

# UNIVERSITI MALAYSIA TERENGGANU

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# CSM3103 -PENGATURCARAAN FRONT-END

# BANCHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING) WITH HONORS

**LAB 5** 

# **SEMESTER 2 2023/2024**

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GitHub Link: https://github.com/AylaaE/CSM3103-Lab-5.git

# Task 1:

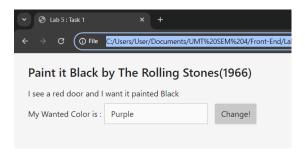
- a. Get the code from https://frend.odaje.biz/lab5/task1.html, and evaluate and test the code.
- i. What is the id of button and input field

## input\_color,button\_change

ii. What happened when you clicked change button and why?

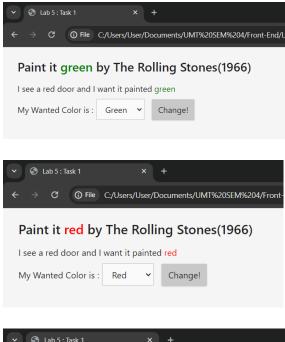
# **Nothing happen**

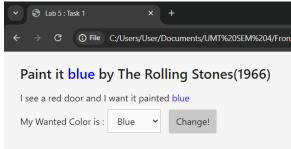
Your mission: when the button is clicked, all occurrences of the word Black to be changed to the text in the input field.





```
#color_change { border: 1px solid; }
      .cow_color { font-weight: bold; }
    </style>
    <script>
    $(document).ready(function() {
      var button = $('#button_change');
      $(button).click(function(){
      var input_color = $('#input_color');
      var input_value = $(input_color).val();
      var element = $('.door_color');
      $(element).html(input_value);
     });
    });
    </script>
  </head>
  <body>
    <h2> Paint it <span class="door_color">Black</span> by The
Rolling Stones(1966)</h2>
    I see a red door and I want it painted <span</p>
class="door_color">Black</span>
    My Wanted Color is:
      <input id="input_color" value="Purple"></input>
     <button id="button_change">
       Change!
      </button>
    </body>
```







```
#color_change { border: 1px solid; }
      .cow_color { font-weight: bold; }
    </style>
    <script>
    $(document).ready(function() {
        $('#button_change').click(function(){
        var selectedColor = $('#select_color').val();
        $('.door color').html(selectedColor);
        $('.door_color').css('color', selectedColor);
     });
    });
    </script>
  </head>
  <body>
    <h2> Paint it <span class="door_color">Black</span> by The
Rolling Stones(1966)</h2>
    I see a red door and I want it painted <span</p>
class="door_color">Black</span>
    My Wanted Color is:
        <select id = "select color">
            <option value ="black">Black</option>
            <option value ="red">Red</option>
            <option value ="green">Green</option>
            <option value ="blue">Blue</option>
            <option value ="purple">Purple</option>
        </select>
      <button id="button change">
        Change!
    </body>
```

#### Task 2:

- a. Get the code from https://frend.odaje.biz/lab5/task2.html, and evaluate and test the code
- i. What id's that exist in the code above?

Boxes,box1,box2,box3, button\_toggle\_colors, button\_toggle\_roundedges, button add box

ii. Open the file inside browser, what have you see in the browser?

When open the file inside a browser, there are three outlined boxes arranged horizontally, followed by three buttons labeled "Toggle Colors", "Toggle Rounded Borders", and "Add a New Box".

