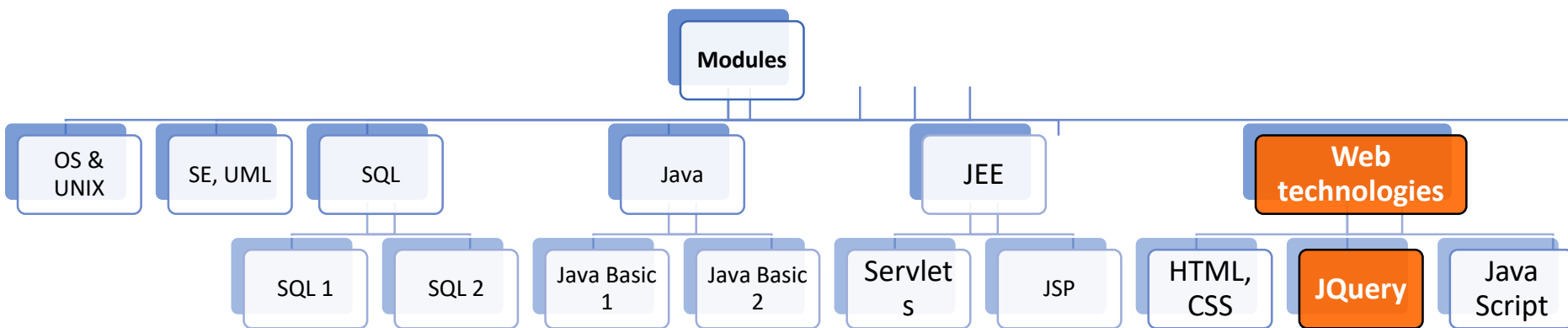# Web technologies
JQuery

Module Overview

Purpose:

The following module hierarchy presents the technical modules required to build the basic IT skills and acquaints you with relevant technology basics.

The current module –JQuery (highlighted in red) underwrites Basics of Web Page Development using JQuery

* Recommended duration: 10 **hours**

Module Objectives

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

- Understand DOM and its manipulation

- Event methods and Handling

- Effects and Animation

- CSS manipulation

jQuery-Core

Why Learn jQuery?

- With HTML and CSS, you can build visually appealing static web pages. With a bit of JavaScript, you can add dynamic behavior to these static websites. jQuery is a JavaScript library that provides you with a lot of dynamic behavior "out-of-the-box", allowing you to add some creative effects to otherwise dull layouts

Features

- DOM manipulation
- Event handling
- AJAX Support
- Animations
- Lightweight
- Cross Browser Support: The jQuery has cross-browser support, and works well in IE 6.0+, FF 2.0+, Safari 3.0+, Chrome and Opera 9.0+
- Latest Technology: The jQuery supports CSS3 selectors and basic XPath syntax.

References	
	• https://www.w3schools.com/jquery/default.asp
	• https://jquery.com/

Document Object Model

```html
<html>
<head>
<title>Simple Page</title>
</head>
<body>
    <h1>Simple HTML Page</h1>
        <p>
        This is a very simple HTML page.
        </p>

    <p>It's about as basic as they come. It has:<p>

    <ul>
        <li>An H1 Tag</li>
        <li>Two paragraphs</li>
        <li>An unordered list</li>
    </ul>
</body>
</html>
```

Simple HTML Page

This is a very simple HTML page.

It's about as basic as they come. It has:

- An H1 Tag
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References

- https://www.tutorialspoint.com/jquery/jquery-dom.htm
- https://www.tutorialspoint.com/jquery/jquery-dom.htm

Event Methods and Handling

Events are actions that can be detected by your Web Application some examples below.

A mouse click

A web page loading

Taking mouse over an element, etc.

