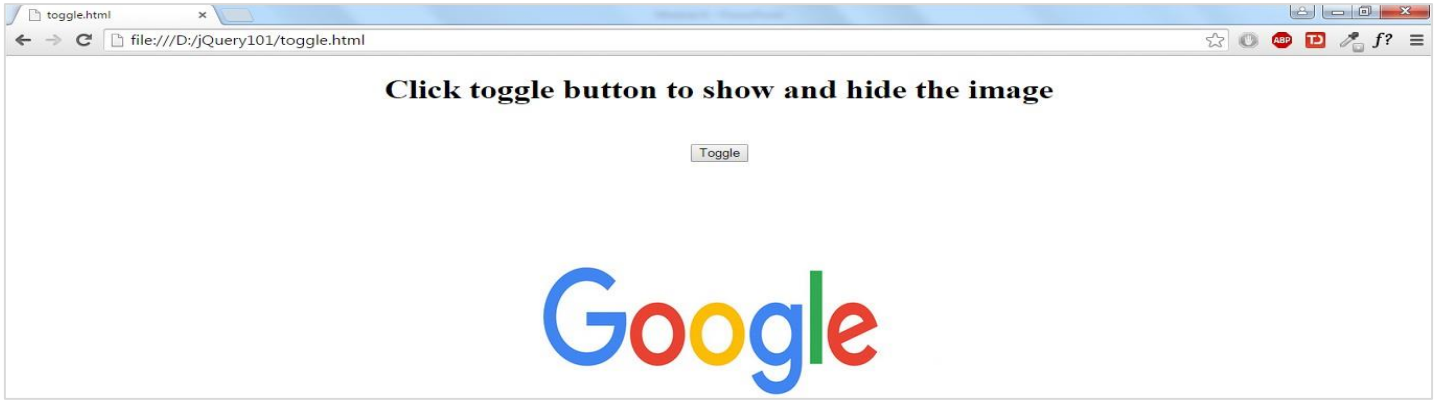
jQuery Effects – Toggle

→ Rather than having two buttons to hide and show the image, we can use the jQuery toggle() method to achieve the same

jQuery toggle()

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("#switch").click(function(){
        $("#logo").toggle();
    });
});
</script>
</head>
<body>

<h1 align="center">Click toggle button to show and hide the image</p>
<button id="switch">Toggle</button>
<div>
<img id="logo" height="400" width="500" src="google-new-logo.jpg"/>
</div>
</body>
</html>
```

jQuery Effects – Toggle (Contd.)



jQuery Effects – FadeOut/FadeIn

→ jQuery fadeOut() and fadeIn() method provides a great way to fadeOut and fadeIn the images smoothly

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("#fadeOut").click(function(){
        $("#logo").fadeOut(3000);
    });
    $("#fadeIn").click(function(){
        $("#logo").fadeIn(3000);
    });
});
</script>
</head>
<body>

<h1 align="center">Click FadeOut and FadeIn button to fadeOut and fadeIn the image</p>
<button id="fadeOut">FadeOut</button>
<button id="fadeIn">FadeIn</button>
<div>
<img id="logo" height="400" width="500" src="google-new-logo.jpg"/>
</div>
</body>
</html>
```

Note that we have set the fadeIn and fadeOut time to 3000 milliseconds

jQuery Effects – fadeOut/FadeIn (Contd.)

jQuery Effects – SlideDown

jQuery

```
<script>
$(document).ready(function(){
    $("#header").click(function(){
        $("#panel").slideDown("slow");
    });
});
</script>
```

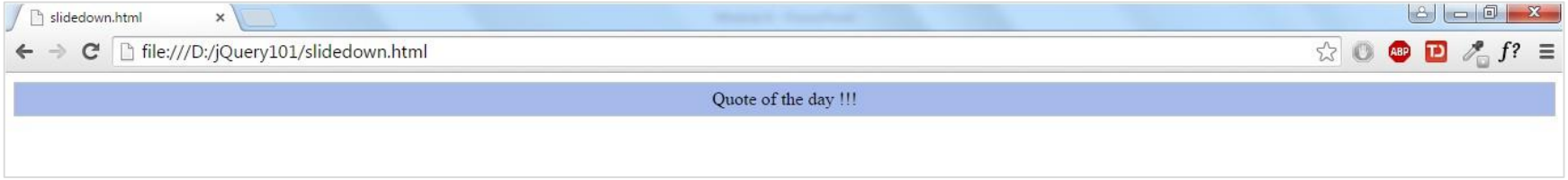
CSS

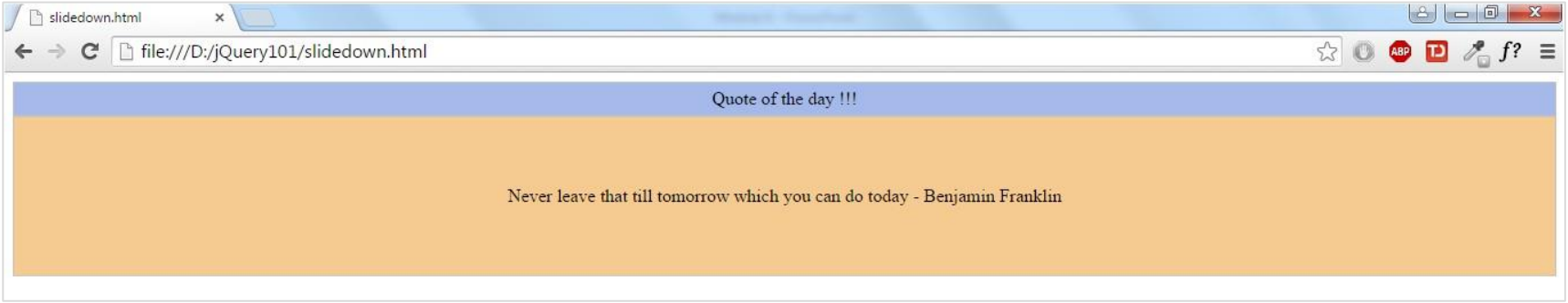
```
<style>
#header {
    padding: 5px;
    text-align: center;
    background-color: rgba(79, 121, 216, 0.51);
    border: solid 1px #c3c3c3;
}
#panel {
    padding: 60px;
    text-align: center;
    background-color: rgba(237, 154, 41, 0.51);
    border: solid 1px #c3c3c3;
    display: none;
}
</style>
```

HTML

```
<body>
<div id="header">Quote of the day !!!</div>
<div id="panel">Never leave that till tomorrow which you can do today - Benjamin Franklin</div>
</body>
```

jQuery Effects – SlideDown (Contd.)





