

level 4

TRY jQuery



On DOM Load

TRY jQuery

Rendered HTML:

jQuery Air Atlantic - Vacation Confirmation

Confirmations

Hawaiian Vacation

Paid \$399.99 on January 14, 2013.

FLIGHT DETAILS

 Call us at 555-25937 to make a reservation today!

4.1 On DOM Load

TRY **jQuery**

Adding Ticket Confirmation

index.html

```
<li class="confirmation">
  ...
  <button>FLIGHT DETAILS</button>
  <ul class="ticket">...</ul>
</li>
```

 Clicking this button...

 ...will show the ticket

```
.ticket {
  display: none;
}
```

 Hide ticket on page load

Rendered HTML:

jQuery Air Atlantic - Vacation Confirmation

Confirmations

Hawaiian Vacation

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FLIGHT DETAILS

 Call us at 555-25937 to make a reservation today!



watch for click



find the ticket



show the ticket

4.1 On DOM Load

TRY **jQuery**

Using slideDown to Show Elements

index.html

```
<li class="confirmation">  
  ...  
  <button>FLIGHT DETAILS</button>  
  <ul class="ticket">...</ul>  
</li>
```

jQuery Object Methods

.slideDown()

.slideUp()

.slideToggle()

application.js

```
$('.confirmation').on('click', 'button', function() {  
  $(this).closest('.confirmation').find('.ticket').slideDown();  
});
```

Searches up through ancestors

Searches down through children

4.1 On DOM Load

TRY **jQuery**

Rendered HTML:

jQuery Travels - Vacation Confirmation

Confirmations

Hawaiian Vacation

Paid \$399.99 on January 14, 2013.

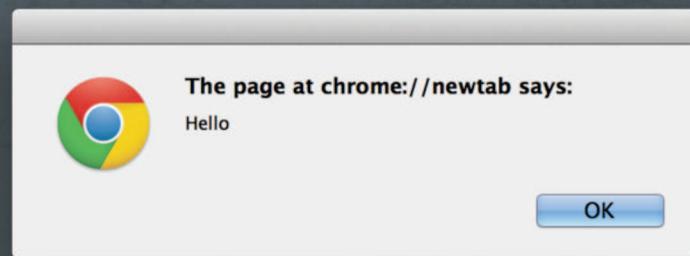
FLIGHT DETAILS

Why doesn't the button work?

TRY **jQuery**

Alert and Length

```
alert('Hello');
```



```
$('.li').length;
```

→ 3

To query how many nodes are on a page.

4.1 On DOM Load

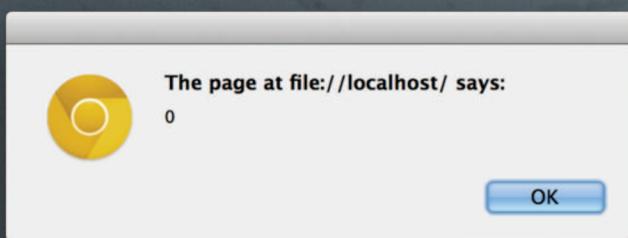
TRY **jQuery**

Debugging with Alert

application.js

```
alert($('.button').length);
$('.confirmation').on('click', 'button', function() {
  $(this).closest('.confirmation').find('.ticket').slideDown();
});
```

The alert dialog



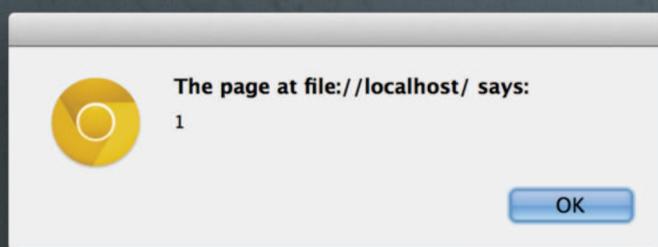
4.1 On DOM Load

TRY **jQuery**

We Forgot `$(document).ready()` already

`application.js`

```
$(document).ready(function() {  
    alert($('button').length);  
    $('.confirmation').on('click', 'button', function() {  
        $(this).closest('.confirmation').find('.ticket').slideDown();  
    });  
});
```



The button is found after the DOM has loaded



4.1 On DOM Load

TRY **jQuery**

Rendered HTML:

jQuery Air Atlantic - Vacation Confirmation

Confirmations

Hawaiian Vacation ➔

Paid \$399.99 on January 14, 2013.

FLIGHT DETAILS

Call us at 555-25937 to make a reservation today!

