

Fall, 2020

## COMP2121 E-Business

# Lab 3: JavaScript

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## References

<https://www.w3schools.com/js/>

<https://www.w3schools.com/jsref/default.asp>

<https://javascript.info/>

# The Nexus

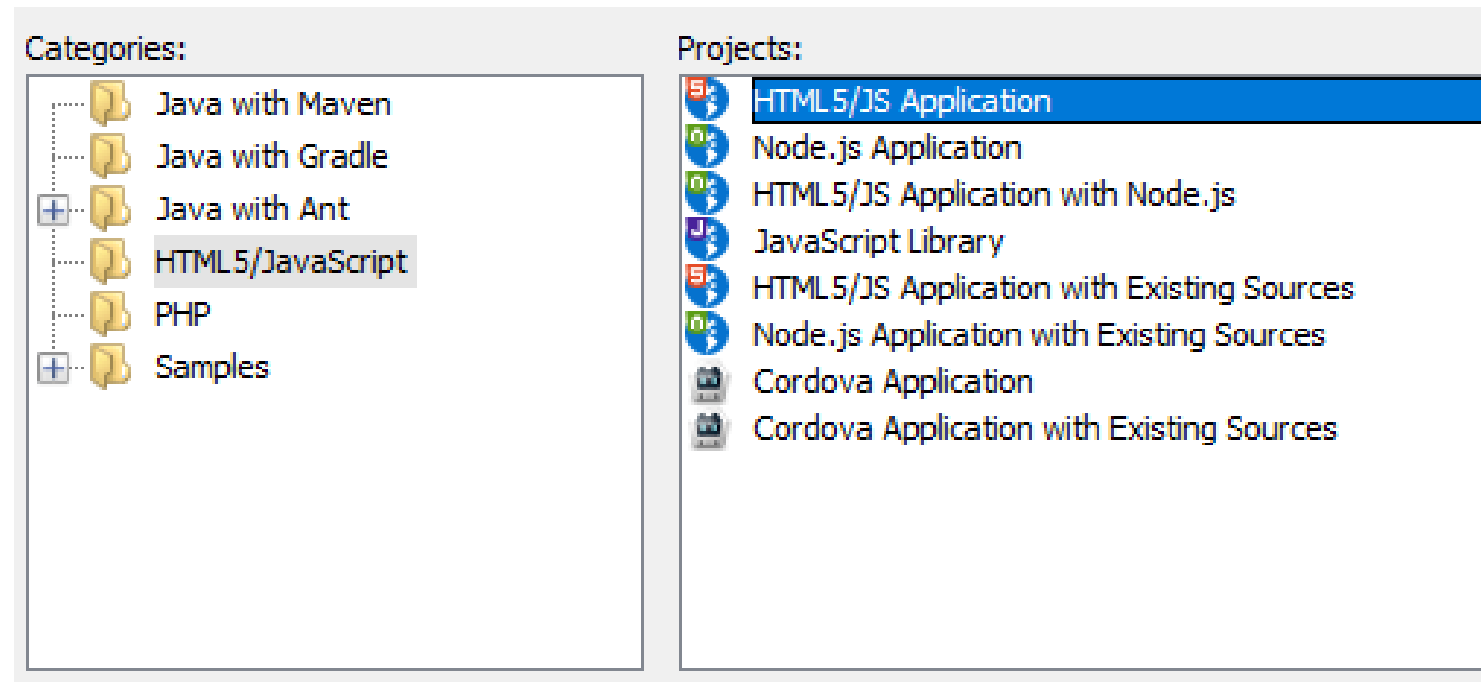
- **HTML:** the content of the web pages
- **CSS:** the “look and feel” of the web pages
- **JavaScript:** the behavior of the web pages

# JavaScript

- We do not need to download and install JavaScript.
- JavaScript is installed in the browser on computer, tablet, or smart-phone.
- JavaScript is free to use for everyone.

