Training Day 19

Day 19– 16th July 2025

Introduction to JavaScript Libraries (jQuery) and Effects

Detailed Description:

On Day 19, we explored **jQuery**, a popular JavaScript library that makes DOM manipulation, event handling, and animation simpler.
The instructor explained that jQuery allows **writing less code** while performing **complex tasks easily**, making it a valuable tool for web designers.

◆ **1. Introduction to jQuery**

Key points:

- jQuery is a **lightweight JavaScript library**.

- It simplifies **DOM selection, manipulation, and event handling**.

- Syntax is concise: $(selector).action()

- Can be included via **CDN**:

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

◆ **2. jQuery Selectors**

We practiced selecting elements using jQuery:

```
$("#demo")      // Select element by ID
```

```
$(".info")      // Select elements by class
```

```
$("p")          // Select all paragraph elements
```

```
$("div:first")   // Select first div element
```

- This makes **DOM element selection simpler** compared to vanilla JavaScript.

◆ **3. jQuery Events**

We learned common jQuery events to **make webpages interactive**:

- click()

```
$("#btn").click(function() {

  alert("Button clicked!");

});
```

- hover()

```
$("#box").hover(function() {

  $(this).css("background-color", "yellow");

});
```

- ready() – ensures code runs after DOM is fully loaded

```
$(document).ready(function() {

  console.log("DOM is ready!");
```

```
});
```

◆ **4. jQuery Effects and Animations**

jQuery provides **built-in effects** to enhance UI:

- **Hide and Show**

```
$("#hideBtn").click(function() {

  $("#text").hide();

});

$("#showBtn").click(function() {

  $("#text").show();

});
```

- **Fade In and Fade Out**

```
$("#fadeBtn").click(function() {

  $("#box").fadeOut(1000);

  $("#box").fadeIn(1000);

});
```

- **Slide Up and Slide Down**

```
$("#slideBtn").click(function() {

  $("#panel").slideUp();
```

```
$("#panel").slideDown();
```

```
});
```

- **Custom Animations**

```
$("#animateBtn").click(function() {

  $("#box").animate({left: '250px', opacity: '0.5'}, 1000);

});
```

These effects **enhance interactivity** and make websites more dynamic and engaging.

◆ **5. Practical Exercises**

- Created **buttons to hide/show content** on click.

- Implemented **fade and slide effects** for div elements.

- Used animate() to move elements dynamically on the page.

- Combined **event handling and effects** for interactive web elements.

- Compared **jQuery simplicity vs. vanilla JavaScript** for common tasks.

Learning Outcomes:

- Learned the basics of **jQuery** and its advantages over plain JavaScript.

- Practiced **selectors, events, and ready function** for DOM manipulation.

- Implemented **built-in jQuery effects** like hide, show, fade, slide, and animate.

- Developed skills to **enhance interactivity and user engagement** with minimal code.

- Understood how jQuery simplifies **dynamic content and UI effects**.

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