On clicking the header, quote of the day slide down

jQuery Effects – SlideUp

jQuery

```
<script>
$(document).ready(function(){
    $("#header").click(function(){
        $("#panel").slideUp("slow");
    });
});
</script>
```

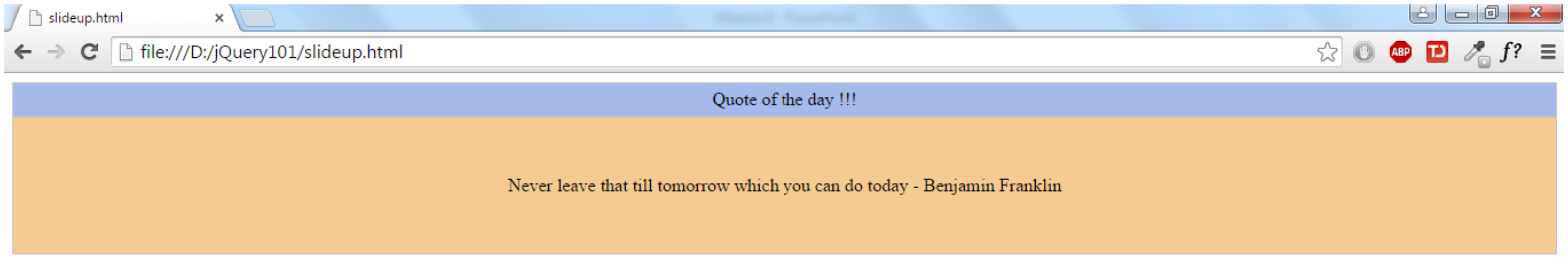
CSS

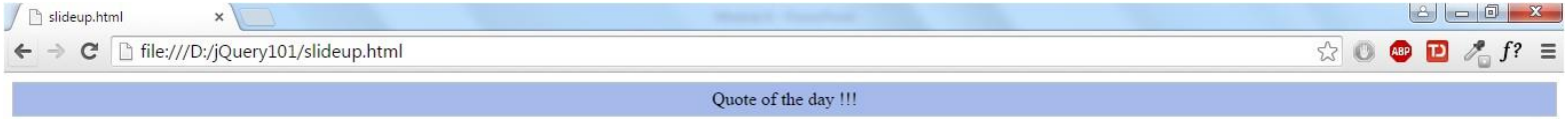
```
<style>
#header {
    padding: 5px;
    text-align: center;
    background-color: rgba(79, 121, 216, 0.51);
    border: solid 1px #c3c3c3;
}
#panel {
    padding: 50px;
    text-align: center;
    background-color: rgba(237, 154, 41, 0.51);
    border: solid 1px #c3c3c3;
}
</style>
```

HTML

```
<body>
<div id="header">Quote of the day !!!</div>
<div id="panel">Never leave that till tomorrow which you can do today - Benjamin Franklin</div>
</body>
```

jQuery Effects – SlideUp (Contd.)

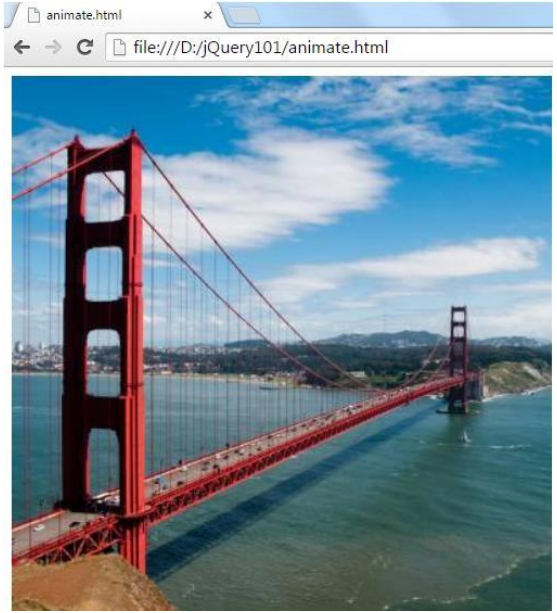




On clicking the header, quote of the day slide up

jQuery Animation

Animation on
mouse over event



→ You can see the live demo here https://s3-ap-southeast-1.amazonaws.com/s3freebucket/jQuery101/animate.html

jQuery Animation (Contd.)

→ jQuery animate method can be used to create custom animations Syntax

» $(selector).animate({params},speed,callback);

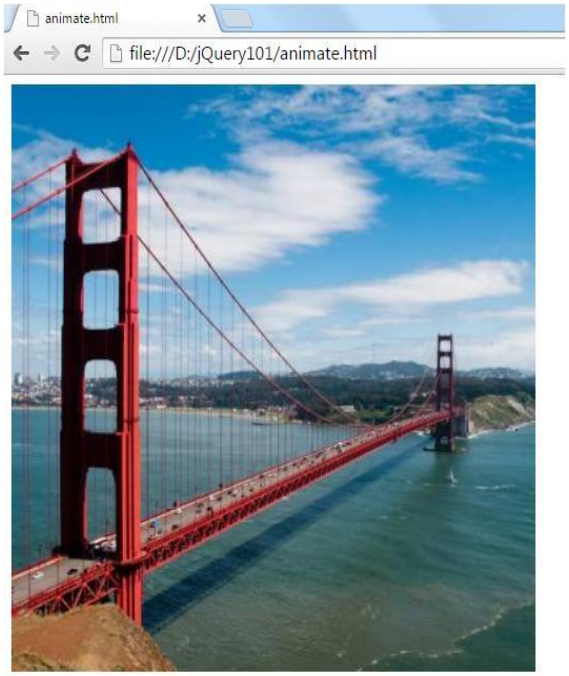
```
<body>
<img id="sfo" height="300" width="300"  src="sanfrancisco.jpg"/>
</body>
```

→ On taking the mouse over image, image size is increased to 500 by 500 and it happens smoothly within 3 seconds

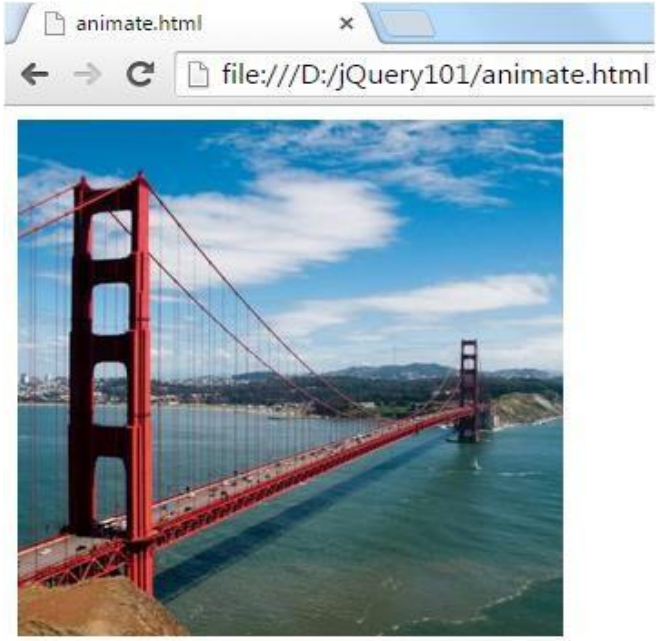
jQuery

```
<script>
$(document).ready(function(){

    $("#sfo").on({

        mouseover:function(){
            $(this).animate({
                'height':500,
                'width':500
            },3000);

        },
        mouseout:function(){
             $(this).animate({
                'height':300,
                'width':300
            },3000);
        }

    });

});
</script>
```

jQuery Animation (Contd.)

