

# Image Rollover

```
<!DOCTYPE html>
<html>
<body>
  <h2> Image rollover </h2>
  
  <script>
    let picture = document.getElementById("img1");
    // picture.onmouseover = function() {img1.style = "height:150px;
width:150px";};
    // picture.onmouseout = function() {img1.style = "height:100px; width:100px";};
    picture.onmouseover = function() {img1.src = "ball.png";};
    picture.onmouseout = function() {img1.src="flower.png";};
  </script>
</body>
</html>
```

# Toggle Pwd

```
<body>
  <h1>Login Page</h1>
  <p><input type="text" /></p>
  <p><input type="password" id="txtPwd" /></p>
  <p><input type="checkbox" onclick="togglePwd()" />Show Password</p>

  <script>
    function togglePwd() {
      if (txtPwd.type === "password") {
        txtPwd.type = "text";
      } else {
        txtPwd.type = "password";
      }
    }
  </script>
</body>
```

# Var vs let keyword

```
var a = 20 //function scope
//var a = 30
if (10>4) {
  var a=10
}
console.log(a)
```

.....

```
let b = 20 //function scope + block scope
//let b=20
if (10>4) {
  let b=10
}
console.log(b)
```

# Transition

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Document</title>
  <style>
    .before {
      position:fixed;
      width: 300px;
      height: 100%;
      top:0px;
      left:100%;
      background-color: silver;
      transition: 0.4s;
    }
    .after{
      left:calc(100% - 300px)
    }
    .main {
      width: 200px;
      height: 100%;
      top:0px;
      left:100px;
      margin:auto;
      background-color: silver;
      transition: 0.4s;
    }
    .trn{
      transform:TranslateX(-100px)
    }
  </style>
</head>
<body>
  <button id="btn">Click</button>
  <div id="m" class="main">Main</div>
  <div id="d" class="before">Hello World</div>
<script>
  btn.onclick = () => {
    d.classList.add("after");
    m.classList.add("trn")
  };
</script>
</body>
</html>
```

# Spread Operator (...)

- `const numbersOne = [1, 2, 3];`  
`const numbersTwo = [4, 5, 6];`  
`const numbersCombined = [...numbersOne, ...numbersTwo];`
- `const numbers = [1, 2, 3, 4, 5, 6];`  
`const [one, two, ...rest] = numbers;`
- `const myVehicle = {`  
    `brand: 'Ford',`  
    `model: 'Mustang',`  
    `color: 'red'}`  
`const updateMyVehicle = {`  
    `type: 'car',`  
    `year: 2021,`  
    `color: 'yellow'}`  
`const myUpdatedVehicle = {...myVehicle, ...updateMyVehicle}`

# Keydown, keyup and keypress

```
<textarea id="th" rows="20" cols="40"></textarea>
<script>
  let b = document.body;
  b.onkeydown =
  b.onkeyup =
  b.onkeypress =
    function handle(e) {
      th.value = e.key;
    };
</script>
```

# Fruit Game – Arrow Key

[illegible]

# Event Bubbling vs Capturing

```
<div id="vehicle">Vehicle
  <div id="car">Car
    <div id="ford">Ford
    </div>
  </div>
</div>
<script>
  vehicle.addEventListener('click',() => {alert('Vehicle')},{capture:false})
  car.addEventListener('click',() => {alert('Car')},{capture:false})
  ford.addEventListener('click',() => {alert('Ford')},{capture:false})
</script>
```

.....  
Capture:true is capturing



# Error Handling – reference error

```
try{  
    console.log(a)  
}  
catch(err){  
    console.log(err)  
    console.log(err.message)  
    console.log(err.name)  
}
```

# Error Handling – eval & syntaxError

if we try to evaluate code with a syntax error.

```
try{
    let name="document.write('Hello World')"
    let result = eval(name)
    console.log(result)
}
catch(err){
    console.log(err)
    console.log(err.message)
    console.log(err.name)
}
```

# Error Handling – `TypeError`

```
try {  
    let num = 34  
    console.log(num.toLowerCase());  
} catch (err) {  
    console.log(err);  
    console.log(err.message);  
    console.log(err.name);  
}
```

# Event onfocus/ onblur

```
<html>
<head> </head>
<body>
  <form>
    <h1>Login Form</h1>
    <div id="error" style="color: red"></div>
    <input type="email" id="em" placeholder="Enter Email" /><br /><br />
    <input type="password" id="pw" placeholder="Enter Password" /><br /><br />
    <input type="submit" value="Submit" />
  </form>
  <script>
    em.onblur = function () {
      if (!em.value.includes("@")) {
        error.innerHTML = "Please enter a correct email.";
      }
    };
    em.onfocus = function () {
      error.innerHTML = "";
    };
  </script>
</body>
</html>
```