

Ch. 9 Written Assignment

1. What is a target?

A target is an element that generates an event. Say if you click on an image, the target is the image but more precisely, it is the element object that represents the image. Target is also a property that holds a reference to the object that generated an event.

2. What does this line of code do: `getElementsByTagName("img");` ?

The line of code: `getElementsByTagName("img");` will look through the dom and try to fetch an element with an id of "img". If no element exists with an id of "img", `getElementsByTagName("img");` will return null.

3. How many threads of control does a browser have?

Some browsers like Chrome and Firefox now support multithreading. However, relating to JavaScript, there is only one queue and one thread of control. This means that only the browser goes through the events and it does it one by one as necessary.

4. What is the name of the property of an event object to know when an event happened?

The name of the property of an event object to know when an event happened is `timeStamp()`. `Event.timeStamp()` returns the time (in milliseconds) at which the event was created.

5. Are events handled synchronously or asynchronously? Why?

JavaScript events are handled asynchronously because they happen after or if and when an event occurs. On the other hand, synchronous events happen before an event happens.

6. What is an event handler's main purpose?

An event handler's main purpose is to detect when an event occurs and respond accordingly when the event happens. In other words, it's a piece of code or function made to respond to an event.

7. List and define all the events discussed in Chapter 9. (Hint: Event Soup)

click - Generated when a web page is clicked.

load - Generated when the browser has completed loading web page.

mousemove - Generated when the mouse is moved over an element.

keypress - Generated every time a key is pressed.

unload - Generated when you close the browser window, or navigate away from a web page.

mouseover - Generated when the mouse is placed over an element.

mouseout - Generated when the mouse is moved off an element.

resize - Generated when the browser window is resized.

dragstart - Generated when and if an element in the page is dragged.

touchstart - Generated when an element is touched and held.

play - Generated when the play button on a video is clicked.

pause - Generated when the pause button on a video is clicked.

drop - Generated when a dragged element is dropped.

touchend - Generated when touching has stopped.

8. Older versions of Internet Explorer have a different event model from other browsers. Discuss what they are and how they work.

The way older versions of Internet Explorer (IE8 or older) handled events differs slightly. For example, older versions of IE supported the “on” properties that could be assigned to event handlers. Also, *attachEvent* is used instead of the *addEventListener* method and event objects are stored in the window object instead of being passed to an event handler when an event is triggered.

9. **Consider the code: `for (var i = 0; i < images.length; i++) { images[i].onclick = showAnswer; }` How would you alter this to set the normal (not blurred) image on mouse over and reblur the image on mouse out? (It's 2 lines of code)**

The way to alter the code above in order to set the normal (not blurred) image on mouse over and reblur the image on mouse out is to call the `moseover()` method on the images array instead of the `onclick` method.

10. **Write a line of JavaScript code that sets the interval of function `ticker()` to 5 seconds.**

A line of code that sets the interval of function `ticker()` to 5 seconds is:

```
setTimeout(ticker, 5000);
```