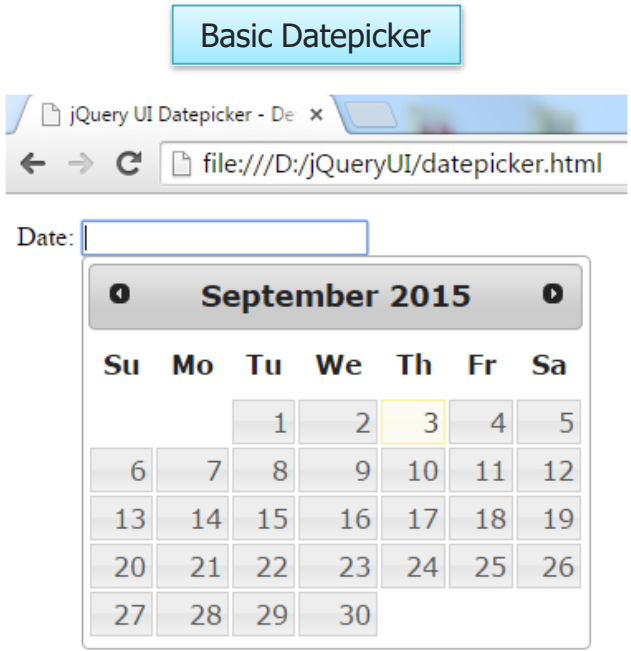


Animation on
mouse out event



jQuery UI

→ jQuery UI built on top of the jQuery JavaScript Library provides a set of user interface elements, widgets and themes



jQuery UI – Basic Datepicker

→ With jQuery UI it becomes very easy to create a customize stylish datepicker which can be used in HTML forms

Resources required

```
<link rel="stylesheet" href="https://code.jquery.com/ui/1.11.4/themes/smoothness/jquery-ui.css">
<script src="https://code.jquery.com/jquery-1.10.2.js"></script>
<script src="https://code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
```

jQuery

```
<script>
$(function() {
  $( "#datepicker" ).datepicker();
});
</script>
```

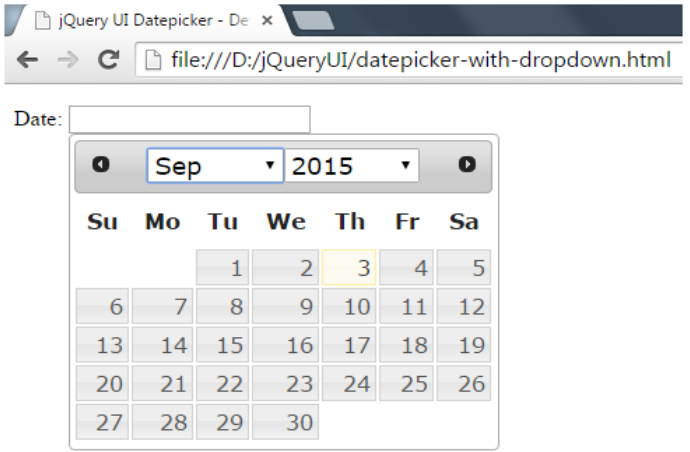
Plain HTML

```
<body>
<p>Date: <input type="text" id="datepicker"></p>
</body>
```

jQuery UI – Datepicker with Dropdown

→ Note that in basic Datepicker to move between months we have to click through left and right arrow buttons. But we can easily provide dropdowns for month and year

```
<script>
$(function() {
  $( "#datepicker" ).datepicker({
      changeMonth:true,
      changeYear:true
  });
});
</script>
```

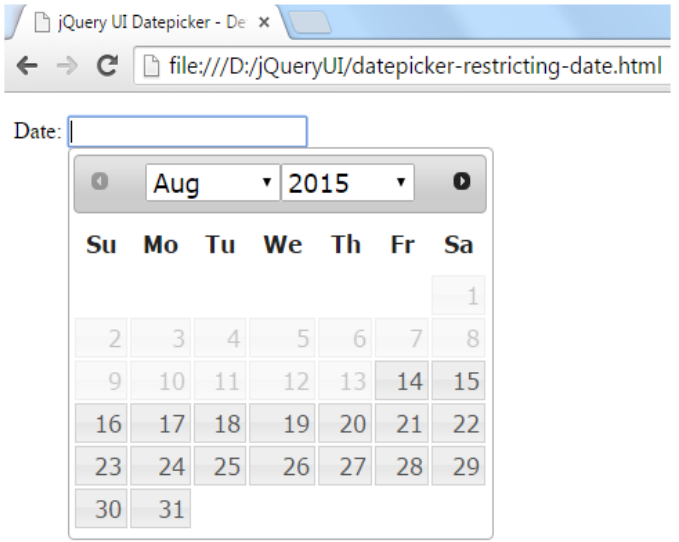


Note that default date format is mm/dd/yy

jQuery UI- Restricting Dates

→ We can also restrict the dates that a user can select by providing extra arguments within datepicker method

```
<script>
$(function() {
  $( "#datepicker" ).datepicker({
       changeMonth:true,
       changeYear:true,
       minDate: -20,
       maxDate: "+1M +10D +5Y" });
});
</script>
```

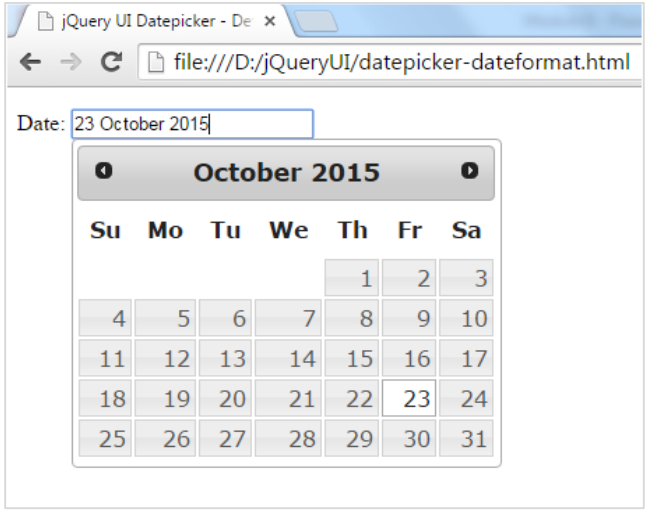


Note that if current date is 3-Sep-2015 , with above arguments user can only select a date between 14-Aug-2015 and 13-Oct-2020

jQuery UI- Datepicker Date Format

→ Below we have changed the date format for datepicker to "d MM yy"

```
<script>
 $(function(){
   var options = {
       dateFormat:"d MM yy"
     };
    $("#datepicker").datepicker(options);
  });
</script>
```



Note that default date format is mm/dd/yy

jQuery UI- Datepicker Date Format Cheatsheat

→ Date Format Cheatsheat

d	Day of month (single digit where applicable)
dd	Day of month (two digits)
m	Month of year (single digit where applicable)
mm	Month of year (two digits)
y	Year (two digits)
yy	Year (four digits)
D	Short day name
DD	Full day name
M	Short month name
MM	Long month name
'...'	

jQuery UI - Spinner

→ Spinners are great way to allow user to enter numeric values in input fields

→ You can increase or decrease the value by clicking on up or down arrow

→ You can see the live demo here https://s3-ap-southeast-1.amazonaws.com/s3freebucket/jQueryUI/spinner.html

jQuery UI - Spinner (Contd.)

Default Spinner

```
<!doctype html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>jQuery UI Spinner - Default functionality</title>
  <link rel="stylesheet" href="https://code.jquery.com/ui/1.11.4/themes/smoothness/jquery-ui.css">
  <script src="https://code.jquery.com/jquery-1.10.2.js"></script>
  <script src="https://code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery-mousewheel/3.1.13/jquery.mousewheel.js"></script>
  <script>
  $(function() {
   var spinner = $( "#spinner" ).spinner();
  });
  </script>
</head>

<body>
<p>
  <label for="spinner">Select a value:</label>
  <input id="spinner" name="value">
</p>
</body>
</html>
```

Note that we have also included jquery-mousewheel.js which allows users to increase and decrease the value by just rolling the mousewheel up and down inside the input field

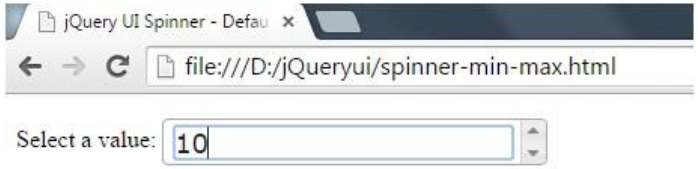
jQuery UI - Setting Spinner Min/Max

→ We can easily set the min and max values for the spinner by setting min and max options which will restrict user to select values within a range of values

