

## Lab 4

### Task 1

- a. Get the code from <http://frend.skimtech.my/Lab/Lab4/Task1.html> , and evaluate and test the code.
  - i. What is the id of button and input field. button id = "button\_change" & input id = "input\_color"
  - ii. What happened when you clicked change button and why? nothing happened
- b. Your mission: when the button is clicked, all occurrences of the word Black to be changed to the text in the input field.

- a. Select the change button

```
var button = $('#button_change');
```

- b. Setting a click listener for button

```
$(button).click(function(){  
    //your next code is here  
});
```

- c. Retrieving and storing the input value

```
//select the input color  
var input_color = $('#input_color');  
  
//select the input value  
var input_value = $(input_color).val();
```

- d. Select all appropriate black text by class selector

```
//select all appropriate black text recognise by class  
var element = $('.door_color');
```

- e. Replace the text with the input value

```
//changed the selected text color to input value color  
$(element).html(input_value);
```

- f. Test and evaluate your code. Comment on the new behaviour of your code
- g. Basically, all those id and value in the code can be access directly without using any variables. **Rewrite the code by directly using the jQuery selector**
- h. **Rewrite the code: can refer to task 2 if in doubt**
  - i. **Instead of input field, change it to dropdown which display available color understood by HTML (use select tag)**
  - ii. **Retrieve the value from the select tag**
  - iii. **Change the color of all appropriate text to selected color**

## Task 2

- a. Get the code from <https://frend.skimtech.my/Lab/Lab4/Task2.html> , and evaluate and test the code
  - i. What are id's that exist in the code above?
  - ii. Open the file inside browser, what have you see in the browser?
  - iii. Click any button, what happened? Why
- b. Your mission:
  - i. Click on Toggle Colors button: Toggles the color between white and cardinal
  - ii. Click on Toggle Rounded Borders: Toggles the appearance of a border on the boxes
  - iii. Click add a new box: adds one new box to the container
- c. Implements the following to accomplished your mission
  - i. Add outlined class to each <div>. Refer to <div> for box2 as an example. Save and open the file in browser
    - i. What changes have you see?
  - ii. Add a click function to button\_toggle\_color, and implementing change color process

```
//add button_toggle_color click function
$('#button_toggle_colors').click(function(){
    //get box1
    var box1 = $('#box1');
    //check and changed background color of box1
    if($(box1).css('background-color')==colorTeal){
        //remove the color
        $(box1).css('background-color','');
    }else{
        //put back colorTeal as background
        $(box1).css('background-color',colorTeal);
    }
});
```

- iii. Create an event listener for button\_toggle\_roundedges
- iv. Inside the function add the following code

```
$(".box").each(function(){
    if ($(this).hasClass('round-edge')){
        $(this).removeClass('round-edge');
    }else{
        $(this).addClass('round-edge');
    }
});
```

- v. Based on code in iv, can you modify a code in ii, so it change all box background and returned all to vanilla as well!

- vi. Create an event listener for button\_add\_box.
- vii. Inside the function put the following code
  - i. Create new element using javascript

```
var new_box = document.createElement('div');
```
  - ii. Get current number of element with class .box

```
var existingBoxes = $(".box").length;
```
  - iii. With the current number of box create new id for new box

```
var nextBoxId = existingBoxes+1;
$(new_box).attr("id", "box"+nextBoxId);
```
  - iv. Add two classes (box and outlined) to new\_box

```
$(new_box).addClass("box");
$(new_box).addClass("outlined");
```
  - v. Finally, attached new box into box container

```
$("#boxes").append(new_box);
```
- viii. Test and evaluate your code
- ix. Modify the code above so that when button clicked, it only show one element which selected randomly .

### Task 3

- a. Get the code from <https://frend.skimtech.my/Lab/Lab4/Task2.html> , and evaluate and test the code:
  - i. Determine the id's of each element
  - ii. Recognise any input element that associated with the form
  - iii. Your Task are:
    1. Add DatePicker
    2. Use selectable interaction
    3. Use Sortable widget
    4. Use the tooltip

- b. Inserting the datepicker into a form
  - i. In the document ready function add this code

```
$('#date').datepicker();
```

- i. Can you set the date to limit the selectable date range to only include dates from the previous two weeks to the next two weeks.

- c. Using selectable for enrolment type
  - i. Comment radiobutton input
  - ii. Add the following code

```
<ol id="selectable">
  <li class="ui-widget-content" title="taking 6.813">Undergraduate</li>
  <li class="ui-widget-content" title="taking 6.831">Graduate</li>
</ol>
```

- iii. Add some css in style section

```

#selectable .ui-selecting {
    background: #FECA40; }

#selectable .ui-selected {
    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: 150px; cursor: pointer; }

#selectable li {
    margin: 3px; padding: 0.4em;
    font-size: 1.0em; height: 16px; }

```

- iv. And control the behaviour using jQuery selector

```
$("#selectable").selectable();
```

- v. How can we retrieve the value of the selected item?

- d. Using sortable for the color input

- i. Comment all input element that related to color selections
- ii. Replace with the following code

```

<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>

```

- iii. Adding a control to sort the list and disable the selection

```

$("#sortable").sortable();
$("#sortable").disableSelection();

```

- iv. Check your output, now you can drag any color to a new position
- v. Add the following style to your code

```
#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;
}
```

- vi. What do you think this CSS did? You can reverse the step to see the changes after and before the use of CSS
- vii. Add the following span with class before color code in the <li> in (ii) above

```
<span class="ui-icon ui-icon-arrowthick-2-n-s"></span>
```

e. Adding a Tooltip

- i. Add the following code inside document ready function

```
$(document).tooltip({
  items: '[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_swatch" style="background:' +
          text + '></div>'
      }
    }
  }
});
```

- ii. Add the following css

```
.color_swatch{ height:50px; width: 50px; }
```