iii. Click any button, what happened? Why

When clicking toggle button ,there is nothing happen because don't have javascript code.

```
<!doctype html>
<html>
 <head>
   <title>Lab 4: Task 2</title>
   <meta charset="utf-8">
   <link rel="stylesheet" href=</pre>
      "https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
   <style>
     #boxes { margin-top: 50px; float: left; width: 100%; }
     #toggles { float: left; width: 100%; margin-top: 10px; }
     #info { float: left; margin-top: 5px; }
     .box { width: 50px; height: 50px; float: left; }
     .outlined { border: 2px solid black; }
     .round-edge { border-radius: 15px; }
      .teal { background-color: teal; }
   </style>
    <script
     src="https://code.jquery.com/jquery-3.1.1.js"
     integrity="sha256-16cdPddA6VdVInumRGo6IbivbERE8p7CQR3HzTBuELA="
     crossorigin="anonymous"></script>
   <script>
   var colorTeal = "rgb(57, 204, 204)";
```

```
$(document).ready(function(){
    var colorTeal = "rgb(57, 204, 204)";
    var originalBackgroundColor = "";
    $('#button_toggle_colors').click(function(){
        // Check the background color of the first box to determine the
current state
        var box1 = $('#box1');
        if (originalBackgroundColor === "") {
            // Save the original background color if it hasn't been saved yet
            originalBackgroundColor = $(box1).css('background-color');
        // Toggle background color of all boxes
        $('.box').each(function(){
            if ($(this).css('background-color') === colorTeal) {
                $(this).css('background-color', originalBackgroundColor);
            } else {
                $(this).css('background-color', colorTeal);
        });
    });
    $('#button_toggle_roundedges').click(function(){
        $(".box").toggleClass('round-edge');
    });
    $('#button_add_box').click(function(){
        // Create a new box and append it to the boxes container
        var newBox = $('<div class="box outlined"></div>');
        $('#boxes').append(newBox);
    });
});
    var new_box = document.createElement('div');
    var existingBoxes = $(".box").length;
    var nextBoxId = existingBoxes+1;
    $(new_box).attr("id","box"+nextBoxId);
    $(new box).addClass("box");
    $(new box).addClass("outlined");
    $("#boxes").append(new_box);
    </script>
  </head>
  <body>
```

```
<div class="container">
    <div id="boxes">
      <div id="box1" class="box outlined"></div>
      <div id="box2" class="box outlined"></div>
      <div id="box3" class="box outlined"></div>
    </div>
    <div id="toggles">
      <h2>Toggles</h2>
      <button class="btn" id="button_toggle_colors"</pre>
        >Toggle Colors</button>
      <button class="btn" id="button_toggle_roundedges"</pre>
        >Toggle Rounded Borders</button>
      <button class="btn" id="button add box"</pre>
        >Add a New Box</button>
    </div>
  </div>
</body>
```





Modify the code above so that when button clicked, it only show one element which selected randomly

```
<!doctype html>
<html>
 <head>
    <title>Lab 4: Task 2</title>
    <meta charset="utf-8">
    <link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
      #boxes { margin-top: 50px; float: left; width: 100%; }
     #toggles { float: left; width: 100%; margin-top: 10px; }
      #info { float: left; margin-top: 5px; }
      .box { width: 50px; height: 50px; float: left; }
      .outlined { border: 2px solid black; }
      .round-edge { border-radius: 15px; }
      .teal { background-color: teal; }
    </style>
    <script src="https://code.jquery.com/jquery-3.1.1.js" integrity="sha256-</pre>
16cdPddA6VdVInumRGo6IbivbERE8p7CQR3HzTBuELA="
crossorigin="anonymous"></script>
    <script>
      $(document).ready(function(){
          var colorTeal = "rgb(57, 204, 204)";
          var originalBackgroundColor = "";
          $('#button_toggle_colors').click(function(){
              // Check the background color of the first box to determine the
current state
              var box1 = ('\#box1');
              if (originalBackgroundColor === "") {
                  // Save the original background color if it hasn't been
saved yet
                  originalBackgroundColor = $(box1).css('background-color');
              // Toggle background color of all boxes
              $('.box').each(function(){
                  if ($(this).css('background-color') === colorTeal) {
                      $(this).css('background-color',
originalBackgroundColor);
                  } else {
                      $(this).css('background-color', colorTeal);
              });
          });
```

```
$('#button_toggle_roundedges').click(function(){
              $(".box").toggleClass('round-edge');
          });
          $('#button add box').click(function(){
              // Hide all existing boxes
              $(".box").hide();
              var randomBoxIndex = Math.floor(Math.random() *
$(".box").length);
              $(".box").eq(randomBoxIndex).show();
          });
      });
    </script>
  <body>
    <div class="container">
      <div id="boxes">
        <div id="box1" class="box outlined"></div>
        <div id="box2" class="box outlined"></div>
        <div id="box3" class="box outlined"></div>
      </div>
      <div id="toggles">
        <h2>Toggles</h2>
        <button class="btn" id="button_toggle_colors">Toggle Colors</button>
        <button class="btn" id="button_toggle_roundedges">Toggle Rounded
Borders</button>
        <button class="btn" id="button_add_box">Add a New Box</button>
      </div>
    </div>
  </body>
</html>
```