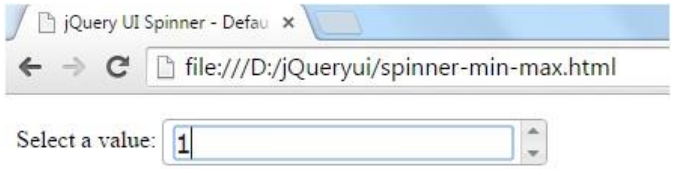
Spinner with min/max option

```
<script>
$(function() {
 var spinner = $( "#spinner" ).spinner({min:1,max:10});
});
</script>
```

Spinner Max Limit



Spinner Min Limit



jQuery UI - Spinner Restricting Keyboard Input

→ Note that even though we have set the min and max limit for the snipper but it doesn't restrict user to insert a value out of the limit using keyboard. We can restrict the keyboard input as shown below

Restricting Keyboard Input

```
<script>
$(function(){
 var spinner = $( "#spinner" ).spinner({min:1,max:10});
  $("#spinner").bind("keydown", function (event) {
     event.preventDefault();
   });
});
</script>
```

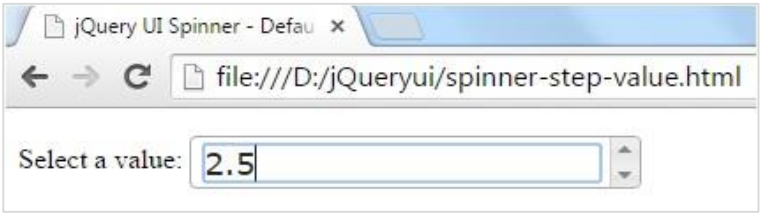
→ You can see the live demo here https://s3-ap-southeast-1.amazonaws.com/s3freebucket/jQueryUI/spinner-restrict-keyboard.html

jQuery UI - Spinner Step Value

→ Note that default step value (increment/decrement on clicking the up and down button) is 1. You can change it using step option as shown below

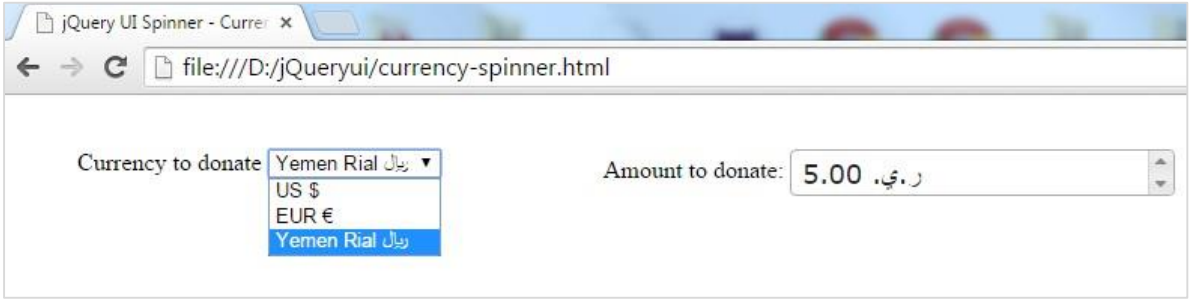
Step value is set to 0.5

```
<script>
$(function(){
 var spinner = $( "#spinner" ).spinner({step:0.5,min:1,max:10});
  $("#spinner").bind("keydown", function (event) {
     event.preventDefault();
   });
});
</script>
```



jQuery UI - Currency Spinner

→ Next we are going to make a currency spinner where we will show the local currency symbol with spinner value as shown below



→We have a dropdown where user select the currency and then the amount
→ You can see the live demo here https://s3-ap-southeast-1.amazonaws.com/s3freebucket/jQueryUI/currency-spinner.html

jQuery UI - Currency Spinner (Contd.)

→ To show the local currency symbol we are going to use globalize and culture js files

→ You can download it from

http://www.java2s.com/Open-Source/Javascript_Free_Code/Component/Download_globalize_Free_Java_Code.htm

```
<script src="globalize.js"></script>
<script src="globalize.culture.en-US.js"></script>
<script src="globalize.culture.de-DE.js"></script>
<script src="globalize.culture.ar-YE.js"></script>
```

→ Language Culture

English - United States = en-US
German - Germany = de-DE
Arabic - Yemen = ar-YE

→ You can see the full list of language cultures here https://www.npmjs.com/package/localizereader

jQuery UI - Currency Spinner (Contd.)

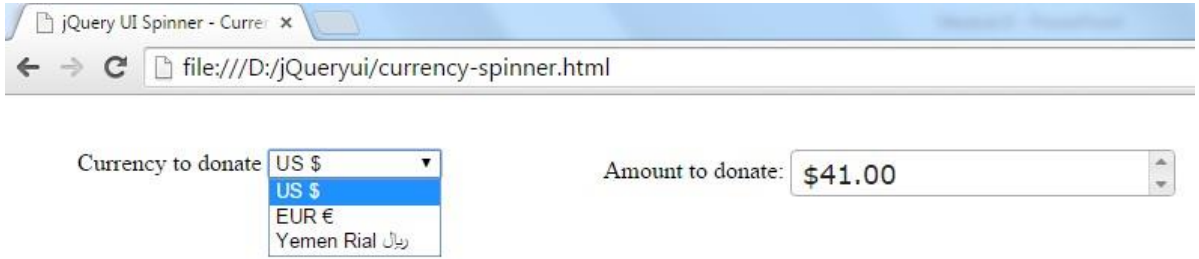
```
<script>
$(function() {
  $( "#currency" ).change(function() {
    $( "#spinner" ).spinner( "option", "culture", $( this ).val() );
  });

  $( "#spinner" ).spinner({
    min: 1,
    step: 10,
    numberFormat: "C"
  });
});
</script>
```

```
<body>
<div style="position:absolute;top:20px;left:50px">
 <p>
  <label for="currency">Currency to donate</label>
  <select id="currency" name="currency">
    <option value="en-US">US $</option>
    <option value="de-DE">EUR € </option>
    <option value="ar-YE">Yemen Rial ﷼</option>
  </select>
 </p>
</div>

<div style="position:absolute;top:20px;left:400px">
<p>
  <label for="spinner">Amount to donate:</label>
  <input id="spinner" name="spinner" value="1">
</p>
</div>
</body>
```

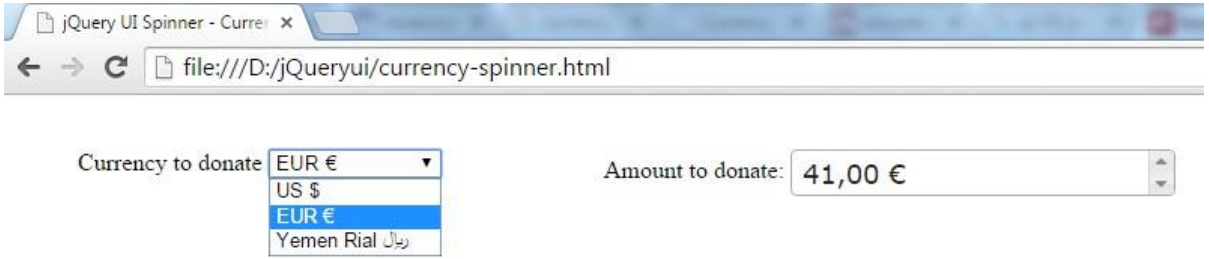
Note that we have set the default value for currency spinner to 1

jQuery UI - Currency Spinner (Contd.)