## Ex1: Create a project

- Open your Netbeans IDE (Run as administrator)
- Click File -> New Project → HTML 5/JS Application



## Ex1: Create a project

- Create a folder named “Lab04JS” (no space) under your working folder which you have created in Lab 1; For example,

### Steps

1. Choose Project
2. **Name and Location**
3. Site Template
4. Tools

### Name and Location

Project Name:

Project Location:

Project Folder:

- Choose no site template

### Steps

1. Choose Project
2. Name and Location
3. **Site Template**
4. Tools

### Site Template

Optionally initialize your project structure with a site template.

☒ **No Site Template**

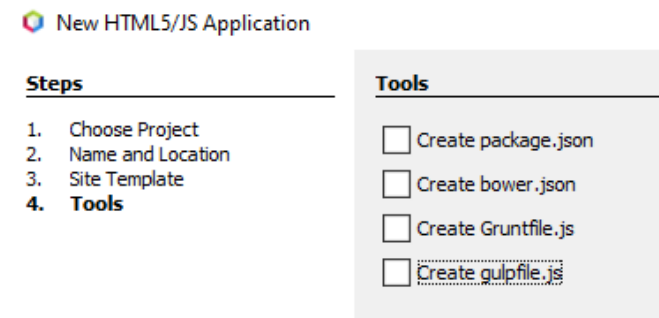
☐ Select Template:

Template:

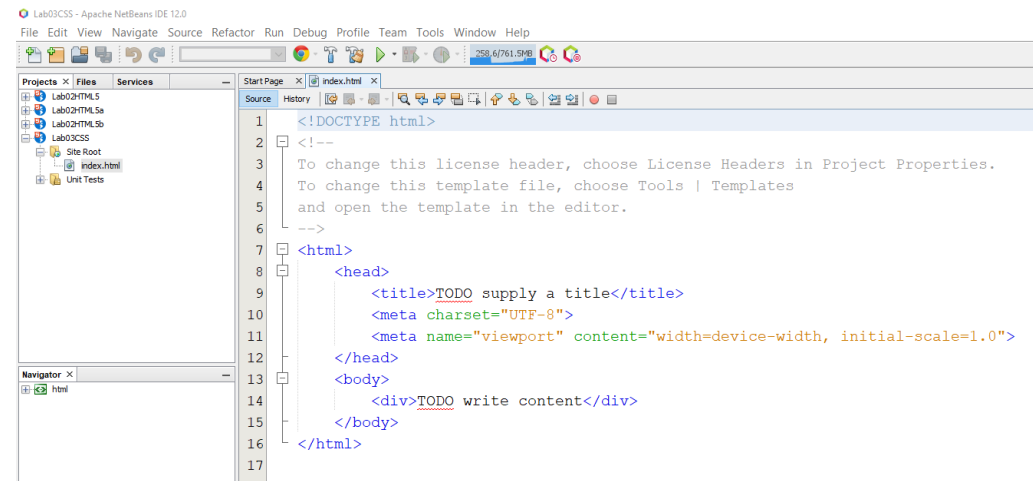
Local archive file or a URL pointing to remote archive file can be specified.

## Ex1: Create a project

- Uncheck these (.json and .js) as we do not need them at this moment.



- Finally, we will have this





# Where and how to write JavaScript

- Inline: in the tag attribute of “the event handler”
- Internal: Use `<script>` tag in either `<head>` or `<body>`
- External: `<script src=“extScript.js”></script>`



## Ex2: Inline JS

```
<!DOCTYPE html>
<!--
Lab 3 JavaScript
-->
<html>
  <head>
    <title>My First JavaScript Lab</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
      initial-scale=1.0">
  </head>
  <body>
    <button type="button"
      onclick="document.getElementById('DateInf').
        innerHTML = 'The time is: <br>' + Date()">
      Show Date
    </button>
    <div id="DateInf">Waiting for your click to show date....</div>
  </body>
</html>
```

Show Date

Waiting for your click to show date....