#### Task 3:

- a. Get the code https://frend.odaje.biz/lab5/task3.html, and evaluate and test the code:
  - Determine the id's of each element
     name input, date input, year input, ugrad, grad, color input
  - ii. Recognise any input element that associated with the form:

Name input: <input type="text" id="name">

Date input: <input type="text" id="date">

Radio buttons for enrollment: <input type="radio"

name="enroll\_year" id="ugrad" value="ugrad"> and <input
type="radio" name="enroll\_year" id="grad" value="grad">

Text inputs for color ranking: <input type="text" class="rank\_color" id="red">, <input type="text" class="rank\_color" id="blue">, <input type="text" class="rank\_color" id="blue">, <input type="text" class="rank\_color" id="hot\_pink">, <input type="text" class="rank\_color" id="mustard">, <input type="text" class="rank\_color" id="dark\_green">

#### iii. Your Task are:

- 1. Add DatePicker
- 2. Use selectable interaction
- 3. Use Sortable widget
- 4. Use the tooltip

```
<link rel="stylesheet" href=</pre>
  "https://code.jquery.com/ui/1.12.1/themes/ui-lightness/jquery-ui.css">
<style>
 body {
    margin: 20px;
 #name_input {
   float: left;
   margin-bottom: 20px;
   margin-right: 20px;
 #date_input {
   float: left;
   margin-bottom: 20px;
 #year_input {
   clear:both;
  .rank_color {
   width: 20px;
   margin-top: 2px;
 #selectable .ui-selecting{
    background: #FECA40;
 #selectable .ui-selecting{
   background: #F39814;
   color: white;
 #selectable li:before{
    content: "\2713";
   color:transparent;
  #selectable li.ui-selecting:before{
    content: "\2713";
    color:black;
 #selectable li.ui-selected:before{
    content: "\2713";
    color:white;
  #selectable{
    list-style-type: none;
    margin: 0;
    padding: 0;
    width: 3px;
    cursor: pointer;
```

```
#selectable li{
        margin: 3px;
        padding: 0.4em;
        font-size: 1.0em;
        height: 16px;
      #sortable{
        list-style-type: none;
        margin: 0;
        padding: 0;
        width: 150px;
      #sortable li{
        margin: 0 3px 3px 3px;
        padding: 0.4em;
        padding-left: 1.5em;
        font-size: 1.0em;
        height: 12px;
    </style>
    <script>
    $(document).ready(function() {
$('#date').datepicker();
$("#selectable").selectable();
$("#sortable").sortable();
$("#sortable").disableSelection();
$(document).tooltip({
  item: '[title], [class]',
  position: {my: "left center", at: "right center"},
  content: function(){
    var element = $(this);
    if(element.is('[title]')){
      return element.attr('title');
    if (element.is('[class]')){
      console.log('class', element);
      if (element.hasClass('ui-state-default')){
        var text = element.text();
        return '<div class="color_switch" style="background:' + text</pre>
+'"></div>'
```

```
});
   </script>
 </head>
 <body>
   <h2>jQuery UI-Survey</h2>
   <h3>General Information</h3>
   <div id="name input">
     <label for="name">Name:</label>
     <input type="text" id="name">
   </div>
   <div id="date input">
     <label for="date">Date:</label>
     <input type="text" id="date">
   </div>
   <div id="year_input">
       <h3>Are you enrolled as an undergraduate or a graduate?</h3>
       <input type="radio" name="enroll_year" id="ugrad" value="ugrad">
       <label for="ugrad">Undergraduate (taking 6.813)</label><bre>
       <input type="radio" name="enroll_year" id="grad" value="grad">
       <label for="grad">Graduate (taking 6.831)</label>
       <!-- Step 2: Your HTML here -->
       6.813">Undergraduate
         Graduate
       </div>
   <div id="color input">
     <!-- Comment out instruction when you finish step 3 -->
       <h3>Rank the colors listed from your most favorite (1)
     to your least favorite (5). Be sure to only use each ranking once.</h3>
     <!-- Comment this part of the form out after step 3 -->
     <input type="text" class="rank_color" id="red">
     <label for="red">#ff0000</label><br/>>
     <input type="text" class="rank_color" id="blue">
     <label for="blue">#0000ff</label><br/>
     <input type="text" class="rank_color" id="hot_pink">
     <label for="hot_pink">#ff00b3</label><br/>
     <input type="text" class="rank_color" id="mustard">
     <label for="mustard">#ded447</label><br/>
```

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### jQuery UI-Survey

#### **General Information**

Name: Date:

Are you enrolled as an undergraduate or a graduate?

