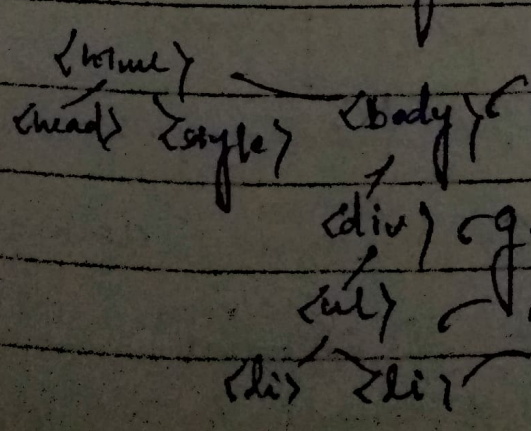
Traversing

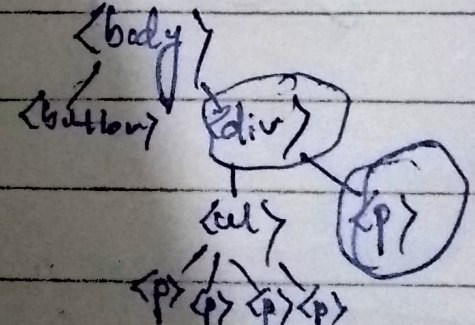
- It means moving through/over the HTML elements to find/filter/select particular or active element.

.children()

- It returns all direct children of selected element.
- finds all child element related to selected element.
- This method only traverse single level down the DOM tree
- Multiple levels ↓ use .find()
- Single level up DOM tree → .parent()/.parents()
- Return all children including text nodes → .contents()
- Syntax: $(selector).children(filter)

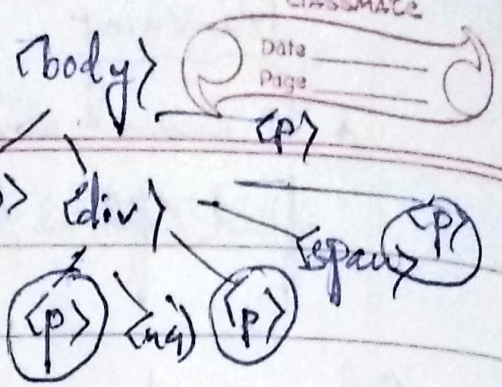
- filter (optional/specific selector expression to narrow down search for children.





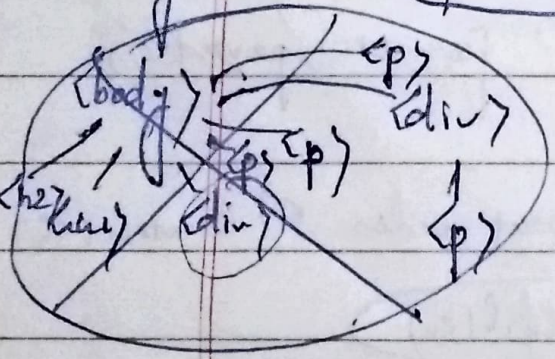
eg:

```
$(document).ready(function(){
    $("button").click(function(){
        $("div").children("p")
            .css("background-color","red");
    });
});
```



- `.next()` : It returns next sibling element of selected element.
  - Sibling elements → Element sharing same parent.
  - Syntax → `$(selector).next(filter)` → optional

eg: `$("div").next().css("background-color","yellow");`

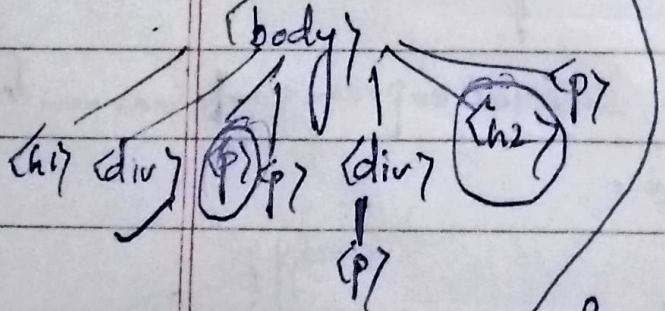


- `.closest()`
  - It returns the 1st ancestor of selected element.
  - Traverses upwards