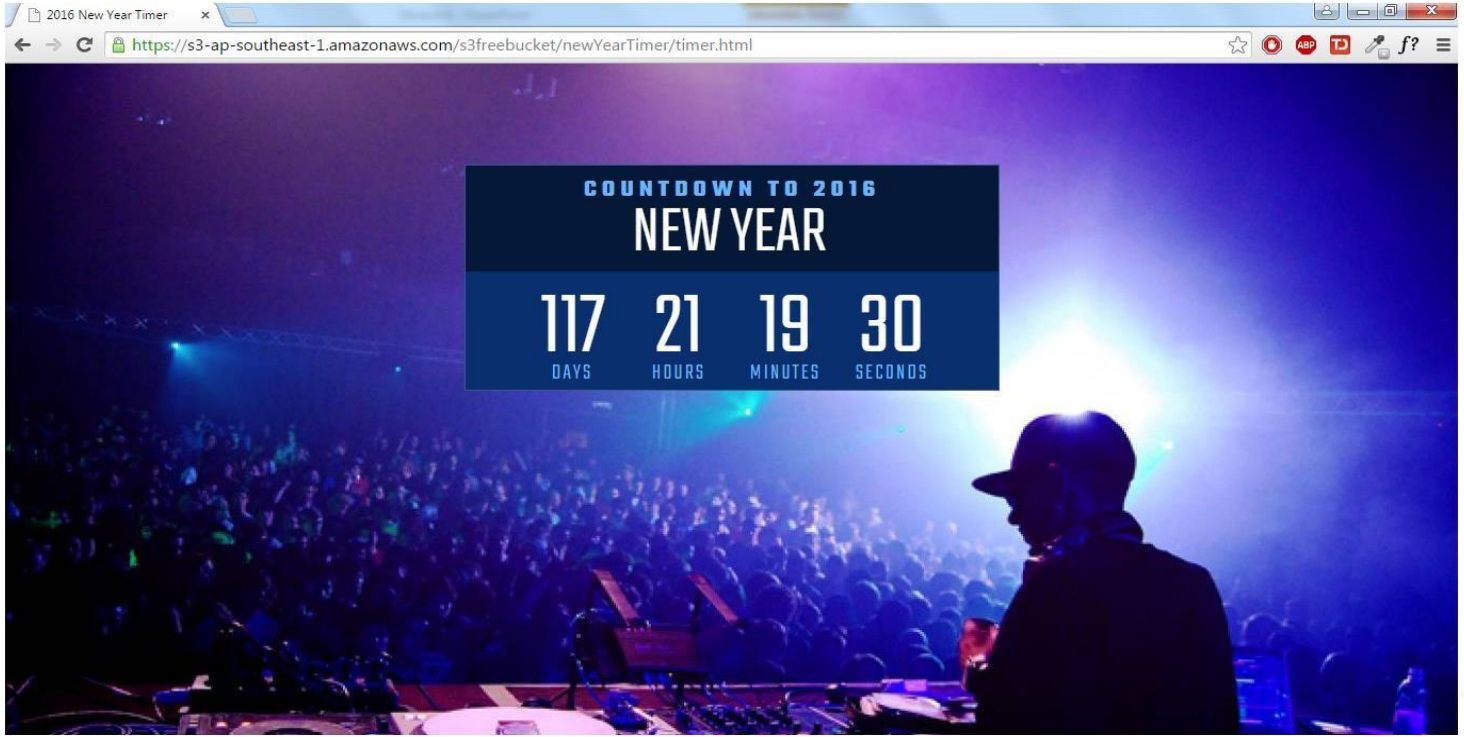
US- Dollar



Euro



jQuery Countdown Timer Plugin



jQuery Countdown Timer Plugin (Contd.)

→ jQuery comes with a handful of plugins that can be used directly to create awesome effects.

→ We are going to use countdown plugin to create a countdown timer for the new year of 2016.

→ You can download the plugin from http://keith-wood.name/countdown.html

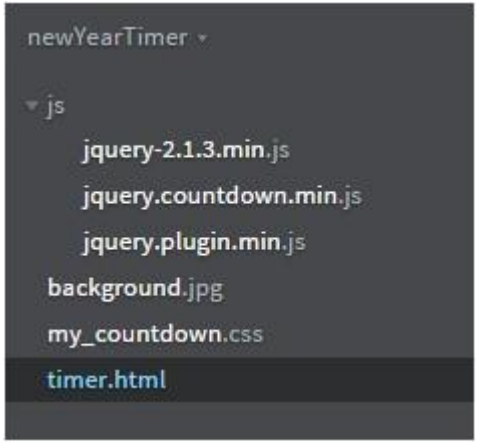
→ You can see the live demo here https://s3-ap-southeast-1.amazonaws.com/s3freebucket/newYearTimer/timer.html

Creating a Countdown Timer

→ Once you downloaded the countdown package include jquery-countdown.min.js and jquery-plugin.js in your project

» Along with above two files we will also need jQuery file

» Below is the snapshot of project structure in Adobe Brackets IDE



→ We have three js files under js folder, one css file(my_countdown.css), an image (background.jpg) and timer.html file

Creating a Countdown Timer (Contd.)

```
<link rel="stylesheet" type="text/css" href="my_countdown.css">
<script type="text/javascript" src="js/jquery-2.1.3.min.js"></script>
<script type="text/javascript" src="js/jquery.plugin.min.js"></script>
<script type="text/javascript" src="js/jquery.countdown.min.js"></script>
```

```
@import url(https://fonts.googleapis.com/css?family=Teko:300,700);
body { margin: 0; padding: 0;background-image: url("background.jpg") }
#showcase{
   font-size:16px;
   font-family:'Teko', sans-serif;
   width:500px;
   margin:150px auto;
   border:1px solid rgba(255,255,255,.2);
   background:#092f6e;
}
```

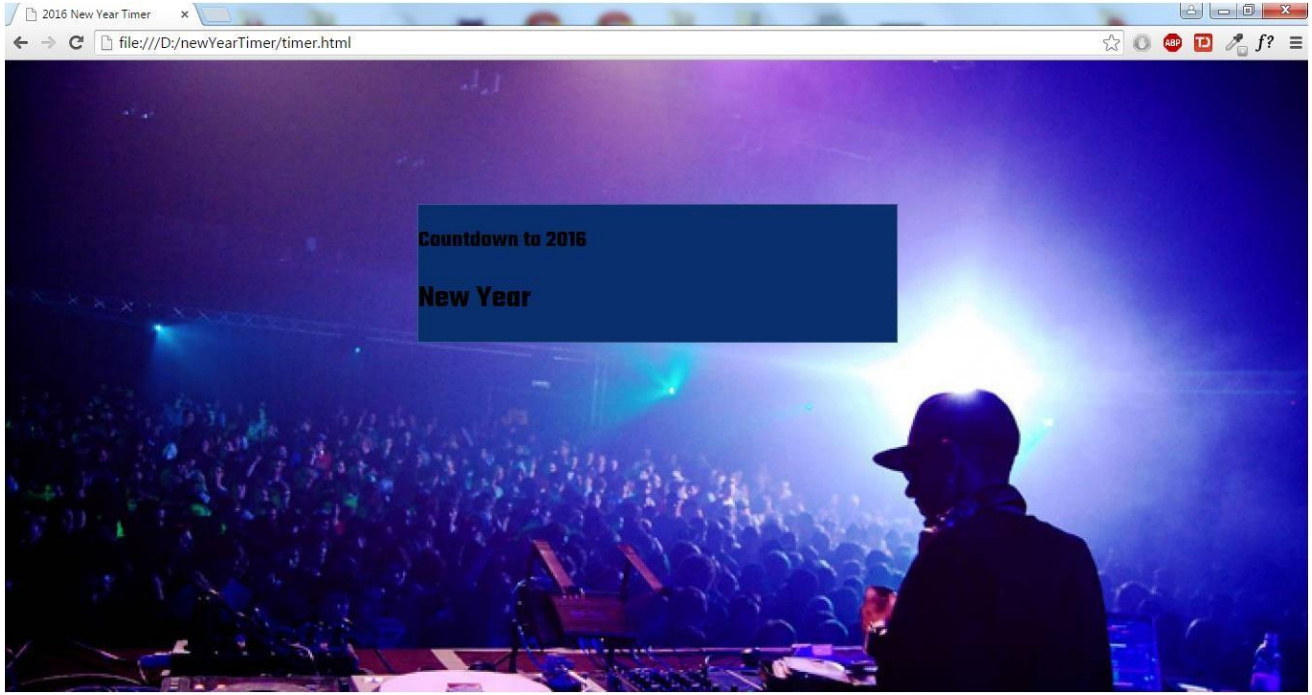
CSS to style showcase div

```
<body>

<div id="showcase">

   <div class="heading">
    <h2>Countdown to 2016</h2>
    <h1>New Year</h1>
   </div>

   <div class="my-countdown"></div>

</div>
```

