## Indian Institute of Information Technology Surat

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# Lab Report on

# Web Engineering (CS 603) Practical

**Submitted by**

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## Lab No: 7

**Aim: JQuery**

**Description:** Write a HTML/CSS/JS Script with JQuery for the following:

1. Array Manipulations:
2. Modify array entries with jQuery.map.
3. Merge two arrays using JQuery.merge.
4. Find duplicate array entries with JQuery.unique.
5. Effects on Webpage Content:
6. Toggle element visibility with duration.
7. Slide and fade elements in and out of view.
8. Show images sequentially on hover.
9. Effects on HTML Form Elements:
10. Toggle select/deselect all checkboxes with a single link.
11. Auto tabbing based on character count for serial number input.
12. Contextual Menu:
13. Create a menu with hover-over info and highlight functionality.
14. Word-Balloon Effect:
15. Apply the effect on clicking "Bold" or "Italic" buttons.
16. Horizontal Image Slider:
17. Display an image gallery with scrollable images beyond initial view.

## Source Code:

**Task 1:**

**<script>**

**const originalArray = [1, 2, 3, 4, 5, 5];**

**const squaredArray = $.map(originalArray, function (value) {**

**return value \* value;**

**});**

**const secondArray = [6, 7, 8, 9];**

**let dupArray = $.merge([], originalArray);**

**const mergedArray = $.merge(dupArray, secondArray);**

**let dupArray2 = $.merge([], mergedArray);**

**const uniqueArray = $.unique(dupArray2);**

**document.write("<p>Original Array: " + originalArray.join(", ") + "</p>");**

**document.write("<p>Second Array: " + secondArray.join(", ") + "</p>");**

**document.write("<p>Squared Array: " + squaredArray.join(", ") + "</p>");**

**document.write("<p>Merged Array: " + mergedArray.join(", ") + "</p>");**

**document.write("<p>Unique Array: " + uniqueArray.join(", ") + "</p>");**

**</script>**

**Task 2:**

**<script>**

**$(document).ready(function() {**

**$("#toggleButton").click(function() {**

**$("#myParagraph").toggle(1000);**

**});**

**$("#slideDiv").click(function() {**

**$(this).slideToggle(1000);**

**});**

**$("#fadeDiv").hover(function() {**

**$(this).fadeOut(1000).fadeIn(1000);**

**});**

**var currentIndex = 0;**

**var totalImages = $(".image").length;**

**function showNextImage() {**

**$(".image").eq(currentIndex).fadeOut(500);**

**currentIndex = (currentIndex + 1) % totalImages;**

**$(".image").eq(currentIndex).fadeIn(500);**

**}**

**showNextImage();**

**$("#imageContainer").on("mouseenter",function(){**

**showNextImage();**

**});**

**});**

**</script>**

**Task 3:**

**<script>**

**$(document).ready(function() {**

**$("#select-all-teammembers").click(function() {**

**var checkBoxes = $("input[name='recipients[]']");**

**checkBoxes.prop("checked", !checkBoxes.prop("checked"));**

**});**

**$("input[type='text']").keyup(function() {**

**if (this.value.length === this.maxLength) {**

**$(this).next("input[type='text']").focus();**

**}**

**});**

**});**

**</script>**

**Task 4:**

**<script>**

**$(document).ready(function(){**

**$('.dropdown-content a').hover(function(){**

**$('.dropdown-content a').removeClass('highlight');**

**$(this).addClass('highlight');**

**});**

**$('.dropdown-content a').mouseenter(function(){**

**var menuText = $(this).parent().parent().find('span').text() + " " + $(this).text();**

**$('#info').text('Information related to ' + menuText);**

**});**

**$('.dropdown-content').mouseleave(function(){**

**$('#info').text('Hover to get Information Displayed');**

**});**

**});**

**</script>**

**Task 5:**

**<script>**

**$(document).ready(function() {**

**$('#bold-button').click(function() {**

**$('#balloon-text').text('This is the Bold button!');**

**$(this).css({**

**'background-color': '#fff',**

**'color': '#f00',**

**'border': '#000'**

**});**

**$('#italic-button').css({**

**'background-color': '#f00',**

**'color': '#000',**

**'border': '#000'**

**});**

**showBalloon();**

**});**

**$('#italic-button').click(function() {**

**$('#balloon-text').text('This is the Italic button!');**

**$('#bold-button').css({**

**'background-color': '#f00',**

**'color': '#000',**

**'border': '#000'**

**});**

**$(this).css({**

**'background-color': '#fff',**

**'color': '#f00',**

**'border': '#000'**

**});**

**showBalloon();**

**});**

**function showBalloon() {**

**$('#balloon-text').css('display', 'block');**

**setTimeout(function() {**

**$('#balloon-text').css('display', 'none');**

**}, 2000);**

**}**

**});**

**</script>**

**Task 6:**

**<script>**

**$(document).ready(function() {**

**var containerWidth = $(".slider-container").width();**

**var totalWidth = 0;**

**$(".slide").each(function() {**

**totalWidth += $(this).outerWidth(true);**

**});**

**$(".slider").width(totalWidth);**

**$(".slider-container").on("scroll", function() {**

**var scrollPos = $(this).scrollLeft();**

**var maxScroll = totalWidth - containerWidth;**

**if (scrollPos >= maxScroll) {**

**}**

**});**

**});**

**</script>**

## Output:

**Task 1:**

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**Task 2:**

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**Task 3:**

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**Task 4:**

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**Task 5:**

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**Task 6:**

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## Conclusion:

* Utilized jQuery operations for array manipulation efficiently.
* Demonstrated various content effects dynamically using jQuery functions.
* Implemented interactive form enhancements using jQuery operations.
* Developed a dropdown contextual menu with hover functionality using jQuery.
* Implemented a word-balloon effect on button click events.
* Implemented a horizontal image slider with scroll functionality.