

Window:

Each browser tab has its top-level window object. Each `<iframe>` (and deprecated `<frame>`) element has its window object too, nested within a parent window. Each of these windows gets its separate global object. `window`. `window` always refers to the window, but a `window.parent` and `window`. The top might refer to enclosing windows, giving access to other execution contexts. In addition to the document and screen described below, window properties include

- `setTimeout()` and `setInterval()` binding event handlers to a timer
- `location` giving the current URL
- `history` with methods `back()` and `forward()` giving the tab's mutable history
- `navigator` describing the browser software

document:

Each window object has a document object to be rendered. These objects get confused in part because HTML elements are added to the global object when assigned a unique id. E.g., in the HTML snippet

```
<body>
```

```
<p id="holyCow"> This is the first paragraph.</p>
```

```
</body>
```

the paragraph element can be referenced by any of the following:

- `window.holyCow` or `window["holyCow"]`
- `document.getElementById("holyCow")`
- `document.querySelector("#holyCow")`
- `document.body.firstChild`
- `document.body.children[0]`

screen:

The window object also has a screen object with properties describing the physical display:

- screen properties `width` and `height` are the full screen
- screen properties `availWidth` and `availHeight` omit the toolbar

The portion of a screen displaying the rendered document is the **viewport** in JavaScript, which is potentially confusing because we call an application's portion of the screen a window when talking about interactions with the operating system. The `getBoundingClientRect()` method of any document element will return an object with `top`, `left`, `bottom`, and `right` properties describing the location of the element in the viewport.