Now that the DOM has loaded, jQuery can find our button

TRY **jQuery**



Expanding on on()

TRY jQuery

Rendered HTML:

jQuery Travels - Vacation Confirmation

Confirmations

Hawaiian Vacation

Paid \$399.99 on January 14, 2013.



[FLIGHT DETAILS](#)

Call us at 555-25937 to make a reservation today!

What if we also want to show the ticket when they hover over the <h3> tag?

TRY jQuery

Deciding on an Event

application.js

```
$(document).ready(function() {
  $('.confirmation').on('click', 'button', function() {
    $(this).closest('.confirmation').find('.ticket').slideDown();
  });
  $('.confirmation').on('?', 'h3', function() {
    $(this).closest('.confirmation').find('.ticket').slideDown();
  });
});
```



What event should we watch for?

Mouse Events

Fires when the mouse is first positioned over the element

click

focusin

mousedown

mousemove

mouseover

mouseenter



dblclick

focusout

mouseup

mouseout

mouseleave

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4.2 Expanding on on()

Mouse Events

application.js

```
$(document).ready(function() {
  $('.confirmation').on('click', 'button', function() {
    $(this).closest('.confirmation').find('.ticket').slideDown();
  });
  $('.confirmation').on('mouseenter', 'h3', function() {
    $(this).closest('.confirmation').find('.ticket').slideDown();
  });
});
```



Show the ticket when the mouse
is positioned over the h3

4.2 Expanding on on()

TRYjQuery

Rendered HTML:

jQuery Travels - Vacation Confirmation

Confirmations

Hawaiian Vacation

Paid \$399.99 on January 14, 2013. ↗

FLIGHT DETAILS

Call us at 555-25937 to make a reservation today!

We have two ways of showing the ticket now

TRY **jQuery**

Refactoring Handler Functions

application.js

```
$(document).ready(function() {
  $('.confirmation').on('click', 'button', function() {
    $(this).closest('.confirmation').find('.ticket').slideDown();
  });
  $('.confirmation').on('mouseenter', 'h3', function() {
    $(this).closest('.confirmation').find('.ticket').slideDown();
  });
});
```

This code is duplicated, how can we refactor this?



Extract out and name our event handler

```
function showTicket () {
  $(this).closest('.confirmation').find('.ticket').slideDown();
}
```



4.2 Expanding on `on()`

TRY **jQuery**

Refactoring Handler Functions

application.js

```
function showTicket () {  
    $(this).closest('.confirmation').find('.ticket').slideDown();  
}  
$(document).ready(function() {  
    $('.confirmation').on('click', 'button', showTicket);  
    $('.confirmation').on('mouseenter', 'h3', showTicket);  
});
```



Don't add () at the end - that would execute the function immediately

4.2 Expanding on on()

TRYjQuery

Rendered HTML:

jQuery Travels - Vacation Confirmation

Confirmations

Hawaiian Vacation

Paid \$399.99 on January 14, 2013.

FLIGHT DETAILS

Call us at 555-25937 to make a reservation today!

Now the exact same code is run for both events

TRYjQuery



Keyboard Events

TRY **jQuery**

Rendered HTML:

jQuery Travels - Trip Planner

Packages

Hawaiian Vacation

\$399.99 per ticket

Tickets:



Total Price: \$399.99

Call us at 555-25937 to make a reservation today!

Changing this "Tickets" input field should recalculate the total

TRY **jQuery**

Trip Planner Page

index.html

```
<div class="vacation" data-price='399.99'>
  <h3>Hawaiian Vacation</h3>
  <p>$399.99 per ticket</p>
  <p>
    Tickets:
    <input type='number' class='quantity' value='1' />
  </p>
</div>
<p>Total Price: $<span id='total'>399.99</span></p>
```

...we'll update the calculated price here

When this updates...

4.3 Keyboard Events

TRY jQuery

Keyboard and Form Events

application.js

```
$(document).ready(function() {
  $('.vacation').on('?', '.quantity', function() {
  });
});
```

Which event should we use?