→ Above we have defined a div with id showcase which contains two other divs with id heading and my-countdown

Creating a Countdown Timer (Contd.)

→ Below is our timer.html page which contains a background image a div with two heading tags



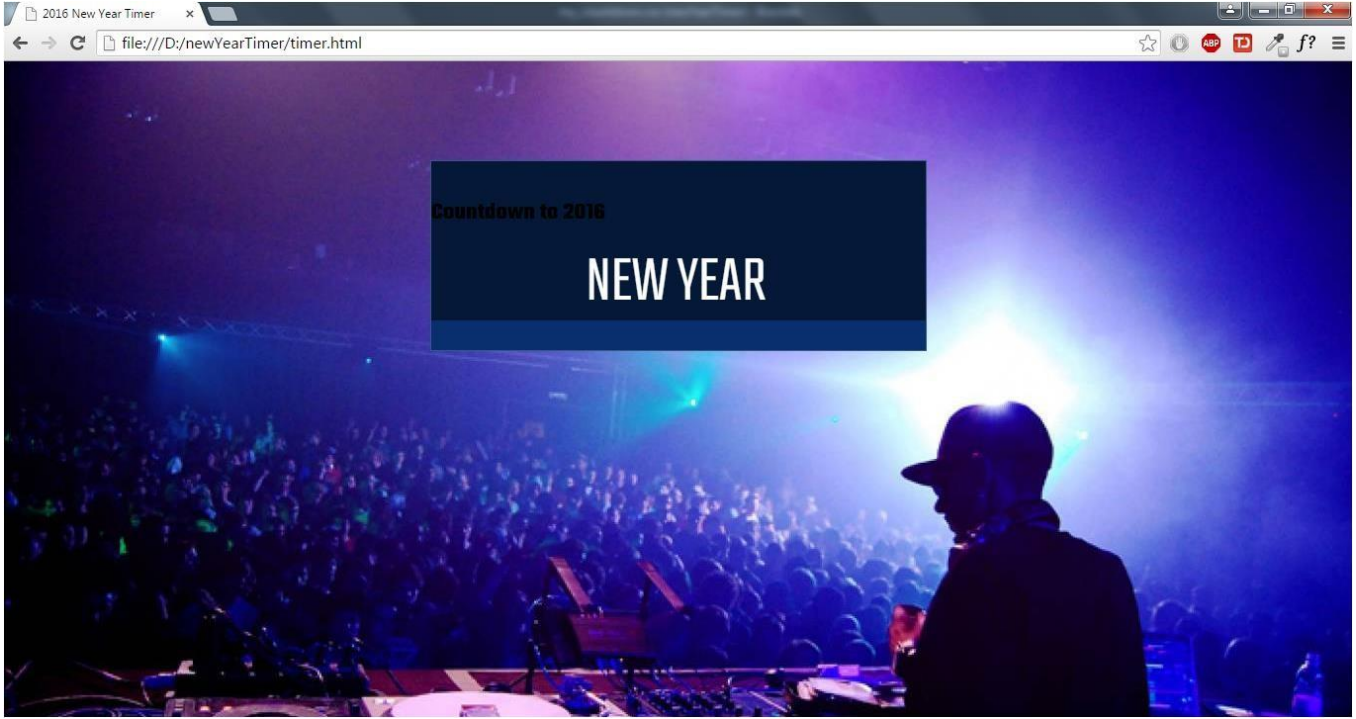
Creating a Countdown Timer – Styling Headers

→ Note that both the headers inside heading div are not styled, so lets first style the h1 element inside heading div

```
#showcase .heading{
  background-color:rgba(0,0,0,.5);
  padding:15px 0px 2px 0px;
  margin:0px 0px 30px 0px;
}

#showcase h1{

  font-size: 4.2em;
  color: #ffffff;
  text-transform:uppercase;
  font-weight:300;
  line-height:70px;
  margin:0px 0px 0px -5px;
  padding:0;
  text-align: center;
}
```

Creating a Countdown Timer – Styling Headers

→ Now the h1 heading looks much better than before as shown below



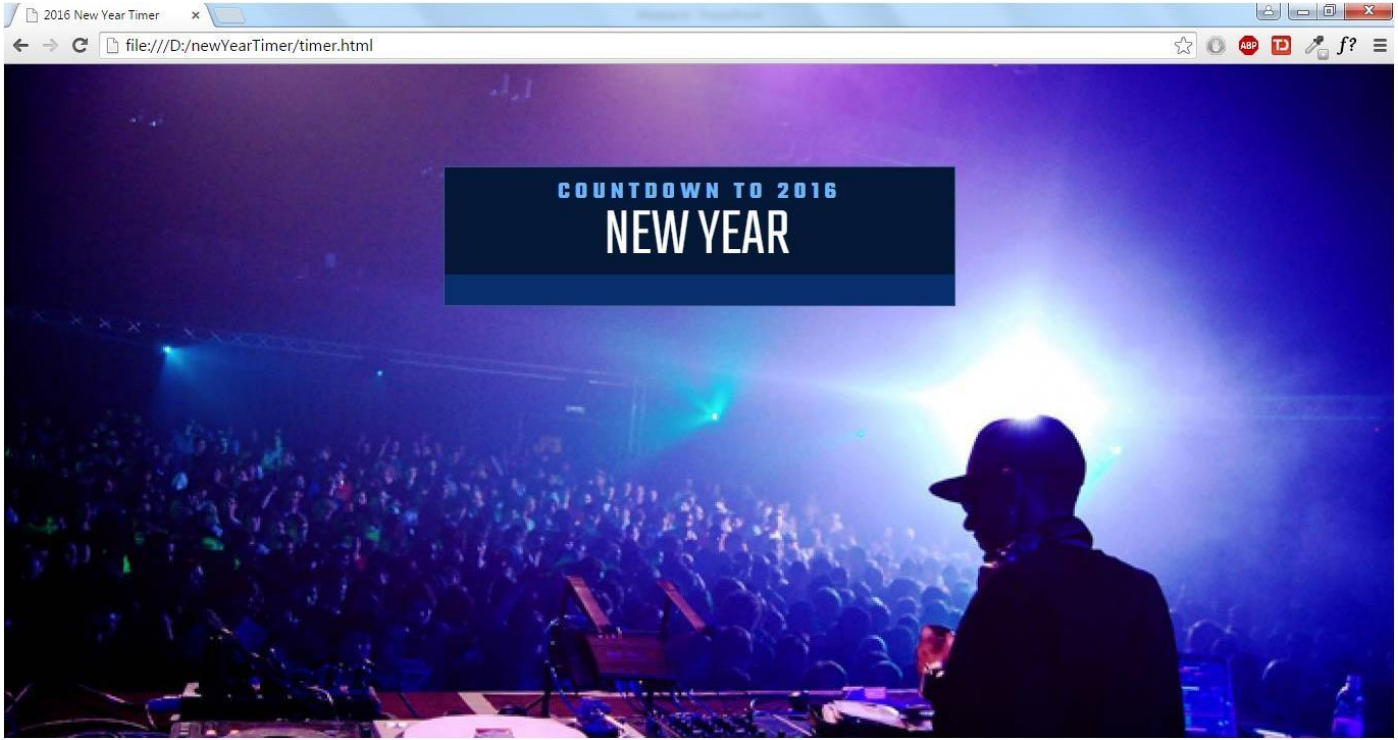
Creating a Countdown Timer – Styling Headers

