Daily Reports(04/03/3022)

1. Effects Animations

Learn about several function make show or hide elements such as:

- **FadeOut(), FadeIn()**

  The fadeOut() method gradually changes the opacity, for selected elements, from visible to hidden (fading effect).

  Syntax:

  $(selector).fadeOut(speed,easing,callback)
  $(selector).fadeIn(speed,easing,callback)

Parameter	Description
speed	Optional. Specifies the speed of the fading effect. Default value is 400 milliseconds • milliseconds • "slow" • "fast"
easing	Optional. Specifies the speed of the element in different points of the animation. Default value is "swing" • "swing" - moves slower at the beginning/end, but faster in the middle • "linear" - moves in a constant speed
callback	Optional. A function to be executed after the fadeOut() method is completed

- **Show(), Hide()**

  With jQuery, you can hide and show HTML elements with the hide() and show() methods:

  Syntax:

  ```
  $(selector).hide(speed,callback);
  $(selector).show(speed,callback);
  ```

  The optional speed parameter specifies the speed of the hiding/showing, and can take the following values: "slow", "fast", or milliseconds.

Example:

$("#hide").click(function(){
  $("p").hide();
});
$("#hide").click(function(){
  $("p").show();
});

- **slideDown(), slideUp(), sideToggle()**

  slideDown()

  The jQuery slideDown() method is used to slide down an element.

  Syntax:

  $(selector).slideDown(speed,callback);

  $(selector).slideUp(speed,callback);

  $(selector).slideToggle(speed,callback);

  Example:

  ```
  $("#flip").click(function(){
    $("#panel").slideDown();
  });
  $("#flip").click(function(){
    $("#panel").slideUp();
  });
  $("#flip").click(function(){
    $("#panel").slideToggle();
  });
  ```

- **Moving Elements**

  The jQuery `animate()` method is used to create custom animations.

  Syntax:

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

  The required params parameter defines the CSS properties to be animated.

  The optional speed parameter specifies the duration of the effect. It can take the following values: "slow", "fast", or milliseconds.

Example:

```
$("button").click(function(){
  $("div").animate({left: '250px'});
});
```

- **Use Delaying and Chaining Animations:**

  The delay() method sets a timer to delay the execution of the next item in the queue.

  Syntax:

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

Parameter	Description
speed	Optional. Specifies the speed of the fading effect. Default value is 400 milliseconds - milliseconds "slow" "fast"
easing	Optional. Specifies the name of the queue Default is "fx", the standard effects queue

  Example:

```
$("button").click(function(){
  $("#div1").delay("slow").fadeTo(1000, 0.5);
});
```

- **Timing Animations Using Callback Functions**

```
$( selector). fadeTo(2000, 0.5, function(){
      alert("Thanks")
});
```

2. Element Selectors
+ Using CSS Selectors in jQuery

jQuery selectors allow you to select and manipulate HTML element(s).

jQuery selectors are used to "find" (or select) HTML elements based on their name, id, classes, types, attributes, values of attributes and much more. It's based on the existing CSS Selectors, and in addition, it has some own custom selectors.

You can select all **\<p>** elements on a page like this:

$("p")

Hide \<p> element

Example:

```
$(document).ready(function(){
  $("button").click(function(){
    $("p").hide();
  });
});
```

You can select all **ID** elements on a page like this:

$("#id")

You can select all **CLASS** elements on a page like this:

$(".class")

You can select all **ID** elements on a page like this:

$("#id")

You can select **all elements** on a page like this:

$("*")

You can select **href attribute** on a page like this:

$("[href]")

You can select **button** on a page like this:

$(":button")

+ jQuery Methods for Traversal

jQuery is a very powerful tool which provides a variety of DOM traversal methods to help us select elements in a document randomly as well as in sequential method. Most of the DOM Traversal Methods do not modify the jQuery object and they are used to filter out elements from a document based on given conditions.

Example:

```
<body>
        <div class="header">
                <h1>Header</h1>
        </div>
        <ul id = "list">
                <li>Coffee</li>
                <li>Tea</li>
                <li>Milk</li>
                <li>Cookie</li>
        </ul>
</body>
$(function(){
  $("#list").find("li").css("background-color", "rgba(0, 255, 0, 0.3)");
   $("#list").siblings(".header").css("background-color", "rgba(0, 255, 0, 0.3)");
  $("#list").parent().css("background-color", "rgba(0, 255, 0, 0.3)");
});
```

+ jQuery Methods for Filtering

The most basic filtering methods are first(), last() and eq(), which allow you to select a specific element based on its position in a group of elements.

Example:

```
$(document).ready(function(){
  $("div").first();
});
```

Demo Section 3