createElement & remove

```
<script>
    let head1 = document.createElement('h1');
    head1.innerHTML = "This is Heading 1";
    document.body.prepend(head1)
    let div1 = document.createElement('div');
    div1.innerHTML = "This is div1 tag";
    document.body.append(div1)
 </script>
.....................................
div1.remove()  //will remove the node
```

Event onchange/ oninput

- <!DOCTYPE html>
- <!DOCTYPE html>
- <html>
-   <head> </head>
-   <body>
-     <form>
-      <h1>Login Form</h1>
-      <div id="msg"></div>
-      <input type="email" id="em" placeholder="Enter Email" />

-      <input type="password" id="pw" placeholder="Enter Password" />

-      <input type="submit" value="Submit" />
-     </form>
-     <script>
-     em.oninput = function () { //try with onchange
-        msg.innerHTML = em.value;
-     };
-
-     </script>
-    </body>
- </html>

Events – cut, copy and paste

```
<!DOCTYPE html>
<html>
  <head> </head>
  <body>
    <h1>Cut, Copy and Paste</h1>
    <textarea id="t1" rows="5" cols="20">Apple, Orange, Banana</textarea>
    <textarea id="t2" rows="5" cols="20"></textarea>
    <script>
      t2.onpaste = function (event) {
        let t2Str = t2.value;
        let pasteStr = event.clipboardData.getData("text/plain");
        if (t2Str.includes(pasteStr))
        {
          alert("Already Exists");
          return false;

        }
      };
      t1.oncut = t1.oncopy = function (event) {
        let t2Str = t2.value;
        let pasteStr = document.getSelection();
        if (t2Str.includes(pasteStr) && t2Str!=""){
          alert("Already Exists");
        }
        //alert(event.type + "-" + document.getSelection());
      };
    </script>
  </body>
</html>
```

Target Event

- `<p onclick="alert(event.target.innerHTML)">This is a dummy text</p>`

- `<p onclick="alert(event.target.nodeName)">This is a dummy text</p>`

- `<p onclick="alert(event.target.tagName)">This is a dummy text</p>`

- `<input type="text" onchange="alert(event.target.value)" /><br /><br /><br />`

- `<input type="text" oninput="lbl.innerHTML=event.target.value" /><br /><br />`

- `<label id="lbl"></label>`

Mouse Events

```
<!DOCTYPE html>
<html>
  <head> </head>
  <body>
   <input type="text" id="t1">
   <textarea id="t2" rows="10" cols="20"></textarea>
    <script>
     t1.addEventListener('mouseover',()=>{t2.append('mouseover\n')})
     t1.addEventListener('mousedown',()=>{t2.append('mousedown\n')})
     t1.addEventListener('mouseup',()=>{t2.append('mouseup\n')})
     t1.addEventListener('click',()=>{t2.append('click\n')})
     t1.addEventListener('dblclick',()=>{t2.append('doubleclick\n')})
     t1.addEventListener('contextmenu',()=>{t2.append('rightclick\n')})
     t1.addEventListener('mouseout',()=>{t2.append('mouseout\n')})
     t1.addEventListener('mousemove',()=>{t2.append(event.clientX+","+event.clientY+"\n")})
     t1.addEventListener('click',(e)=>{
       if (e.altKey) t2.append('Alt+click\n')
     })
     t1.addEventListener('click',(e)=>{
       if (e.shiftKey) t2.append('Shift+click\n')
     })
     t1.addEventListener('click',(e)=>{
       if (e.ctrlKey) t2.append('Ctrl+click\n')
     })
    </script>
   </body>
</html>
```

JavaScript Cookies

 document.cookie = "name=John;expires=Thu, 18 Oct 2022 12:00:00 UTC";

 document.cookie = "name=;expires=Thu, 18 Oct 2021 12:00:00 UTC";

let n = document.cookie.split("=");

alert(document.cookie);

alert(`Hello ${n[1]}`);

Remember me Cookies

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Document</title>
</head>
<body>
  <h1>Login Screen</h1>
  <form>
    <p><input type="text" id="user" placeholder="Enter Username" /></p>
    <p>
      <input
        type="password"
        autocomplete=""
        id="pass"
        placeholder="Enter Password"
      />
    </p>
    <p>
      <input type="checkbox" id="chk" onclick="toggleCookie()" />Remember Me
    </p>
    <p><button>Login</button></p>
  </form>
  <script>

    const toggleCookie = () => {
      let date = new Date();
      if (chk.checked) {
        //save user and pass cookie
        date.setTime(date.getTime() + 100000);
        // let expdays = d.getTime() + 1000000;
        // console.log(expdays);
        document.cookie = `name=${user.value};expires=${date}`;
        document.cookie = `pass=${pass.value};expires=${date}`;
      } else {
        date.setTime(date.getTime() - 100000);
        document.cookie = `name=null;expires=${date}`;
        document.cookie = `pass=null;expires=${date}`;
        user.value = "";
        pass.value = "";
        chk.disabled = true
      }
    };
    let r = "";
    const getCookie = (name) => {
      let arr = document.cookie;
      let ck = arr.split("; ");
      ck.forEach((element) => {
        if (element.indexOf(name) == 0) {
          r = element.substring(name.length + 1);
        }
      });
      return r;
    };
    let usr = getCookie("name");
    let pwd = getCookie("pass");
    console.log(usr, pwd);
    console.log(document.cookie);
    if (usr !== "null" && pwd !== "null") {
      user.value = usr;
      pass.value = pwd;
      chk.checked = true;
    }
    else {
      chk.disabled = true
    }

    user.onchange = () => {
      if (user.value != ""){
        chk.disabled = false
      }
    }
  </script>
</body>
</html>
```

JavaScript Object Notation (JSON)

JSON – Data
```
{
"emp_id":1021,
"name":"John",
"location":"LA"
}
```

JavaScript Object

```
employee =
{
"emp_id":1021,
"name":"John",
"location":"LA"
}
```

JSON.stringify

student = {name:"john",age:20,pass:true}

student = JSON.stringify(student)

console.log(student)

expected output:

{"name":"john","age":20,"pass":true}

JSON.parse

```
let student = '{"name":"john", "age":20}'
console.log(student.name)
let obj = JSON.parse(student)
console.log(obj.name)
```