Bootstrap and JQuery

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Bootstrap and JavaScript

- Bootstrap's JavaScript support is through JS Plugins
  - Plugins written based on Jquery
  - Plugins can be individually included

Bootstrap and JavaScript

Bootstrap JS Components

JQuery

JavaScript

Bootstrap JS Components

- JS components can all be used without writing a single line of JavaScript:
  - data-* attributes (e.g., data-toggle, data-spy)
  - Straightforward approach to use plugins
  - We will explore this approach in this module
- Full JS API available if needed
  - Need to know JQuery syntax and JavaScript

JQuery

- Lightweight Javascript library
- Feature-rich:
  - HTML/DOM manipulation
  - CSS manipulation
  - HTML Event methods
  - Effects and animations
  - AJAX
- Bootstrap JS components build upon JQuery

JQuery Syntax

- $(selector).action()
  - $: define/access JQuery
  - (selector): to query and find HTML elements
  - action(): action to be performed on the element(s)
  - e.g., $("p").hide(), $("#mycarousel").carousel('pause')

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Bootstrap JQuery Example

```
<script>
    $(document).ready(function(){
        $('[data-toggle="tooltip"]').tooltip();
    });
</script>
```

JQuery Selectors

- Any HTML element e.g., "p", "button" etc.
- Using an #id, e.g., "#myCarousel"
- Class, e.g., ".btn", ".btn.btn-default"
- Attribute, e.g., "[href]", "[data-toggle="tooltip"]"
- Current element: $(this).
- And a lot more . . .

JQuery Events

- User's interactions on a web page causing DOM events:
  - Mouse: click, dblclick, mouseenter, mouseleave
  - Keyboard: keypress, keydown, keyup
  - Form: submit, change, focus, blur
  - Document, Window: load, resize, scroll, unload
- JQuery Event Methods: e.g., ready(), click(), dblclick(), mousedown(), on()

Example: Bootstrap Carousel

- Data Attributes
  - data-slide="prev|next"
  - data-slide-to="0|1|2|…"
  - data-ride="carousel"
  - data-interval=5000

Example: Carousel

- JavaScript based control:
  - $('.carousel').carousel();

  - e.g.

    $('.carousel').carousel({ interval:2000});

Example: Carousel

- Other controls:
  - .carousel('cycle'): cycle items left to right
  - .carousel('pause'): stops the carousel
  - .carousel(number): cycles the carousel to a particular frame number specified
  - .carousel('prev'): previous item
  - .carousel('next'): next item

Example: Carousel

- Events:
  - slide.bs.carousel: fires when the slide instance method is invoked
  - slid.bs.carousel: fired when the carousel has completed its slides transition
  - Use with the .on() method:
    ```
    $("#myCarousel").on('slide.bs.carousel', function() {
        // do something
    })
    ```

Exercise: Bootstrap and JQuery

- Add two buttons to the Carousel to pause/ resume the slide transition

- Activate the buttons using JavaScript