JavaScript 50 Q&A: Selectors, Events, and AJAX

Q1 [Interview] What is querySelector in JavaScript?

Ans: Returns the first element that matches a specified CSS selector.

```
document.querySelector('.my-class')
```

Q2 [Interview] Difference between querySelector and getElementById?

Ans: querySelector supports all CSS selectors; getElementById only finds by ID.

Q3 [Interview] How to attach an event handler in JS?

Ans: Use addEventListener.

```
element.addEventListener('click', callback)
```

Q4 [Interview] What are DOM events?

Ans: Actions like clicks, mouse movements, key presses.

Q5 [Interview] What is event bubbling?

Ans: Events propagate from inner to outer element.

Q6 [Interview] What is event delegation?

Ans: Handle events at a parent level for all child elements.

Q7 [Interview] What is AJAX?

Ans: Asynchronous JavaScript and XML for background server communication.

Q8 [Interview] What is the role of XMLHttpRequest?

Ans: It allows AJAX-based requests in older browsers.

Q9 [Interview] What does fetch() do?

Ans: Performs AJAX requests using Promises.

Q10 [Interview] Can we stop event propagation?

Ans: Yes, using event.stopPropagation().

Q11 [Interview] What is event.preventDefault() used for?

Ans: Prevents default browser behavior.

Q12 [Interview] What is the default HTTP method of forms?

Ans: GET.

Q13 [Interview] How do you get all buttons in a page?

Ans: Use document.querySelectorAll('button')

Q14 [Interview] Is AJAX synchronous?

Ans: No, it's asynchronous.

Q15 [Interview] What is the use of readyState in XHR?

Ans: Indicates request state in XMLHttpRequest.

Q16 [DSA] Add click event to all list items.

Ans:

```
document.querySelectorAll('li').forEach(li    =>    li.addEventListener('click',    ()    =>
```

```
alert(li.textContent)));
```

Q17 [DSA] Highlight input on focus.

Ans:

```
input.addEventListener('focus', () => input.style.background = 'yellow');
```

Q18 [DSA] Fetch data on button click and display in div.

Ans:

```
button.addEventListener('click', async () => {
 const res = await fetch('url');
 const data = await res.json();
 document.querySelector('#output').textContent = JSON.stringify(data);
});
```

Q19 [DSA] Create a live character counter.

Ans: Use keyup event on textarea.

Q20 [DSA] Submit form via AJAX without reload.

Ans:

Q21 [DSA] Add mouseenter to change div background.

Ans:

Q22 [DSA] Create a dropdown that loads items via AJAX.

Ans:

Q23 [DSA] Remove element on double click.

Ans:

Q24 [DSA] Disable submit button if input is empty.

Ans:

Q25 [DSA] Track how many times a div was clicked.

Ans:

Q26 [DSA] Alert value of a select dropdown.

Ans:

Q27 [DSA] Style every second item using nth-child.

Ans:

Q28 [DSA] Change paragraph text when hovered.

Ans:

Q29 [DSA] Count number of checkboxes selected.

Ans:

Q30 [DSA] Log AJAX request status to console.

Ans:

Q31 [LeetCode] document.querySelector('#id') returns?

Ans: First matching element with ID 'id'.

Q32 [LeetCode] typeof fetch?

Ans: 'function'

Q33 [LeetCode] click event fires on?

Ans: User click on an element.

Q34 [LeetCode] addEventListener accepts how many arguments?

Ans: Two (event type and handler).

Q35 [LeetCode] Can querySelector return null?

Ans: Yes.

Q36 [LeetCode] Can fetch return JSON directly?

Ans: No, use res.json()

Q37 [LeetCode] event.target is?

Ans: Element that triggered the event.

Q38 [LeetCode] Can AJAX fetch HTML?

Ans: Yes.

Q39 [LeetCode] Does stopPropagation stop default?

Ans: No, use preventDefault.

Q40 [LeetCode] typeof event?

Ans: 'object'

Q41 [Conceptual] Is event bubbling default?

Ans: Yes.

Q42 [Conceptual] Can we attach same event multiple times?

Ans: Yes, with addEventListener.

Q43 [Conceptual] What happens if querySelector doesn't find element?

Ans: Returns null.

Q44 [Conceptual] Does fetch work offline?

Ans: No.

Q45 [Conceptual] Are events asynchronous?

Ans: Event handlers run in main thread, but fetch is async.

Q46 [Conceptual] Can we send data with GET?

Ans: Yes, via URL query.

Q47 [Conceptual] Can AJAX post JSON?

Ans: Yes, using fetch with headers.

Q48 [Conceptual] Do all browsers support fetch?

Ans: Modern ones do.

Q49 [Conceptual] Is innerText affected by hidden elements?

Ans: Yes.

Q50 [Conceptual] Can a div have a click event?

Ans: Yes.