Show Date

The time is:  
Sun Oct 04 2020 17:09:10 GMT+0800 (Malay Peninsula Standard Tim)

## Ex3:Internal JS

```
1 <!DOCTYPE html>
2 <!--
3 Lab 3 JavaScript
4 -->
5 <html>
6 <head>
7 <title>My First JavaScript Lab Ex3</title>
8 <meta charset="UTF-8">
9 <meta name="viewport" content="width=device-width,
10 initial-scale=1.0">
11 <script>
12 function showDate() {
13     document.getElementById('DateInf').
14     innerHTML = 'The time is: <br>' + Date()
15 }
16 </script>
17 </head>
18
19 <body>
20 <button type="button" onclick="showDate()">
21     Show Date
22 </button>
23 <div id="DateInf">Waiting for your click to show date....</div>
24
25 </body>
26 </html>
```

1. Copy ex2.html to a new page named ex3.html.
2. Modify the code as shown.

Show Date

Waiting for your click to show date....

Show Date

The time is:  
Sun Oct 04 2020 17:30:03 GMT+0800 (Malay Peninsula Standard Tim)

## Ex4:External JS

1. Copy ex3.html to a new page named ex4.html.
2. Create a JS file named functionlib.js.
3. Modify the code as shown.

```

1  <!DOCTYPE html>
2  <!--
3  Lab 3 JavaScript
4  -->
5  <html>
6  <head>
7      <title>My First JavaScript Lab</title>
8      <meta charset="UTF-8">
9      <meta name="viewport" content="width=device-width,
10         initial-scale=1.0">
11      <script src="functionLib.js"></script>
12
13  </head>
14
15  <body>
16      <button type="button" onclick="showDate()">
17          Show Date
18      </button>
19      <div id="DateInf">Waiting for your click to show date....</div>
20
21  </body>
22  </html>

```

```

1  /*
2   *   Lab 4
3   *   COMP2121 E-Business, Fall 2020
4   *   kevin Yuen
5   *   functionlib.js
6   */
7  function showDate() {
8      document.getElementById('DateInf').
9          innerHTML = 'The time is: <br>' + Date()
10  }

```

Show Date

The time is:  
Sun Oct 04 2020 17:45:59 GMT+0800 (Malay Peninsula Standard Tim)

## Ex5: Connecting web pages

- 1) Copy the html and css files of the previous lab to the current project.
- 2) Rename the files, e.g. ex5.html, and lab4.css.
- 3) Modify the HTML file as shown.
- 4) Create **five** html files with respect to the file names in the source code.
- 5) Create one list item linked to a valid external web site.
- 6) Create one function in the functionLib.js (next slide)

```

1 <!DOCTYPE html>
2 <!--
3 A simple demo
4 -->
5 <html>
6 <head>
7   <title>KKF Yuen Company</title>
8   <meta charset="UTF-8">
9   <meta name="viewport" content="width=device-width, initial-scale=1.0">
10  <link rel="stylesheet" type="text/css" href="lab4.css">
11  <script src="functionLib.js"></script>
12 </head>
13
14 <body onload="document.getElementById('webDisplay').src = 'home.html'">
15   <div class="container wrapper">
16     <h1>Welcome to KKF Yuen Company</h1>
17
18     <div class="wrapper">
19       <ul id="mList">
20         <li class="mItem" onclick="goTo('home.html')">Home</li>
21         <li class="mItem" onclick="goTo('Product.html')">Product</li>
22         <li class="mItem" onclick="goTo('Promotion.html')">Promotion</li>
23         <li class="mItem" onclick="goTo('Signin.html')">Sign In</li>
24         <li class="mItem" onclick="goTo('Help.html')">Help</li>
25         <li class="mItem" onclick="goTo('https://www.r-project.org/')">R</li>
26       </ul>
27     </div> </div>
28     <hr>
29     <p id="testWeb">test</p> <!-- This line is for debug purpose-->
30
31     <iframe id="webDisplay" >
32       Your browser does not support iframe.
33     </iframe>
34
35     <div id="endnote">
36       No Copyright @ 2020 Kevin Yuen
37     </div>
38   </body>
39 </html>