Keyboard Events

Form Events

keypress

blur

select

change

keydown

focus

submit

keyup



<http://api.jquery.com/category/events/keyboard-events/>
<http://api.jquery.com/category/events/form-events/>

4.3 Keyboard Events

TRY jQuery

Writing our Event Handler

application.js

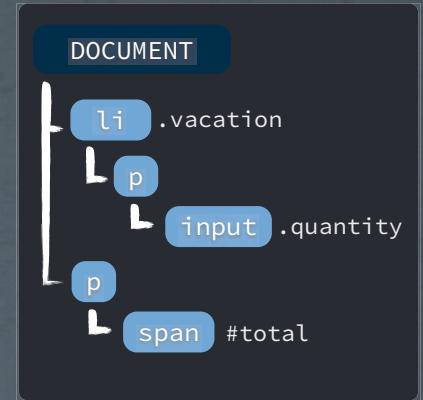
```
$(document).ready(function() {
  $('.vacation').on('keyup', '.quantity', function() {
    // Get the price for this vacation
    // Get the quantity entered
    // Set the total to price * quantity
  });
});
```

```
var price = $(this).closest('.vacation').data('price');
↳ '399.99'
```

Returns price as a string

```
var price = +$(this).closest('.vacation').data('price');
↳ 399.99
```

Use + to convert the string to a number



4.3 Keyboard Events

TRYjQuery

Getting the Quantity of Tickets

application.js

```
$(document).ready(function() {
  $('.vacation').on('keyup', '.quantity', function() {
    var price = +$(this).closest('.vacation').data('price');
    // Get the quantity entered
    // Set the total to price * quantity
  });
});
```

```
var quantity = this.val();
```



Errors - not a jQuery object

```
var quantity = $(this).val();
↳ '2'
```

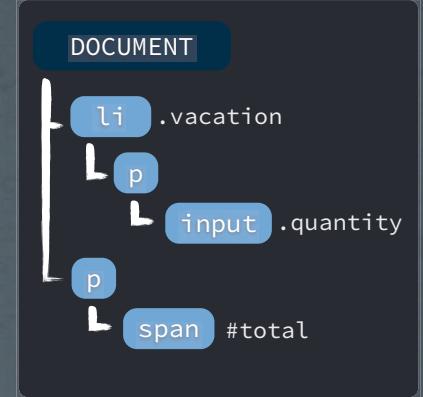


Sets quantity to a string

```
var quantity = +$(this).val();
↳ 2
```



Sets quantity to a number



jQuery Object Methods

`.val(<new value>)`

`.val()`

TRYjQuery

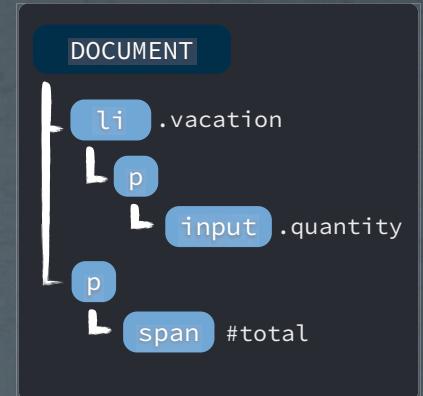
Setting the Total Price

application.js

```
$(document).ready(function() {
  $('.vacation').on('keyup', '.quantity', function() {
    var price = +$(this).closest('.vacation').data('price');
    var quantity = +$(this).val();
    // Set the total to price * quantity
  });
});
```

```
$('#total').text(price * quantity);
```

You can pass a number or a string to the `.text()` method



4.3 Keyboard Events

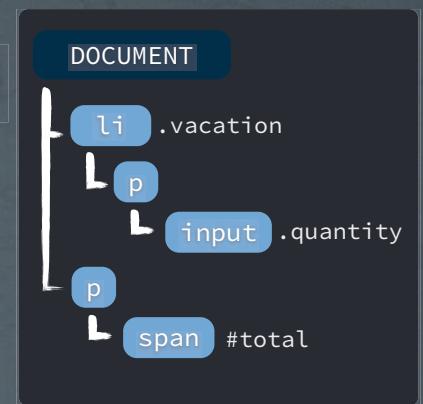
TRYjQuery

The Completed Event Handler

application.js

```
$(document).ready(function() {
  $('.vacation').on('keyup', '.quantity', function() {
    var price = +$(this).closest('.vacation').data('price');
    var quantity = +$(this).val();
    $('#total').text(price * quantity);
  });
});
```

Whenever the quantity is changed, the total will be updated



4.3 Keyboard Events

TRYjQuery

jQuery Travels - Trip Planner

Packages

Hawaiian Vacation

\$399.99 per ticket

Tickets:

1

*The total changes
immediately as we wanted*

Total Price: \$399.99

Call us at 555-25937 to make a reservation today!

