

JavaScript Animation (Week #5)

JavaScript does not have a function such as Java's sleep method that pauses a task for a specified period of time. However, JavaScript has two functions that can be used to delay the execution of a function.

- **setTimeout**–Will execute a function a specific number of milliseconds in the future
- **setInterval**–Will execute a function every milliseconds

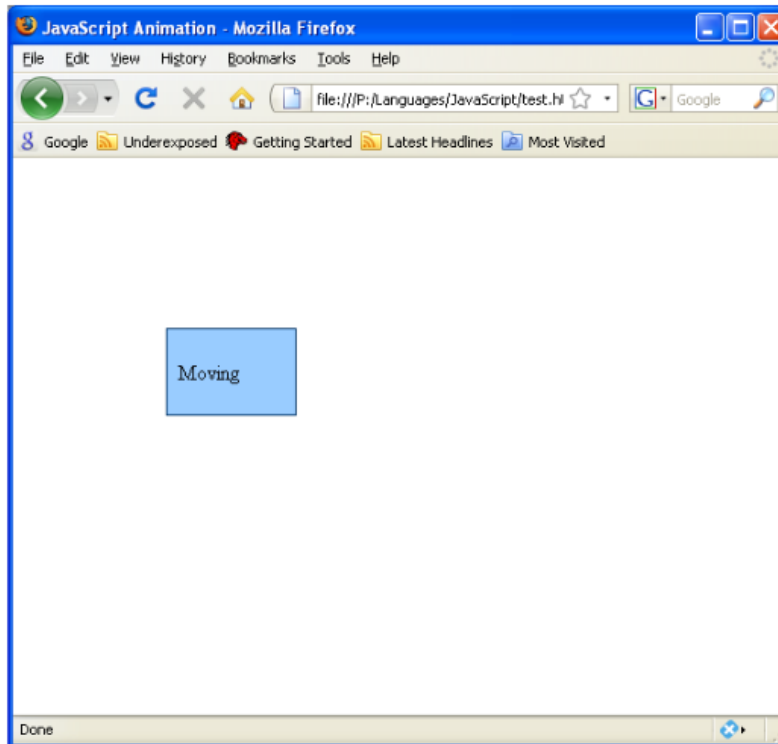
Both functions take on two arguments:

- **Function**–The first argument identifies the function to execute
- **Time**–The number of milliseconds

```
setTimeout(someFunction,500);    // The function will be executed 500 milliseconds  
                                   // in the future  
setInterval(someFunction,500);    // The function will be executed 500 every  
                                   //milliseconds
```

Exercise 1

Provide the necessary HTML and JavaScript code that produces a web page that looks like the picture provided below. Please use the `setTimeout` to move a `<div>` tag across the screen. The `int` function setups the animation by retrieving a reference to the tag and calling the `move` function. The function `move` modifies the position of the tag and recursively schedules itself for future invocation.



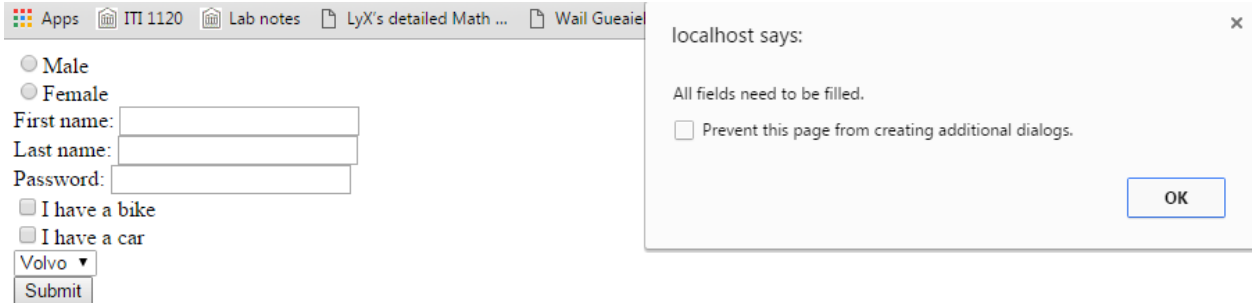
Hint:

```
function move() {  
square.style.left = parseInt(  
square.style.left)+1+'px';  
setTimeout(move,20);  
}  
  
function init() {  
square= document.getElementById('Square');  
  
square.style.left = '0px';  
move();  
}
```

JavaScript code to move the div tags to right side of the screen.

Exercise 2

Provide the necessary HTML and JavaScript code that produces a web page that looks like the picture provided below. Provide a form where all fields are mandatory to be filled.



The screenshot shows a web browser window with several tabs: 'Apps', 'ITI 1120', 'Lab notes', 'LyX's detailed Math ...', and 'Wail Gueaie'. The active page displays a form with the following elements:

- Radio buttons for 'Male' and 'Female'.
- Text input fields for 'First name:', 'Last name:', and 'Password:'.
- Checkboxes for 'I have a bike' and 'I have a car'.
- A dropdown menu with 'Volvo' selected.
- A 'Submit' button.

An alert dialog box titled 'localhost says:' is overlaid on the form. It contains the message 'All fields need to be filled.' and a checkbox labeled 'Prevent this page from creating additional dialogs.' which is unchecked. An 'OK' button is located at the bottom right of the dialog.

```
function checkFields() {  
    var firstname =  
document.forms["myForm"]["firstname"].value;  
    var lastname =  
document.forms["myForm"]["lastname"].value;  
    var passowrd = document.forms["myForm"]["pwd"].value  
    if ((firstname == "" || lastname == "" || (passowrd == "")) {  
        window.alert("All fields need to be filled.");  
    }  
    else window.alert("Thank you for submitting your  
information");  
}
```

JavaScript code to check the text filed inputs.