**Assignment Week 11: JavaScript’s DOM Manipulation (Part 3+4)**

**3, Part 3: DOM CRASH COURSE PART 3**

3.1, How does JavaScript track user’s gestures and events?

- With DOM (Document Object Model), JavaScript can capture any user’s gesture and events, decide what to do next and response to the gesture correctly

- HTML DOM Events (Mouse Events, Keyboard & input events) allow JavaScript to register different event handlers on elements in an HTML document

Ex: The MouseEvent object: Events that occur when the mouse interacts with the HTML document belongs to the MouseEvent Object

3.2, Fill out 2 tables down below for all the Mouse Events and Keyboard & Input events that you have learnt: 

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| **Mouse Events** | **Descriptions** |
| dblclick | event occurs when the user double-clicks on an element  Ex: var button = document.getElementById(‘button’);  button.addEventListener(‘dblclick’, myFuction);  function myFuction(){  } |
| mousedown | event occurs when a user presses a mouse button over an element  Ex: object.addEventListener("mousedown", myScript); |
| mouseup | event occurs when a user releases a mouse button over an element  Ex: object.addEventListener("mouseup", myScript); |
| mouseenter | event occurs when the mouse pointer is moved onto an element  Ex: object.addEventListener("mouseenter", myScript); |
| mouseleave | event occurs when the mouse pointer is moved out of an element  (!) Similar to the mouseout event. The only difference is that the mouseleave event does not bubble (does not propagate up the document hierarchy)  Ex: object.addEventListener("mouseleave", myScript); |
| mouseover | event occurs when the mouse pointer is moved onto an element, or onto one of its children  Ex: object.addEventListener("mouseover", myScript); |
| mouseout | The onmouseout event occurs when the mouse pointer is moved out of an element, or out of one of its children.  Ex: object.addEventListener("mouseout", myScript); |
| mousemove | event occurs when the pointer is moving while it is over an element.  Ex: object.addEventListener("mousemove", myScript); |

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| **Keyboard & Input Events** | **Descriptions** |
| keydown | event occurs when the user is pressing a key (on the keyboard).  Ex: object.addEventListener("keydown", myScript); |
| keyup | event occurs when the user releases a key (on the keyboard)  Ex: object.addEventListener("keyup", myScript); |
| keypress | event occurs when the user presses a key (on the keyboard)  Ex: object.addEventListener("keypress", myScript); |
| focus | event occurs when an element gets focus  event is most often used with <input>, <select>, and <a>  Ex: object.addEventListener("focus", myScript); |
| blur | event occurs when an object loses focus  blur event is the opposite of the [focus](https://www.w3schools.com/jsref/event_onfocus.asp) event  Ex: object.addEventListener("blur", myScript); |
| cut | event occurs when the user cuts the content of an element   (Although the cut event is supported by all HTML elements, it is not actually possible to cut the content of, for example, a <p> element, UNLESS the element has set contenteditable to "true")  event is mostly used on <input> elements with type="text"  Ex: object.addEventListener("cut", myScript); |
| paste | event occurs when the user pastes some content in an element  Ex: object.addEventListener("paste", myScript); |
| input | event occurs when an element gets user input  occurs when the value of an <input> or <textarea> element is changed  This event is similar to the [change](https://www.w3schools.com/jsref/event_onchange.asp) event. The difference is that the input event occurs immediately after the value of an element has changed, while change occurs when the element loses focus, after the content has been changed. The other difference is that the change event also works on <select> elements.  Ex: object.addEventListener("input", myScript); |
| change | event occurs when the value of an element has been changed  For radiobuttons and checkboxes, the onchange event occurs when the checked state has been changed  Ex: object.addEventListener("change", myScript); |
| submit | event occurs when a form is submitted  Ex: object.addEventListener("submit", myScript); |