UNIVERSITI MALAYSIA TERENGGANU

CSM3103 – FRONT-END PROGRAMMING

BACHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING) WITH HONORS

LAB 5

SEMESTER II 2023/2024

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(S67614)

Link Github :

https://github.com/0pSinon/CSM3103-Lab5-S67614-Iqbal-Rauf-

Task 1

Code :

```html
<html>
  <head>
    <title>Lab 5 : Task 1</title>
    <meta charset="utf-8">
    <script
      src="https://code.jquery.com/jquery-3.1.1.js"
      integrity="sha256-16cdPddA6VdVInumRGo6IbivbERE8p7CQR3HzTBuELA="
      crossorigin="anonymous"></script>
    <link rel="stylesheet" href=
      "https://cdnjs.cloudflare.com/ajax/libs/mini.css/2.0.2/mini-default.css">
    <style>
      body { margin: 20px; }
      #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);

          $('body').css('color', input_value);

      });
    });
    </script>
  </head>
  <body>

    <h2> Paint it <span class="door_color">Black</span> by The Rolling
Stones(1966)</h2>
    <p>I see a red door and I want it painted <span class="door_color">Black</span>
    </p>

    <p>My Wanted Color is :
      <input id="input_color" value="Purple"></input>
      <button id="button_change">
        Change!
      </button>
```
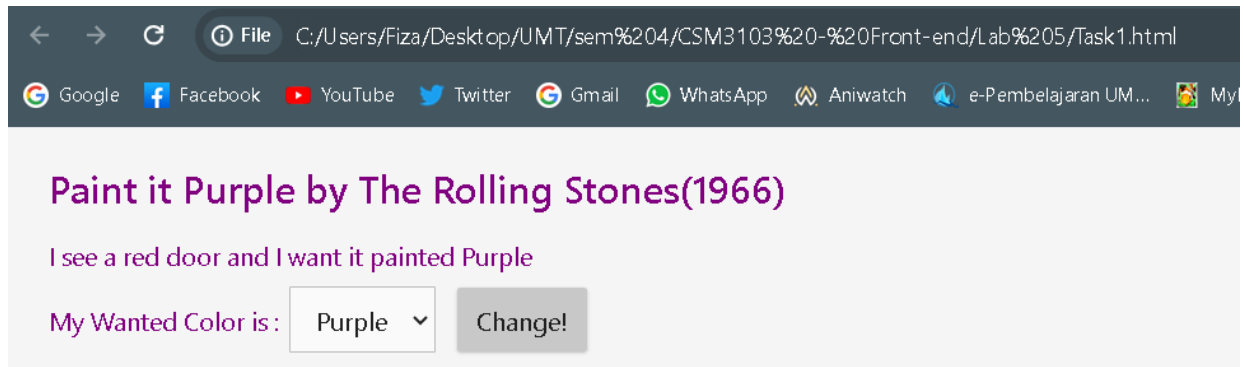
```
    </p>

  </body>
</html>
```

Output:

Paint it Purple by The Rolling Stones(1966)

I see a red door and I want it painted Purple

My Wanted Color is :   [Purple ▾]   [Change!]

For selected colour

Code :

```html
<html>
  <head>
    <title>Lab 5 : Task 1 - select colour</title>
    <meta charset="utf-8">
    <script
      src="https://code.jquery.com/jquery-3.1.1.js"
      integrity="sha256-16cdPddA6VdVInumRGo6IbivbERE8p7CQR3HzTBuELA="
      crossorigin="anonymous"></script>
    <link rel="stylesheet" href=
      "https://cdnjs.cloudflare.com/ajax/libs/mini.css/2.0.2/mini-default.css">
    <style>
      body { margin: 20px; }
      #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>
    <p>I see a red door and I want it painted <span class="door_color">Black</span>
    </p>

    <p>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!
```

```
      </button>
    </p>


  </body>
</html>
```

Output :

Paint it black by The Rolling Stones(1966)

I see a red door and I want it painted black

My Wanted Color is : [Black   ∨] [Change!]

Paint it red by The Rolling Stones(1966)

I see a red door and I want it painted red

My Wanted Color is : [Red   ∨] [Change!]

Paint it green by The Rolling Stones(1966)

I see a red door and I want it painted green

My Wanted Color is : [Green   ∨] [Change!]

Paint it blue by The Rolling Stones(1966)

I see a red door and I want it painted blue

My Wanted Color is : [Blue   ∨] [Change!]

Paint it purple by The Rolling Stones(1966)

I see a red door and I want it painted purple

My Wanted Color is : Purple ▼ Change!