Undergraduate Graduate (takin	
taking 6.813	
Graduate	

Rank the colors listed from your most favorite (1) to your least favorite (5). Be sure to only use each ranking once.

#ff0000
#0000ff
#ff00b3
#ded447
#125e18
<b>‡</b>
#ff0000
#0000ff
#ff00b3
#ded447
#405-40

## Task 4:

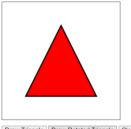
# Drawing a triangle to canvas

```
<!doctype html>
 <head>
   <title>Lab 2: Exercise 3</title>
   <meta charset="utf-8">
   <script
     src="https://code.jquery.com/jquery-3.1.1.js"
     integrity="sha256-16cdPddA6VdVInumRGo6IbivbERE8p7CQR3HzTBuELA="
     crossorigin="anonymous"></script>
   <script
     src="https://code.jquery.com/ui/1.12.1/jquery-ui.js"
     integrity="sha256-T0Vest3yCU7pafRw9r+settMBX6JkKN06dqBnpQ8d30="
     crossorigin="anonymous"></script>
   <link rel="stylesheet" href=</pre>
      "https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.css">
   <link rel="stylesheet" href=</pre>
      "https://code.jquery.com/ui/1.12.1/themes/ui-lightness/jquery-ui.css">
     <style>
       body { margin: 20px; }
       #container { display: block; }
       #draw_buttons { float: left; width: 100%; margin-top: 10px; }
     </style>
   <script>
   $(document).ready(function() {
     /* Step 1: Your code goes here */
     var canvas = document.getElementById("myCanvas");
     var ctxt = canvas.getContext('2d');
     /* Step 2: Your js code goes here */
     $("#button_draw_triangle").click(function() {
       ctxt.fillStyle = '#f00';
       ctxt.strokeStyle = '#000';
       ctxt.lineWidth = 3;
       ctxt.beginPath();
       ctxt.moveTo(60, 240);
       ctxt.lineTo(240, 240);
       ctxt.lineTo(150, 60);
       ctxt.closePath();
       ctxt.fill();
```

```
ctxt.stroke();
     });
     /* Step 3: Your js code goes here */
     $("#button_draw_rotated_triangle").click(function() {
       ctxt.translate(canvas.width / 2, canvas.height / 2);
       ctxt.rotate(Math.PI / 4);
       ctxt.beginPath();
       ctxt.moveTo(-90, 90);
       ctxt.lineTo(90, 90);
       ctxt.lineTo(0, -90);
       ctxt.closePath();
       ctxt.fill();
       ctxt.stroke();
     });
     /* Step 4: Your js code goes here */
     $("#button_clear_canvas").click(function() {
       /* Clear canvas and reset transformations */
       ctxt.clearRect(0, 0, canvas.width, canvas.height);
       ctxt.setTransform(1, 0, 0, 1, 0, 0); // Reset transformation matrix
     });
   });
   </script>
 </head>
 <body>
   <h2>Manipulate the Canvas</h2>
   <canvas id="myCanvas"
     width="300" height="300"
     style="border:1px solid #000000;"></canvas>
   <div id="draw buttons">
     <button id="button_draw_triangle">Draw Triangle
     <button id="button_draw_rotated_triangle">Draw Rotated Triangle
     <button id="button_clear_canvas">Clear Canvas</button>
   </div>
 </body>
</html>
```



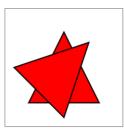
#### Manipulate the Canvas



Draw Triangle Draw Rotated Triangle Clear Canvas



#### Manipulate the Canvas





#### Manipulate the Canvas



Draw Triangle Draw Rotated Triangle Clear Canvas