

LAB-04

BROWSER OBJECT MODEL(BOM)

OBJECTIVE:

To learn what is BOM and the APIs is available for manipulating them .

Lab TASK CODE:

1. Copy the *Login Form* created in Lab#1 and update its OK button to
 - a. Create a *cookie* if *Remember Me* is set and save Student Id and Name
 - b. Show wait image on Login Form OK button click
 - c. Redirect to the *Student Profile* page after 2 seconds and remove the wait image

Code:

a) Cookies Remember

```
}  
function setCookie(name, value)  
{  
    document.cookie=name + "=" + encodeURIComponent(value) + "; path=/; expires=" + expiry.toGMTString();  
}  
  
function storeValues(form) |  
{  
    setCookie("Username", form.id.value);  
    setCookie("UserID", form.user.value);  
    return true;  
}  
  
</script>  
</body>  
</html>
```

b) Wait Image

```
<script>  
    setTimeout(function(){  
        window.location.href = 'loginform.html';  
    }, 5000);  
</script>
```

Output:

Sir Syed University
of Engineering & Technology

Username

admin

Password

....

Login

☒ Remember me

Cancel

Forgot [password?](#)192.168.1.1

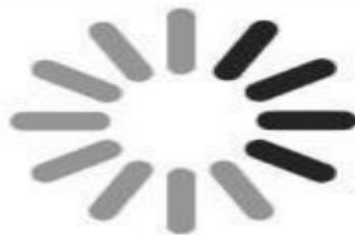
admin

.....

192.168.8.1

admin

.....





Sir Syed University of Engineering & Technology

Syed University of Engineering and Technology is a private research university located in the urban area of Karachi, Sindh, Pakistan.
The university is honored in the name of notable 19th-century Indian Muslim reformer and philosopher, Sir Syed Ahmad Khan.

[SSUET University Home Page](#)

[SSUET University Scholarship Notice Page](#)

[SSUET University News and Events Page Calendar](#)

Course ID	Course Name	Credit Hours	Year Taken
SWE314L - 203	ARTIFICIAL INTELLIGENCE	3+1	2021
SWE312T - 2190	SOFTWARE CONSTRUCTION & DEVELOPMENT	3+1	2021
SWE209L - 1483	INTRODUCTION TO DATABASE SYSTEMS	3+0	2020
SWE204L - 1837	OPERATING SYSTEMS	3+0	2020
Add New Course Delete Course Update Course			

HOOME TASK CODE:

2. Update the Student Profile page
 - a. If cookie is present
 - i. Retrieve the cookie and show student Name on top-right of the page
 - ii. Set the background page color to be light green, otherwise light gray
 - b. Add a new button alongside other buttons under the table called *Remove All New* for removing all the newly created courses (rows).
 - c. Create a *ul* list and using *window.history* API, find all the previous URLs visited and list them down using *li* items
 - i. If the URL of each history item contains the text Lab#2, highlight using green color, otherwise blue

Code:**a) Cookies Present:**

```

<script>function setCookie(cname, cvalue, exdays) {
  const d = new Date();
  d.setTime(d.getTime() + (exdays * 24 * 60 * 60 * 1000));
  let expires = "expires=" + d.toUTCString();
  document.cookie = cname + "=" + cvalue + ";" + expires + ";path=/";
}

function getCookie(cname) {
  let name = cname + "=";
  let ca = document.cookie.split(';');
  for(let i = 0; i < ca.length; i++) {
    let c = ca[i];
    while (c.charAt(0) == ' ') {
      c = c.substring(1);
    }
    if (c.indexOf(name) == 0) {
      return c.substring(name.length, c.length);
    }
  }
  return "";
}

function checkCookie() {
  let user = getCookie("username");
  if (user != "") {
    alert("Welcome again " + user);
  } else {
    user = prompt("Please enter your name:", "");
    if (user != "" && user != null) {
      setCookie("username", user, 365);
    }
  }
}
</script>

```

b) Remove All Courses:

```

<script>describe('clearArray()', () => {
  test('clear regular array', () => {
    const array = [1, 2, 3, 4, 5];
    clearArray(array);
    expect(array.length).toEqual(0);
    expect(array[0]).toEqual(undefined);
    expect(array[4]).toEqual(undefined);
  });

  test('clear array that contains undefined and null', () => {
    const array = [1, undefined, 3, null, 5];
    clearArray(array);
    expect(array.length).toEqual(0);
    expect(array[0]).toEqual(undefined);
    expect(array[4]).toEqual(undefined);
  });
});
</script>

```

b) Windows History:

```

<script>
function goBack() {
  window.history.back()
}
</script>
</script>

```

Output:




Aseef Ahmed


Retrieve From Cookies

Syed University of Engineering and Technology is a private research university located in the urban area of Karachi, Sindh, Pakistan.
The university is honored in the name of notable 19th-century Indian Muslim reformer and philosopher, Sir Syed Ahmad Khan

[SSUET University Home Page](#)
[SSUET University Scholarship Notice Page](#)
[SSUET University News and Events Page Calendar](#)

Course ID	Course Name	Credit Hours	Year Taken
<div> Add New Course Delete Course Update Course Remove All New Courses </div>			

- ☐ 2:42 AM  2019-SE-010 Lab02 Task#01 file:
- ☐ 2:40 AM  2019-SE-010 Lab02 Task#01 file:
- |
- ☐ 1:54 AM  2019-SE-010 file:



Sir Syed University
of Engineering & Technology

Syed University of Engineering and Technology is a private research university located in the urban area of Karachi, Sindh, Pakistan.
The university is honored in the name of notable 19th-century Indian Muslim reformer and philosopher, Sir Syed Ahmad Khan.

[SSUET University Home Page](#)
[SSUET University Scholarship Notice Page](#)
[SSUET University News and Events Page Calendar](#)

Course ID	Course Name	Credit Hours	Year Taken
SWE14L - 203	ARTIFICIAL INTELLIGENCE	3+1	2021
SWE12T - 2190	SOFTWARE CONSTRUCTION & DEVELOPMENT	3+1	2021
SWE20L - 1483	INTRODUCTION TO DATABASE SYSTEMS	3+0	2020
SWE204L - 1837	OPERATING SYSTEMS	3+0	2020

[Add New Course](#) | [Delete Course](#) | [Update Course](#)