Tuesday, July 19, 2022   9:38 AM

Traversal in Jquery ---- DOM traversal ----
Traverse = visit each node of the tree either from root to leaf or upwards from node to parent etc

Different possibilities provided in Jquery
        --DOM traversal
                ---- top to bottom ---- find() , children()
                ----bottom to top ---- parent() , parents()
                ---- sibling level traversal --- next () , prev ()
                --- first() , last()
        --- data attributes in jquery --- set and get custom attributes for any TAG use the **data()**
        ---animation ----   animate(), fadeIn(),.....
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AJAX -----   Asynchronous Javascript and XML

Today we see how to use AJAX in Javascript and Jquery

What is the purpose --- fire HTTP METHODS to the SERVER side!!!!!!
        WE used to do this using POSTMAN   for SERVER REST API

Basic AJAX library is called as XMLHttpRequest !!!!   You may find many http libraries that internally use this.

Difference between MVC and REST application

	MVC application	REST Application
(Response) Return	Mvc returns a full html page	Rest returns data in JSON
(Request)	MVC - submit request with GET /POST	AJAX Request--- GET,POST,PUT,DELETE
	The entire page goes with request So client may have to wait till a new page comes with response	Current page is still available to client even when AJAX request is fired. Client continues the work seamlessly
	Synchronous flow	Asynchronous flow
	MPA -- Multi page application	Single Page Application ---- SPA
	Many htmls are sent in responses	Single html lands in first response , otherwise only data arrives .

http://www.dummy.restapiexample.com/

https://reqres.in/

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AJAX with javascript ------------

```
http.open("GET","https://reqres.in/api/users?page=2",false) //this is
syncronous request
```

The third parameter indicates whether the request is synchronous(false) / Asynchronous (true)
Synchronous http requests are discouraged !!! WHY ? They make the user wait for a long time !!!
Until the response is NOT available the next line will NOT run!!!!!

AJAX with Jquery
  Apis ---- $.ajax()
       OR
      $.get()
      $.post()
      ……

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React ------------------- Javascript Framework .
       ------------   MVC
       ------------- Lot of architectural support to out FRONT END application
   ------------------------ Component based architecture
    We can have our own components + React components } integration gives us REACT application

React can have two types of components
 1. Function components
 2. Class components
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React gives us a template project ---- to download it ---
 npx create-react-app myapp
   LOTS of files are downloaded
   A myapp folder is created in the current folder

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Go to terminal / cmd

Cd to my-app   >   **npm start**

   This will start an inbuilt WEB SERVER
     The WEB SERVER runs on port number 3000
     This WEB SERVER is used while we develop react application = Development web server
     This WEB SERVER **deploys** the my-app automatically

   Connect to the webserver from the browser -----   http://localhost:3000

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React -------------Component
       |
       |
      Compiled
       |
       |

```
                    Normal JS code
                    |
                    |
                    Deployed on the server


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 http://localhost:3000
         |
         |
         |
      index.html
           <div id="root"> </div>
             |
             |
            index.js
               ReactDOM.render( TAG ,  document.getElementById("root" ) )  }  ADD the TAG
           contents to root element



                 _____TAG is processed as FOLLOWS-----------------------
         TAG  ---- <App />
                      |
                      |
               App.js  }}}  this is in the import line
                |
                |
             function App()
             {
                     Return (<div>HI</div> )
             }
```

App is the function component of React !!!

Core Java	What is the difference between extends inheritance and implements inheritance.
Advanced Java	What is a cookie ?
OS	what is fork() ?