Task 2

Code :

```
<!doctype html>
<html>
  <head>
    <title>Lab 5: Task 2</title>
    <meta charset="utf-8">
    <link rel="stylesheet" href=
      "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"
          >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>
```

Output :

Toggle colour

Toggle Rounded Borders

Add a New Box

Toggles

Toggle Colors | Toggle Rounded Borders | Add a New Box

Modify

Code :

```
<!doctype html>
<html>
  <head>
    <title>Lab 5: Task 2 - Modify</title>
    <meta charset="utf-8">
    <link rel="stylesheet"
href="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-
16cdPddA6VdVlnumRGo6IbivbERE8p7CQR3HzTBuELA="
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();
          // Randomly select one box to show
          var randomBoxIndex = Math.floor(Math.random() * $(".box").length);
          $(".box").eq(randomBoxIndex).show();
        });
      });
    </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">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>
```

Output :

Toggles

Toggle Colors | Toggle Rounded Borders | Add a New Box

Toggles

Toggle Colors | Toggle Rounded Borders | Add a New Box

Toggles

Toggle Colors | Toggle Rounded Borders | Add a New Box

Toggles

Toggle Colors | Toggle Rounded Borders | Add a New Box

Task 3

Code :

```html
<!doctype html>
<html>
 <head>
  <title>Lab 5: Task 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=
   "https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.css">
  <link rel="stylesheet" href=
   "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;
   }
```

```css
#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 +'"></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><br>
        <input type="radio" name="enroll_year" id="grad" value="grad">
        <label for="grad">Graduate (taking 6.831)</label>

        <!-- Step 2: Your HTML here -->
        <ol id="selectable">
          <li class="ui-widget-content" title="taking 6.813">Undergraduate</II>
           <li class="ui-widget-content" title="taking 6.813">Graduate</li>
        </ol>

      </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/>
       <input type="text" class="rank_color" id="dark_green">
       <label for="dark_green">#125e18</label><br/>
```

```html
    <!-- Step 3: Your HTML here -->
    <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>

    <ul id = "sortable">
      <li class = "ui-state-default">#ff0000</li>
      <li class = "ui-state-default">#0000ff</li>
      <li class = "ui-state-default">#ff00b3</li>
      <li class = "ui-state-default">#ded447</li>
      <li class = "ui-state-default">#125e18</li>
    </ul>

  </div>

 </body>
</html>
```

Output :

jQuery UI-Survey

General Information

Name: [   ]   Date: [   ]

Are you enrolled as an undergraduate or a graduate?

○ Undergraduate (taking 6.813)
○ Graduate (taking 6.831)
  [ ] Undergraduate
  [ ] 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
↕
  #ff0000
  #0000ff
  #ff00b3
  #ded447
  #125e18

Task 4

Code :

```html
<!doctype html>
<html>
  <head>
    <title>Lab 5: Task 4</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=
      "https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.css">
    <link rel="stylesheet" href=
      "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>
    <button id="button_draw_rotated_triangle">Draw Rotated Triangle</button>
    <button id="button_clear_canvas">Clear Canvas</button>
  </div>

</body>
</html>
```
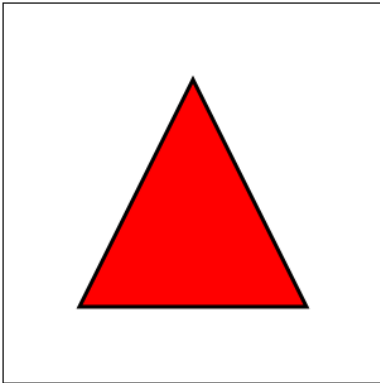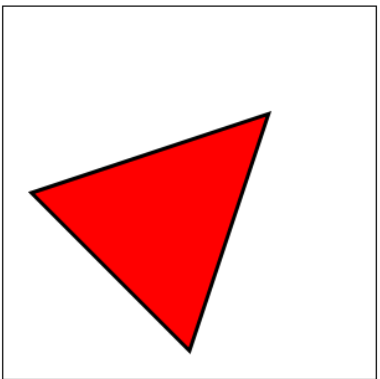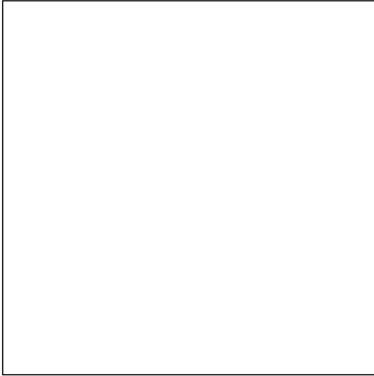
Output :

Draw Triangle

Manipulate the Canvas

[Draw Triangle] [Draw Rotated Triangle] [Clear Canvas]

Draw Rotated Triangle

Manipulate the Canvas

[Draw Triangle] [Draw Rotated Triangle] [Clear Canvas]

Clear Canvas

Manipulate the Canvas

| Draw Triangle | Draw Rotated Triangle | Clear Canvas |