

UNDERSTANDING BOM (BROWSER OBJECT MODEL)

Introduction of BOM

The Browser Object Model (BOM) is a browser-specific convention referring to all the objects exposed by the web browser. The BOM allows JavaScript to “interact with” the browser. The object of window represents a browser window and all its corresponding features. A window object is created automatically by the browser itself. JavaScript’s window.screen object contains information about the user’s screen. It can also be written without the window prefix.

Properties:

- screen.width
- screen.height
- screen.availWidth
- screen.availHeight
- screen.colorDepth
- screen.pixelDepth
- **screen.width:** screen.width property returns the users screen width in pixels.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<p id="GFG"></p>
```

```
<script>
```

```
document.getElementById("GFG").innerHTML =
```

```
" The Screen width is " + screen.width;
```

```
</script>
```

```
</body>
```

```
</html>
```

- **Output :**
- The Screen width is 1600
- **screen.height:** screen.height property returns the users screen height in pixels.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<p id="GFG"></p>
```

```
<script>
```

```
document.getElementById("GFG").innerHTML =
```

```
" The screen height is " + screen.height;
```

```
</script>
```

```
</body>
```

```
</html>
```

- **Output :**
- The screen height is 900
- **screen.availWidth:** screen.availWidth property returns the users screen width in pixels, excluding the interface features.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<p id="GFG"></p>
```

```
<script>
```

```
document.getElementById("GFG").innerHTML =
```

```
"The available screen width is " + screen.availWidth;
```

```
</script>
```

```
</body>
```

```
</html>
```

- **Output :**
- The available screen width is 1549

- **screen.availHeight:** screen.availHeight property returns the users screen height in pixels excluding the interface features.

```
<!DOCTYPE html>

<html>

<body>


<p id="GFG"></p>


<script>

document.getElementById("GFG").innerHTML =

"The available screen height is " + screen.availHeight;

</script>


</body>

</html>
```

- **Output :**
- The available screen height is 876
- **screen.colorDepth:** screen.colorDepth property returns the bits (number) to be used to display one color.
Usually, 24 bit or 32 bit hardware is used for color resolution.
24 bits = 16, 777, 216 different (True Colors)
32 bits = 4, 294, 967, 296 different (Deep Colors)

```
<!DOCTYPE html>

<html>

<body>


<p id="GFG"></p>


<script>

document.getElementById("GFG").innerHTML =

"The screen color depth is " + screen.colorDepth;

</script>


</body>

</html>
```

- **Output :**
- The screen color depth is 24
- **screen.pixelDepth:** screen.pixelDepth property returns the pixel depth of the screen.

```
<!DOCTYPE html>

<html>
```

```
<body>

<p id="GFG"></p>

<script>

document.getElementById("GFG").innerHTML =

"The screen pixel depth is " + screen.pixelDepth;

</script>

</body>

</html>
```

- **Output :**
- The screen pixel depth is 24