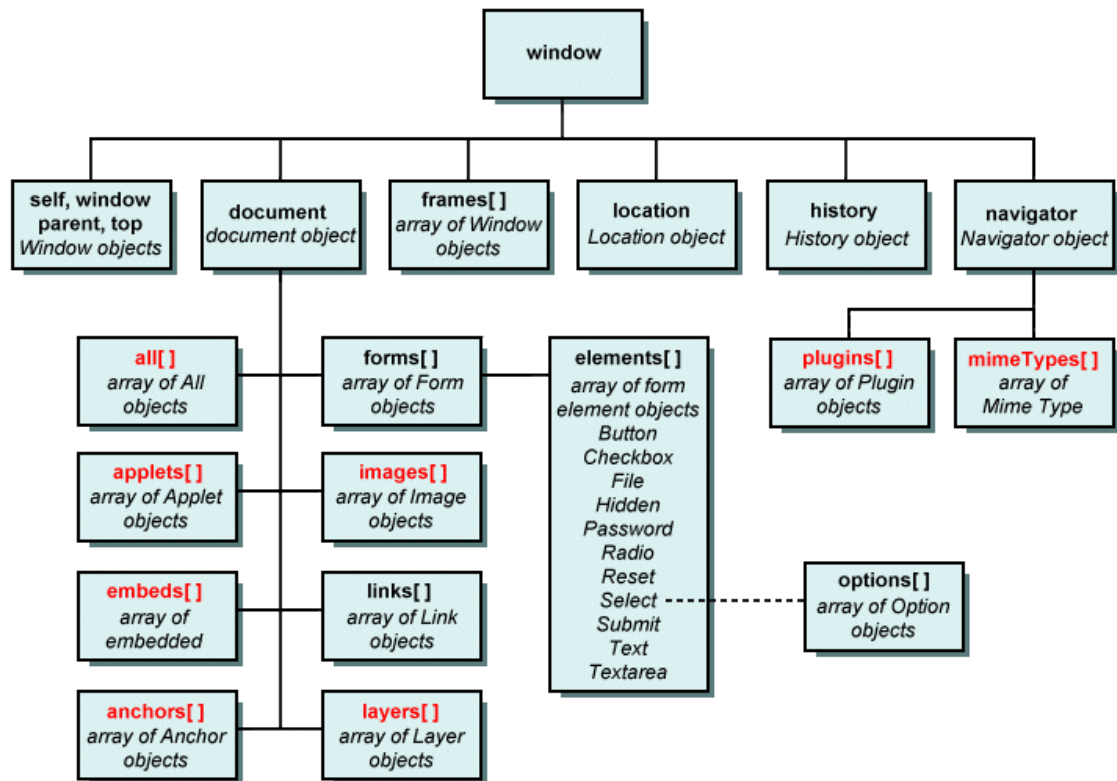


How JavaScript Refers HTML DOM Elements?

1. Refer by using DOM hierarchy



Ex: `window.document.images[index]`

`window.document.forms[index].elements[index]`

- Every time when you change the position of any DOM element, you have to update the index in logic.

Ex:

`<!DOCTYPE html>`

`<html>`

```
<head>
  <title>Reference</title>
  <script type="text/javascript">
    function bodyload(){

window.document.images[0].src="../Images/shoe.jpg";

window.document.forms[0].elements[1].value
= "Register";
    }
  </script>
</head>
<body onload="bodyload()">
  <div>
    <img width="100" height="100"
border="1">
  </div>
  <div>
    <h2>Register</h2>
```

```
<form>
    User Name:
    <input type="text">
    <input type="button">
</form>
</div>
</body>
</html>
```

2. Refer by using “name”

- Every element can have a reference name.
- Name can be common for multiple elements.
- If you are referring a child element, it is mandatory that you have to refer the parent element.

Ex:

```
<!DOCTYPE html>
<html>
    <head>
        <title>Reference</title>
        <script type="text/javascript">
```

```
function bodyload(){
    pic.src="../Images/shoe.jpg";
    frmRegister.btnRegister.value =
"Register";
}
</script>
</head>
<body onload="bodyload()">
    <div>
        <img name="pic" width="100"
height="100" border="1">
    </div>
    <div>
        <h2>Register</h2>
        <form name="frmRegister">
            User Name:
            <input name="txtName" type="text">
            <input name="btnRegister"
type="button">
```

```
        </form>
    </div>
</body>
</html>
```

3.Refer by using ID

- Every element can be defined with unique ID.
- You can access element by using the following document method

document.getElementById()

- You can access any element directly with ID.

Ex:

```
<!DOCTYPE html>
<html>
    <head>
        <title>Reference</title>
        <script type="text/javascript">
            function bodyload(){
```

```
document.getElementById("pic").src="../Images/s
hoe.jpg";
```

```
document.getElementById("btnRegister").value =  
"Register";
```

```
}
```

```
</script>
```

```
</head>
```

```
<body onload="bodyload()">
```

```
<div>
```

```
<img id="pic" width="100" height="100"  
border="1">
```

```
</div>
```

```
<div>
```

```
<h2>Register</h2>
```

```
<form id="frmRegister">
```

```
User Name:
```

```
<input id="txtName" type="text">
```

```
<input id="btnRegister" type="button">
```

```
</form>
```

```
</div>
```

```
</body>
</html>
```

4. Access elements by Tag Name

getElementsByTagName()

Ex:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Reference</title>
    <script type="text/javascript">
      function bodyload(){
        x =
document.getElementsByTagName("img")
        alert("Total Number of Images: " +
x.length);
      }
    </script>
  </head>
```

```
<body onload="bodyload()">
  <div>
    <img id="pic" width="100" height="100"
border="1">
  </div>
  <div>
    <h2>Register</h2>
    <form id="frmRegister">
      User Name:
      <input id="txtName" type="text">
      <input id="btnRegister"
type="button">
    </form>
  </div>
</body>
</html>
```

5.Access elements by class Name

Every element can have multiple classes.
You can access element by using their class name.

Ex:

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <style>
```

```
      .effects {
```

```
        background-color: yellow;
```

```
      }
```

```
    </style>
```

```
    <title>Reference</title>
```

```
    <script type="text/javascript">
```

```
      function bodyload(){
```

```
        x =
```

```
document.getElementsByClassName("effects");
```

```
        alert("Total Count: " + x.length);
```

```
      }
```

```
    </script>
```

```
  </head>
```

```
  <body onload="bodyload()">
```

```
<div>
    <img id="pic" width="100" height="100"
border="1">
</div>
<div>
    <h2>Register</h2>
    <form id="frmRegister">
        User Name:
        <input class="effects" id="txtName"
type="text">
        <input class="effects" id="btnRegister"
type="button">
    </form>
</div>
</body>
</html>
```

6.Access elements that have common name

Ex:

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <style>
```

```
      .effects {
```

```
        background-color: yellow;
```

```
      }
```

```
    </style>
```

```
    <title>Reference</title>
```

```
    <script type="text/javascript">
```

```
      function bodyload(){
```

```
        x =
```

```
document.getElementsByName("pay");
```

```
        alert("Total Payment Methods: " +  
x.length);
```

```
      }
```

```
    </script>
```

```
  </head>
```

```
<body onload="bodyload()">
  <fieldset>
    <legend>Payment</legend>
    <input type="radio" name="pay"
value="Cash"> Cash
    <input type="radio" name="pay"
value="UPI"> UPI
    <input type="radio" name="pay"
value="Credit Card"> Credit Card

  </fieldset>
</body>
</html>
```