→ Similar to h1 heading lets style the h2 heading as shown below

```
#showcase h2{

  font-size: 1.5em;
  color:  #6fb5f8;
  text-transform:uppercase;
  font-weight: 700;
  line-height: 18px;
  margin: 0px;
  padding:  0px;
  text-align: center;
  letter-spacing: 5px;

}
```

Creating a Countdown Timer – Styling Headers

→ Once both h1 and h2 headings are styled , timer.html will look like as shown below



Creating a Countdown Timer – Activating Plugin

→ Lets activate the countdown plugin, to do that we will call the countdown() method on my-countdown div

```
<script type="text/javascript">
    $(document).ready(function(){
    var newYear = new Date();
    newYear = new Date(newYear.getFullYear() + 1, 1 - 1, 1);
    $('.my-countdown').countdown({until: newYear});

    });
</script>
```

→ In above code we fetch the current date from the system and then set the countdown to new year by appending 1 to year, setting month to 0 and day to 1. Note that although our countdown is working but its not styled so lets do that

Creating a Countdown Timer – Injected HTML

→ When we activate the jQuery countdown plugin, it injects HTML code inside my-countdown div. You can see the injected code HTML code in browsers element inspector

» jQuery countdown plugin injects a span with class countdown-row

» Inside countdown-row span , 4 span with class countdown-section are injected

» Inside countdown-section , a span with class countdown-amount and countdown-period are injected

Creating a Countdown Timer – Styling Countdown Row1

→ Lets activate the countdown plugin, to do that we will call the countdown() method on my-countdown div

```
#showcase .my-countdown .countdown-row{
  display:block;
  text-align:center;

}
```

Creating a Countdown Timer- Styling Countdown Section

→ Lets activate the countdown plugin, to do that we will call the countdown() method on my-countdown div

```
#showcase .my-countdown .countdown-section{
  display:inline-block;
  width:100px;
}
```

Creating a Countdown Timer-styling Countdown Amount

→ Lets activate the countdown plugin, to do that we will call the countdown() method on my-countdown div

```
#showcase .my-countdown .countdown-amount{
  display:block;
  color:#ffffff;
  font-size:5.6em;
  line-height:55px;
}
```

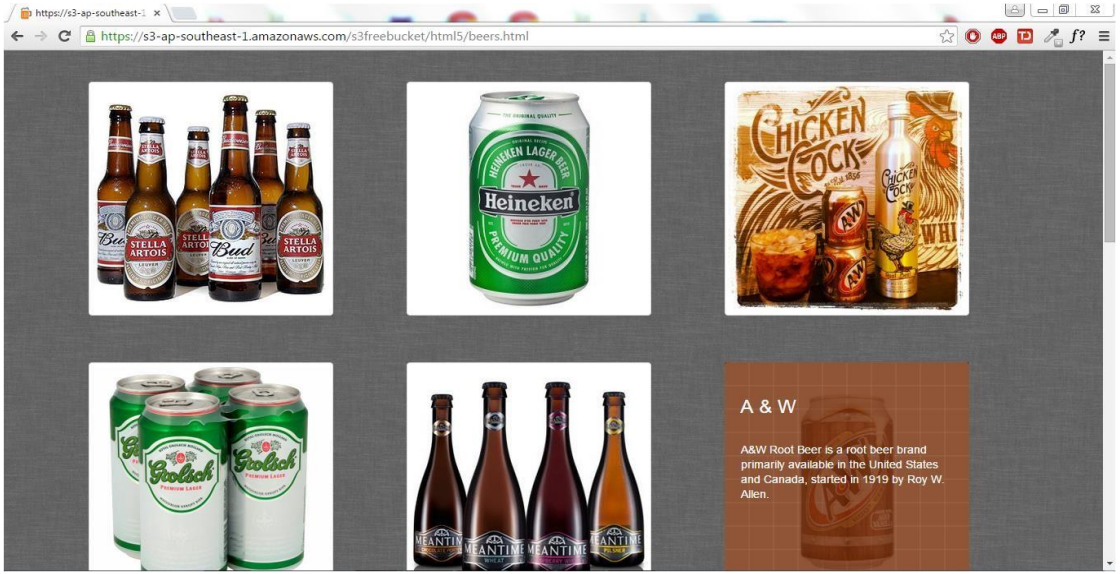
Creating a Countdown Timer-styling Countdown Perioc

→ Lets activate the countdown plugin, to do that we will call the countdown() method on my-countdown div

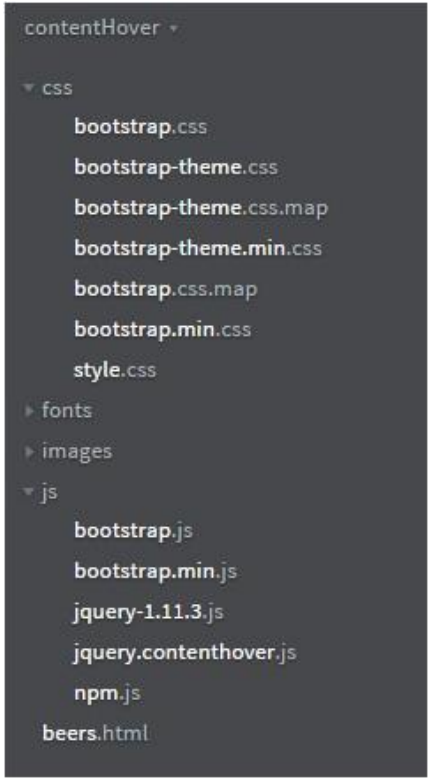
```
#showcase .my-countdown .countdown-period{
  display:block;
  color:#6fb5f8;
  font-size:1.4em;
  text-transform: uppercase;
  letter-spacing:2px;
}
```

jQuery Content Hover Plugin

→ Next we are going to use jQuery content hover plugin to show different effects e.g. fade, slide on hovering the mouse on an image



jQuery Content Hover Plugin (Contd.)




```
<link  type="text/css" rel="stylesheet"  href="css/bootstrap.css" />
<link  type="text/css" rel="stylesheet"  href="css/style.css" />
<script src="js/jquery-1.11.3.js"></script>
<script src="js/bootstrap.js"></script>
<script src="js/jquery.contenthover.js"></script>
```

Note that we have added both jQuery and content hover js that we downloaded before

jQuery Content Hover Plugin – Simple Fade

jQuery code for effect

```
<script type="text/javascript">
        $('document').ready(function(){

         $('#id1').contenthover({
            overlay_background:'#000',
            overlay_opacity:0.8
         });

       });
</script>
```

beers.html

```
<body >
    <br/><br/>

    <div class="container">
      <div class="row">
        <div class="col-md-3">
           <img id="id1"  class="img-thumbnail" src="images/Anheuser-Busch.jpeg"/>
           <div class="contenthover">
            <h3>Anheuser-Busch</h3>
            <p>Anheuser-Busch from Saint Louis, Missouri is known for its refreshing alcohol</p>
           </div>
       </div>
      </div>
    </div>

</body>
```

