

External API like Web API or Brower API

Definitions

SetTimeout

This is part of window and is a function but not part of core java script , these are part of browser API and they get access through event queue similarly there is function like setInterval and clearTimeout and lot of other function are there JavaScript have call stack and memory

Syntax of SetTimeout and clearTimeout()

- SetTimeout need handler function and time in millisecond

```
setTimeout(function () {},1000)
or
function sayPragyesh(){
console.log("Pragyesh")
}
setTimeout(sayPragyesh,1000)
```

code of SetTimeout and clearTimeout()

```
<body>
  <h1>Hi Buddy</h1>
  <button class="close">Stop</button>
  <button class="clearTimeOut">clearTimeOut</button>
</body>
<script>
  let h1 = document.querySelector('h1');
  let button =document.querySelector('.close')
  let clearTimeOut =document.querySelector('.clearTimeOut');
  let setTimeout;
  stopAgain();
  function stopAgain() {
    button.addEventListener('click' ,function handel(event) {
      h1.innerText= "Game stop is going to stop in a min ";
      setTimeout= setTimeout(function (){
        button.innerText ='start';
        h1.innerText= "Game stop";
      },10000);
      button.removeEventListener('click',handel)
      startAgain();
    },false)
    clearTimeOut.addEventListener('click', function(event){
      event.preventDefault();
      clearTimeout(setTimeout);
      console.log(`clear ${setTimeout}`)
    })
  }
  function startAgain() {
    button.addEventListener('click' ,function handel2(event) {
      h1.innerText= "Game is going to start Again";
      setTimeout = setTimeout(function(){
        h1.innerText= "Game Started";
      },10000);
      // document.querySelector('h1').innerText="why you clicked start";
    })
  }
}
```

```

        button.innerText ='stop';
        // if(Boolean(isexecute)){
        //   location.reload()
        // }
        button.removeEventListener('click',handel2)
        stopAgain();
      },false)
      clearTimeout.addEventListner('click', function(event){
        event.preventDefault();
        clearTimeout(setTimeout);
        console.log(`clear ${setTimeout} `)
      })
    }
  </script>

```

SetInterval() clearInterval()

Definitions

SetInterval()

Use to run batch of code in function in repeated time after give interval and interval should in millisecond

ClearInterval(IntervalReference)

This use to clear the interval of provided reference

code using SetInterval() and clearInterval()

```

<body>
  <h1>Hi Buddy</h1>
  <button class="Start">Start</button>
  <!-- <button class="close">Stop</button> -->
</body>
<script>

  let StarInterval = document.querySelector('.Start');
  // let closeInterval = document.querySelector('.close');
  let h1 = document.querySelector('h1');
  let setinterval;
  StarInterval.addEventListener('mouseover',function () {
    function handler(str) {
      let date = new Date()
      h1.innerText=` ${date.toLocaleDateString()} at time ${date.toLocaleTimeString()}`;
      // console.log(`hey ${str} now time is ${date.toLocaleTimeString()} `);
      StarInterval.innerText='Remove Mouse To Stop '
    }
    setinterval= setInterval(handler ,1000,'Pragyesh') // Here we can pass the parameter to function
  },false)
  // has three parameter 'Pragyesh' is to pass in function handler parameter
  StarInterval.addEventListener('mouseout',function () {
    console.log("inside closeInterval");
    clearInterval(setinterval);
    StarInterval.innerText='Start'
  },false) // bubbling phase or propogation
</script>

```