Module 7) J Query Basic, Effects & Advanced

(1) What is JQuery

jQuery is a JavaScript library designed to simplify HTML document traversal and manipulation, as well as event handling, animation, and AJAX (asynchronous JavaScript and XML). It provides a concise and easy-to-use syntax for common tasks performed in client-side web development.

One of the key features of jQuery is its ability to allow developers to write less code while achieving the same functionality compared to raw JavaScript. It was particularly popular in the early days of web development, but with advancements in browser capabilities and the rise of modern frameworks, its usage has somewhat declined.

(2) How to Apply CSS Using JQuery, How to Add Class and Remove Class in Jquery, JQuery Animation?

Applying CSS using jQuery:

You can use the css() method to apply CSS styles to elements. Here's a simple example:

```
example:-
// Set CSS styles
$(document).ready(function () {
$('p').css('color', 'blue');
});
```

Adding and Removing Classes:

You can use the addClass() and removeClass() methods to add and remove classes, respectively:

```
example:-
// Add a class
$(document).ready(function(){
```

```
$('p').addClass('highlight');
});

// Remove a class
$(document).ready(function(){
$('p').removeClass('highlight');
});
```

jQuery Animation:

jQuery provides various methods for animation. The animate() method is commonly used for creating animations. Here's a basic example:

```
example:-
// Simple animation
$(document).ready(function(){
$('div').animate({
    opacity: 0.5,
    width: '50%'
}, 1000); // 1000 milliseconds (1 second) duration
});
```

(3) How to create slider with animation?

```
Code:
<!DOCTYPE html>
<html>
<head>
<style>
```

```
.slider {
     width: 300px;
     overflow: hidden;
     position: relative;
}
.slide {
     width: 100%;
     display: none;
}
.slide img {
     width: 100%;
     height: auto;
}
button {
     margin-top: 10px;
}
    </style>
</head>
<body>
     <div class="slider">
          <div class="slide">
               <img src="./img/2.jpeg" alt="Image 1">
          </div>
          <div class="slide">
```

```
<img src="./img/4.jpg" alt="Image 2">
     </div>
     <div class="slide">
          <img src="./img/5.jpeg" alt="Image 3">
     </div>
</div>
<button class="prev">Previous</button>
<button class="next">Next</button>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<script>
     $(document).ready(function () {
var currentIndex = 0;
var slides = $('.slide');
function showSlide(index) {
     slides.hide();
     slides.eq(index).show();
}
$('.next').click(function () {
     currentIndex = (currentIndex + 1) % slides.length;
     showSlide(currentIndex);
});
$('.prev').click(function () {
     currentIndex = (currentIndex - 1 + slides.length) % slides.length;
```

```
showSlide(currentIndex);
});
showSlide(currentIndex);
});
</script>
</body>
</html>
```