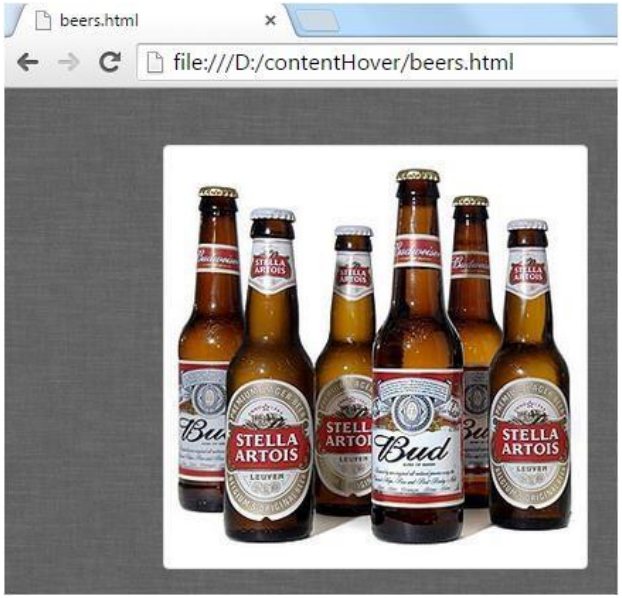
Note that id of image is id1 and in jQuery we call contenthover method on id1

jQuery Content Hover Plugin – Simple Fade

→ style.css to style the text shown on mouse hover on an image

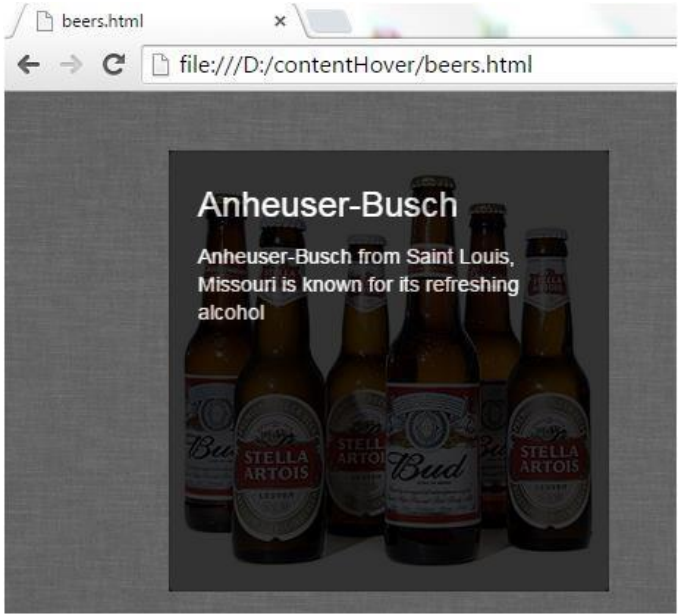
```
.contenthover { padding:20px 20px 10px 20px; }
.contenthover, .contenthover h3, contenthover a { color:#fff; }
.contenthover h3, .contenthover p { margin:0 0 10px 0; line-height:1.4em; padding:0; }
.contenthover a.mybutton { display:block; float:left; padding:5px 10px; background:#3c9632; color:#fff; -moz-border-radius: 4px; -webkit-
border-radius: 4px; border-radius: 4px; }
.contenthover a.mybutton:hover { background:#34742d }
```

jQuery Content Hover Plugin – Simple Fade



On mouse hover

Simple Fade



jQuery Content Hover Plugin – Slide Up

→ There are lots of other effects e.g. slide up, slide down, slide left, slide right etc. that can be achieved using content hover plugin

```
<div class="col-sm-offset-1 col-md-3">
    <img id="id2"  class="img-thumbnail" src="images/beer-heineken-can-300x300.jpg"/>
    <div class="contenthover">
      <h3>Heineken</h3>
      <p>Dutch brand Heineken is a pale lager beer with 5% alcohol by volume produced by the Dutch brewing company Heineken
        International </p>
    </div>
</div>
```

jQuery for Slide Up effect

```
$('#id2').contenthover({
effect:'slide',
slide_speed:300,
overlay_background:'#000',
overlay_opacity:0.8
 });
```

jQuery Content Hover Plugin – Slide Left

```
<div class="col-sm-offset-1 col-md-3">
    <img id="id3"  class="img-thumbnail" src="images/root-beer-300x300.jpg"/>
    <div class="contenthover">
     <h3>Chicken Cock</h3>
     <p>Chicken cock is famous american whiskey with 43% of alcohol</p>
    </div>
</div>
```

jQuery for Slide Left effect

```
$('#id3').contenthover({
overlay_background:'#000',
overlay_opacity:0.8,
effect:'slide',
slide_speed:500,
slide_direction:'left'
});
```

jQuery Content Hover Plugin – Slide Right

```
<div class="col-md-3">
<img id="id4"  class="img-thumbnail" src="images/Free-Grolsch-Beer-300x300.png"/>
<div class="contenthover">
 <h3>Grolsch Beer</h3>
 <p>Grolsch Brewery, known simply as Grolsch, is a Dutch brewery founded in 1615 by Willem Neerfeldt in Groenlo</p>
</div>
</div>
```

jQuery for Slide Right effect

```
$('#id4').contenthover({
overlay_background:'#000',
overlay_opacity:0.8,
effect:'slide',
slide_speed:500,
slide_direction:'right'
});
```

jQuery Content Hover Plugin – Slide Down

```
<div class="col-sm-offset-1 col-md-3">
 <img id="id5"  class="img-thumbnail" src="images/e4f2b7e77a8171a79c93008c8beed23b.jpg"/>
 <div class="contenthover">
  <h3>Meantime</h3>
  <p>Meantime Brewing Company is a brewery based in Greenwich, London, England. </p>
 </div>
</div>
```

jQuery for Slide Down effect

```
$('#id5').contenthover({
overlay_background:'#000',
overlay_opacity:0.8,
effect:'slide',
slide_speed:500,
slide_direction:'top'
});
```

jQuery Content Hover Plugin – Transparent Image

```
<div class="col-sm-offset-1 col-md-3">
  <img id="id6"   class="img-thumbnail" src="images/AW-Root-Beer-300x300.jpg"/>
  <div class="contenthover">
  <h3>A & W</h3>
  <p>A&W Root Beer is a root beer brand primarily available in the United States and Canada, started in 1919 by Roy W. Allen.
  </p>
  </div>
</div>
```

jQuery for transparent image

```
$('#id6').contenthover({
hover_class:'mybackground'
});
```

CSS

```
.mybackground { background:url(transparent_bg.png); }
```

jQuery Content Hover Plugin – Transparent Image

On mouse hover

Transparent Image

QUESTIONS

Assignment

→ Create a countdown timer for 2017 New Year using keith-wood countdown plugin

Pre-work for Next Class

→ Learn about JQuery

Further Reading

- http://getbootstrap.com/components/
- https://bootstrapbay.com/blog/bootstrap-3-carousel-tutorial/
- http://www.codemag.com/article/1501031
- http://fontawesome.bootstrapcheatsheets.com/

Agenda for the Next Class

→ In the next module, you will be able to:

→ Create Countdown based timers for websites

→ Show Social Plugins from twitter, LinkedIn, Facebook, Google+, Quora on your web pages

Survey

Your feedback is important to us, be it a compliment, a suggestion or a complaint. It helps us to make the course better!

Please spare few minutes to take the survey after the webinar.

Thank you!