```

```

12 function goTo(web)
13 {
14   document.getElementById('testWeb').
15     innerHTML =web; //For debug Purpose
16   document.getElementById('webDisplay').src = web;
17 }

```

## Ex5: Connecting web pages

### Welcome to KKF Yuen Company

[Home](#) [Product](#) [Promotion](#) [Sign In](#) [Help](#) [R](#)

home.html

This is Home

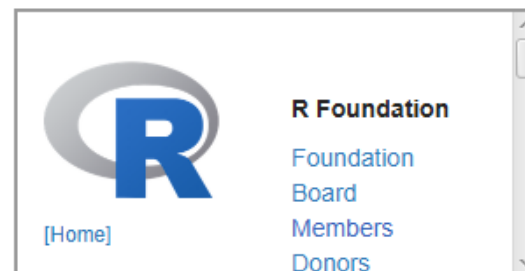
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The iframe will display when the user clicks the menu item. However, the iframe display needs improvement.

### Welcome to KKF Yuen Company

[Home](#) [Product](#) [Promotion](#) [Sign In](#) [Help](#) [R](#)

<https://www.r-project.org/>



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## Ex6: css of iframe and html

Revise and add the code below to the lab4.css file.

```
html{  
    height: 75%;  
    overflow: hidden;  
}  
  
body{  
    height: 100%;  
    font: 100% Verdana;  
    margin: 10px;  
    line-height: 26px;  
}  
  
iframe {  
    height: 90%;  
    width: 100%;  
    overflow: hidden;  
    border: none;  
}
```

### Welcome to KKF Yuen Company

[Home](#) [Product](#) [Promotion](#) [Sign In](#) [Help](#) [R](#)

Product.html

This is a Product page

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# Ex6: css of iframe and html

## Welcome to KKF Yuen Company

[Home](#) [Product](#) [Promotion](#) [Sign In](#) [Help](#) [R](#)<https://www.r-project.org/>[\[Home\]](#)

### Download

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## The R Project for Statistical Computing

### Getting Started

R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS. To [download R](#), please choose your preferred [CRAN mirror](#).

If you have questions about R like how to download and install the software, or what the license terms are, please read our [answers to frequently asked questions](#) before you send an email.

### News

- Thanks to the organisers of useR! 2020 for a successful online conference. Recorded tutorials and talks from the conference are available on the [R Consortium YouTube channel](#).
- R version 4.0.3 (Bunny-Wunnies Freak Out)** prerelease versions will appear starting Wednesday 2020-09-30. Final release is scheduled for Saturday 2020-10-10.
- R version 4.0.2 (Taking Off Again)** has been released on 2020-06-22.
- R version 3.6.3 (Holding the Windsock)** has been released on 2020-02-29.
- You can support the R Foundation with a renewable subscription as a [supporting member](#)

### News via Twitter

 The R Foundation Retweeted**R Consortium**

@RConsortium

Deadline is Oct 1! September 2020 Call for Proposals!  
We are soliciting progressive, pioneering projects that will benefit and serve the R community and ecosystem at large. Our goal is to foster innovation and help bring your ideas into tangible realities. [bddy.me/2G9mXzA](https://bddy.me/2G9mXzA)

This exercise is to combine the HTML, CSS, and JS files to create the dynamic websites.

We use ex5.html to connect to the other five pages and one external page to display under the horizontal line.

In addition to iframe, explore more methods. For example, take a quick view of the HTML source code to find out how <https://www.r-project.org/> is structured.



Q&A  
Thank you