Events Binding with Handlers

bind()

unbind()

ready()

toggle()

hover()

trigger()

$("selector").bind(event, data, handler)

$("selector").unbind(event, handler)

$(function(){

$("#myButton").bind("onclick", validate);

$("#myButton").click(validate);

});

function validate(){if($("#myText").val().length == 0) { alert("Error") } else {

$("#myForm").submit(); }

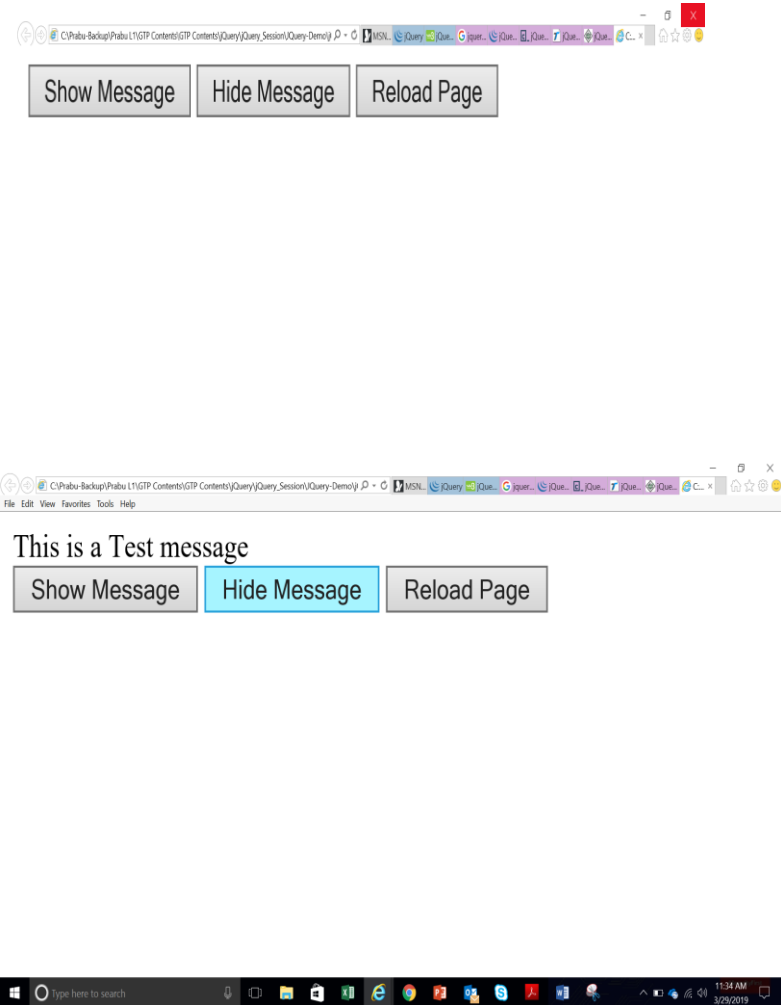| References	• https://www.tutorialspoint.com/jsp/jsp_syntax.htm

Animation Effects

Animation methods:

- show()
- hide()
- fadeIn()
- fadeOut()
- slideUp()
- slideDown()

These methods are used to animate the images like hide, fade, etc.

CSS - JQuery

The jQuery library supports nearly all of the selectors included in Cascading Style Sheet (CSS)

Syntax:

selector.css(PropertyName, PropertyValue);

Example

```
<script type="text/javascript“>
$(document).ready(function() {
$("li").eq(2).css("color", "red"); });
</script>
</head>
<body>
<div> <ul> <li>list item 1</li> <li>list item 2</li> <li>list item 3</li> <li>list item 4</li> <li>list item 5</li> </ul> </div>
</body>
</html>
```

Additional References

The last discussed topics aimed at to gain the concept knowledge and the practical contexts to apply the knowledge.

If you want to explore more and build the expertise level, refer to below links and books:

<u>Links :-</u>

- http://www.w3schools.com/jquery

- http://www.tutorialspoint.com/jquery/

- http://learn.jquery.com

<u>Books :-</u>

- jQuery in Action

- Learning jQuery

Self Check?

Instructions to write Self Evaluation Sheet:
Open the excel sheet, refer Jquery sheet, write down the solutions for all questions, save a local copy in your machine.

Lab Assignment

- Refer Assignment Document to complete the tasks on the required timeline
- You are required to submit the Solutions for the given assignment and refer the Participant guide to get know the submission procedure.

Module Summary

Now that you have completed this module, you will be able to:

- Develop JSP using different building blocks
- Understand Scripting elements, implicit objects and directives
- Use standard action tags and custom tags
- Use JSTL library with Jsp

Thank you!