jQuery Animation

Web Technologies

Lecture by

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```html
<!doctype html>
<html>
    <head>
        <title>
            Web Technologies
        </title>
        <style>
            p {
                color: blue;
            }
        </style>
        <script>
        console.log("client-side");
        </script>
    </head>
    <body>
        <p>
            Welcome!
        </p>
    </body>
</html>
```

What we will cover

- **animate ()**
- **delay ()**
- **stop ()**
- **finish ()**
- **jQuery Easing Plugin**

animate ()

- **Syntax**

  animate({properties}[, duration][, callback])

- **Without a callback function**

  $("#faqs h1").animate({ fontSize: "275%", opacity: 1, left: 0 },2000);

Animate with Callback

- **With a callback function**

```
$("#faqs h1").animate(
    { fontSize: "275%", opacity: 1, left: "+=175" },
    2000,
    () => $("#faqs
h2").next().fadeIn(1000).fadeOut(1000)
);
```

- **CSS code**

```
#faqs h1 {
    position: relative;
    left: -175px;
    font-size: 75%;
    opacity: .2;
}
```

Chained Animations

```
$("#faqs h1").click( evt => {
    $(evt.currentTarget)
        .animate({ fontSize: "650%", opacity: 1,
            left: "+=275" }, 2000)
    .animate({ fontSize: "175%",
            left: "-=275" }, 1000);
});
```

Queued Animations

```javascript
$("#faqs h1").click( evt => {
    $(evt.currentTarget).animate(
        { fontSize: "650%", opacity: 1,
         left: "+=275" }, 2000);
    $(evt.currentTarget).animate(
        { fontSize: "175%", left: "-=275" }, 1000);
});
```

Callback Animations

```
$("#faqs h1").click( evt => {
    $(evt.currentTarget).animate(
        { fontSize: "650%", opacity: 1, left: "+=275" },
        2000,
        () => { $(evt.currentTarget).animate(
            { fontSize: "175%", left: "-=275" }, 1000
          );
        } );
});
```

Other Methods for Animation

- **delay (duration)**

  $("#startup_message").delay(5000).fadeOut(1000);

- **Stop ([clearQueue] [,jumpToEnd])**

  $("#image_list a").hover(
      evt => $(evt.currentTarget).stop(true).animate({ top: 15 }, "fast"),
      evt => $(evt.currentTarget).stop(true).animate({ top: 0 }, "fast")
  );

- **finish ()**

jQuery Easing Plugin

- **To get the jQuery Easing Plugin**

    - To download

    - To include the library
      <script
      src="https://..../jquery.easing.min.js">
      </script>

Easing with Effects and Animations

- **Syntax**

  methodName([duration][, easing][, callback])

- **fadeTo ()**

  fadeTo(duration, opacity[, easing][, callback])

- **Animate ()**

  animate({properties}[, duration][, easing][, callback])

Easing Example in the FAQs Application

```javascript
$("#faqs h2").click( evt => {
    const target = evt.currentTarget;
    $(target).toggleClass("minus");
    if ($(target).attr("class") == "minus") {
        $(target).next().slideDown(
            1000, "easeOutBounce");
    }
    else {
        $(target).next().slideUp(
            1000, "easeInBounce");
    }
});
```

Try It Yourself

In this activity you can practice to use the animate () and Easings methods. So,

1. Use the code in slide 5 to apply the animation to the FAQs application.

2. Use the code in slide 12 to apply the Easings methods to the FAQs web application.