Topic/Title: Selecting HTML Elements with JavaScript

Hello

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Keywords/Questions:

Notes:

- Google
- Second
- Third

document.get**Elements**ByTagName("li");

-gets all of the elements with a particular tag name. For example here it will fetch

all the li elements

```
> document.getElementsByTagName("li");
< ▶ HTMLCollection(3) [li.item, li.item, li.item]
```

-It gives us the 3 li items in the above page. It gives them as an array.

```
> document.getElementsByTagName("li").style.color = "purple";
❌ ▶ Uncaught TypeError: Cannot set property 'color' of undefined
        at <anonymous>:1:49
```

-we can't change the style of all our li items at once.

document.getElementsByTagName("li")[2].style.color="purple";

-we are targeting the 2nd li tag and changed its color to purple.

-this will also give us the 2nd element of the array.

document.get**Elements**ByClassName("btn")[0].style.color="red";

```
<button class="btn">Click Me</button>
```

- this will target the 1st "btn" class and change its color to red.

document.getElementsByClassName("btn").style.color="red";

```
❌ ▶ Uncaught TypeError: Cannot set property 'color' of undefined
        at <anonymous>:1:52
```

-this is will result in an error even if we have only one btn.

Summary:

document.get**Element**ById("title");

    −selects the element with the id="title"

```
<h1 id="title">Hello</h1>
```

    −There is only one particular instance of an id so if I select on the title id, then I will only get

      back a single item as opposed to an array of items.

    −document.get**Element**ById("title").innerHTML="Good Bye"

Good Bye

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document.querySelector("h1");

    −targets the h1 tag

document.querySelector("#title");

    −targets the h1 tag

```
> document.querySelector("h1");
<·    <h1 id="title">Good Bye</h1>
> document.querySelector("#title");
<·    <h1 id="title">Good Bye</h1>
```

document.querySelector(".btn");

    −targets the element with the btn class.

```
<button class="btn">Click Me</button>
> document.querySelector(".btn");
<·    <button class="btn" style="color: red;">Click Me</button>
```

```
> document.querySelector("li a");
<·   <a href="https://www.google.com">Google</a>
```

    −targets the <a> tag inside the

    −a hierarchical selector

```
> document.querySelector("a");
<·   <a href="https://www.google.com">Google</a>
```

    −targets the first <a> tag.

```
> document.querySelector("li.item");
<·  ▶<li class="item">…</li>
```

    −we get our first list item

    −we are using a combined selector.

```
> document.querySelector("#list a");
<·   <a href="https://www.google.com">Google</a>
```

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```
<body>
  <h1 id="title">Hello</h1>
  <a href="https://www.google.com">Google</a>
  <input type="checkbox">
  <button class="btn">Click Me</button>
  <ul id="list">
    <li class="item"><a href="https://www.google.com">Google</a></li>
    <li class="item">Second</li>
    <li class="item">Third</li>
  </ul>
</body>
```

    −targets the anchor tag inside the list. We are using a hierarchical selector.

When using document.querySelector("");, you get the first item that satisfies the particular selector.

```
> document.querySelector("#list .item");
<· ▶<li class="item">…</li>
```

—this gives us the first list item that satisfies the property.

document.querySelectorAll{"#list .item");

—returns a list/array of all items that satisfy the particular selector.

```
> document.querySelectorAll("#list .item");
<· ▶ NodeList(3) [li.item, li.item, li.item]
```

—to manipulate specific items you need to use indexes.

```
> document.querySelectorAll("#list .item")[2].style.color = "blue";
<· "blue"
```

```
> document.querySelector("li a").style.color="green";
<· 'green'
```

– **Hello**

```
<body>
  <h1 id="title">Hello</h1>
  <a href="https://www.google.com">Google</a>
  <input type="checkbox">
  <button class="btn">Click Me</button>
  <ul id="list">
    <li class="item"><a href="https://www.google.com">Google</a></li>
    <li class="item">Second</li>
    <li class="item">Third</li>
  </ul>
</body>
```

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- Third

```
> document.querySelector("li").style.color="green";
<· 'green'
```

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—Because <li> and <a> are separate elements

selecting on <li> will only change the bullet point.

The <a> tag inside it will not change its color.