

Section B
Unit #10
Local
Storage



Unit #10 local storage

Sketch B10.1 sliders

Sketch B10.2 storing data

Sketch B10.3 getting the data

Sketch B10.4 replacing the values



Introduction

This part has no core theme but a series of useful and interesting features found in p5.js. there is no logic to this but where I think you might find some useful features no explicit taught anywhere else in the course.

Unit #10 local storage

Introduction

You can store information and data on your machine and in your browser, calling it up at a later date.



Sketch B10.1 sliders

By sliding the sliders we can change the background

```
let rSlider
let gSlider
let bSlider

function setup()
{
  createCanvas(400, 400)
  rSlider = createSlider(0, 255, 0)
  gSlider = createSlider(0, 255, 0)
  bSlider = createSlider(0, 255, 0)
}

function draw()
{
  let r = rSlider.value()
  let g = gSlider.value()
  let b = bSlider.value()
  background(r, g, b)
}
```



Sketch B10.2 storing data

We cannot save this if we close down the programme and reopen it later even on the same machine. Yet we can if we use two p5.js functions. They do exactly as they same on the tin. We create a function called **storedData()**. Inside that function we store the value of the red slider. We will call the variable 'redValue'.

storeItem()

getItem()

```
let rSlider
let gSlider
let bSlider

function setup()
{
  createCanvas(400, 400)
  rSlider = createSlider(0, 255, 0)
  gSlider = createSlider(0, 255, 0)
  bSlider = createSlider(0, 255, 0)
  rSlider.changed(storeData)
}

function storeData()
{
  storeItem('redValue', rSlider.value())
}

function draw()
{
  let r = rSlider.value()
  let g = gSlider.value()
```

```
let b = bSlider.value()  
background(r, g, b)  
}
```

Notes

We can also use **input()** which does this continuously. We need to get the stored value.



Sketch B10.3 getting the data

The redValue has been saved. Now we add the **getItem()** function. We only want to get the value if it isn't null (or zero), hence the **!==** if statement.

```
let rSlider
let gSlider
let bSlider

function setup()
{
  createCanvas(400, 400)
  rSlider = createSlider(0, 255, 0)
  let r = getItem('redValue')
  if (r !== null)
  {
    rSlider.value(r)
  }
  gSlider = createSlider(0, 255, 0)
  bSlider = createSlider(0, 255, 0)
  rSlider.changed(storeData)
}

function storeData()
{
  storeItem('redValue', rSlider.value())
}

function draw()
{
  let r = rSlider.value()
  let g = gSlider.value()
```



```
let b = bSlider.value()  
background(r, g, b)  
}
```

Notes

Save the sketch, now change the red slider (make sure that auto refresh is off), and close the sketch, you can even close the browser. Open it up again and you should have the same red value for the slider and background.

Challenge

You can check by changing the other sliders and you will see the difference!



Sketch B10.4 replacing all the values

Putting the other values for the background colour into the local storage

```
let rSlider
let gSlider
let bSlider

function setup()
{
  createCanvas(400, 400)
  // get the red value
  rSlider = createSlider(0, 255, 0)
  let r = getItem('redValue')
  if (r !== null)
  {
    rSlider.value(r)
  }
  // get the green value
  gSlider = createSlider(0, 255, 0)
  let g = getItem('greenValue')
  if (g !== null)
  {
    gSlider.value(g)
  }
  // get the blue value
  bSlider = createSlider(0, 255, 0)
  let b = getItem('blueValue')
  if (b !== null)
  {
    bSlider.value(b)
  }
}
```

```
// store the values of the red, green and blue
rSlider.changed(storeData)
gSlider.changed(storeData)
bSlider.changed(storeData)
}

function storeData()
{
  storeItem('redValue', rSlider.value())
  storeItem('greenValue', gSlider.value())
  storeItem('blueValue', bSlider.value())
}

function draw()
{
  let r = rSlider.value()
  let g = gSlider.value()
  let b = bSlider.value()
  background(r, g, b)
}
```