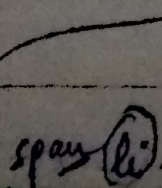
Parent, grand, great grand

Syntax: 1) `$(selector).closest(filter)`

2) `$(selector).closest(filter, content)`



- returns 1st ancestor element of selected element in DOM tree



filter → required

body

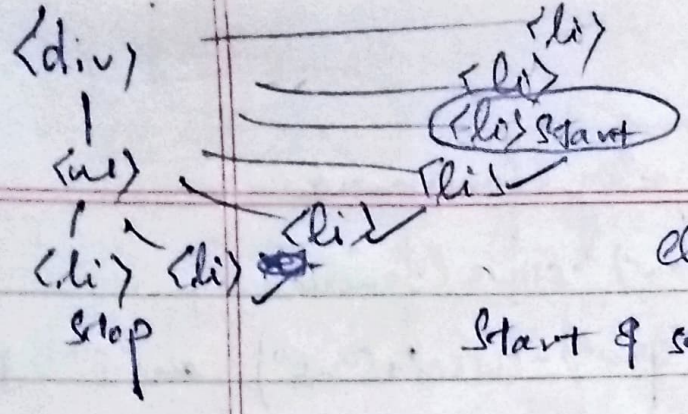
div
ul
li
span

```
eg: $(document).ready(function(){
        $("button").click(function(){
            $("span").closest("ul").css("--");
        });
    });
```

- parent() → return direct parent element of selected element.
- Traverse single level up Dom Tree
- Syntax → $(selector).parent(filter) → optional
- eg: $("span").parent().css(--);

<body>

- prevUntil() → returns all previous sibling elements b/w selector & stop.
- Traverses backward along siblings of Dom elements
- prev() → returns all previous sibling element of selected element.
- prevAll() → Return all previous sibling elements of selected element



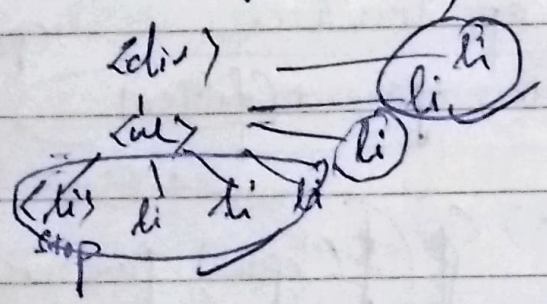
↳ It returns all previous siblings element (b/w) li element with class name

Start & stop.

↳ • siblings ↳ Returns all siblings element of selected element.

↳ It traverse forward & backward along siblings of DOM elements.

↳ Syntax ↳ $(selector).siblings(filter) ↳ optional



↳ • first() ↳ return the first/last element of selected element

$(selector).last()

↳ Syntax :

```
$(selector).first()
$(selector).last()
```

↳ • is() ↳ checks if one of selected element matches the selected element.

Syntax : `$(selector).is(selectedelement,function(index,element))`

1) Selector element → required
   → returns → 1 → If atleast one match
   → F → If no match

2) function(index, element)
   → Optional → Specify a function to run for each of selected element.
   → index → Index pos of element
   → element → Current element.

Eg:
    |
    <p>

```
$(document).ready(function(){
    $("button").click(function(){
        if($("p").parent().is("div")){
            let p = $(".valet");
            p.prepend("<br>");
        }
    });
});
```

3) map() : Translates all items in an array or object to a new array.

Syntax → `jQuery.map(array/object, callback);`

→ array/object → It holds arrays/object to translate
→ callback → It holds function to process each item against.

Eg:- $(document).ready(function(){
$("button").click(function(){
var array = [55, 12, 49, 89, 34, 28];
var newArray = jQuery.map(array, function(val){
return val+5;
});
document.getElementById("res").innerHTML
= "New : " + JSON.stringify(newArray);
});
});

c) • filters c) It is used to filter out all elements that do not match selected criteria & those matches will be returned.

Syntax : $(selector).filter(criteria, function(index))

Eg $("p").filter(".p").css("...");

c) • not() c) Return all element which do not match with selected element.

Syntax c) $(selector).not(criteria, function(index))

c) opposite of filters

- andSelf() → addBack()

Adds the previous set of elements to current set

Syntax → `$(selector).andSelf()` → No arguments

Eg: The error because andSelf() deprecated from v1.8 and removed in jquery 3.0

Use addBack()

```
$("div").find("p").addBack().addClass("bordered");
```

When we call → Selects all p elements inside div

addBack() → Include itself (removing both <p> &) modified together.

- each() → Specify function to run for each matched element

Return false can be used to stop loop early.

Syntax

```
$(selector).each(function(index, element))
```

index → Index position

element → Current element

```
$("li").each(function(){
    alert($(this).text());
});
```

- find() → Finds all descendant elements of selected element.
  - Descendant → child, grandchild, great-grandchild
  - Traverse downwards
  - Syntax → `$(selector).find(filter)` → required
  - To return all descendant element use → *
  - To return multiple descendents → seperate each expression with a comma.
  - Eg: `$("ul").find("span").css("...")`