TRY jQuery



Link Layover

TRY jQuery

jQuery Travels - Vacation Packages

Packages *Clicking Show Comments will cause them to fade in*

Hawaiian Vacation European Getaway Visit Japan

GET PRICE GET PRICE GET PRICE

Show Comments Show Comments

Orlando Denver Portland

GET PRICE GET PRICE GET PRICE

Show Comments

TRY jQuery

Preparing for Flight

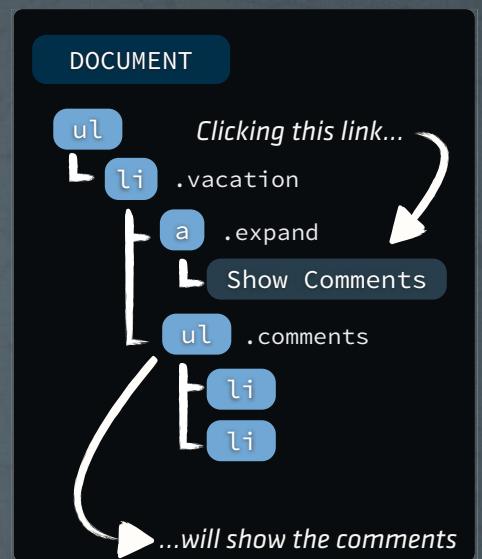
application.css

```
.comments {  
    display: none;  
}
```

application.js

```
$(document).ready(function() {  
    $('.vacation').on('click', '.expand', function() {  
        // Find the comments ul  
        // Show the comments ul  
    });  
});
```

We need to write the event handler



4.4 Link Layover

TRY jQuery

Preparing for Flight

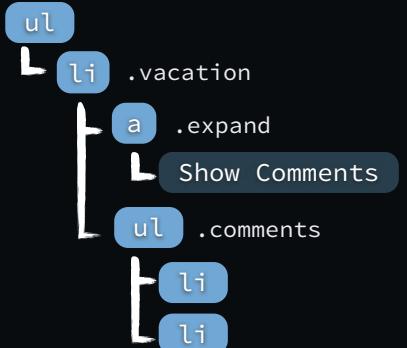
application.js

```
$(document).ready(function() {
    $('.vacation').on('click', '.expand', function() {
        // Find the comments ul
        // Show the comments ul
    });
});

$(this).closest('.vacation').find('.comments')
```

Find the .comments ul using traversing

DOCUMENT



4.4 Link Layover

TRYjQuery

Preparing for Flight

application.js

```
$(document).ready(function() {
    $('.vacation').on('click', '.expand', function() {
        $(this).closest('.vacation')
            .find('.comments')
        // Show the comments ul
    });
});
```

jQuery Object Methods

.fadeIn()

.fadeOut()

.fadeToggle()

These are similar to the slide methods

DOCUMENT



4.4 Link Layover

TRYjQuery

Handling the Click

application.js

```
$(document).ready(function() {
  $('.vacation').on('click', '.expand', function() {
    $(this).closest('.vacation')
      .find('.comments')
      .fadeToggle();
  });
});
```

*fadeIn() .comments on first click,
fadeOut() .comments on next click.*

DOCUMENT



4.4 Link Layover

TRYjQuery

jQuery Travels - Vacation Packages

Packages Why does the page jump to the top?

Hawaiian Vacation

GET PRICE

Show Comments

European Getaway

GET PRICE

Visit Japan

GET PRICE

Show Comments

Orlando

GET PRICE

Denver

GET PRICE

Portland

GET PRICE

Show Comments

TRYjQuery

How the Browser Handles the Click

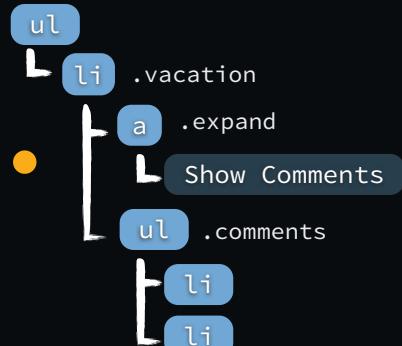
index.html

```
<a href='#' class='expand'>Show Comments</a>
```

*Follows the link!
(goes to the top of the page)*

*The click event will “bubble up”
to each parent node*

DOCUMENT



4.4 Link Layover

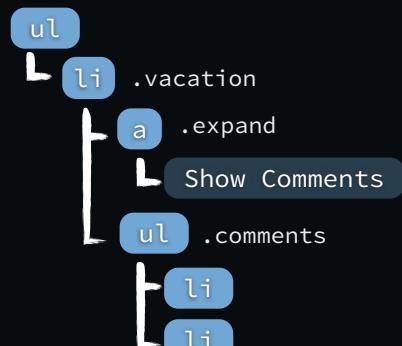
TRYjQuery

The Event Object

application.js

```
$(document).ready(function() {  
    $('.vacation').on('click', '.expand',  
        function(event) {  
            $(this).closest('.vacation')  
                .find('.comments')  
                .fadeToggle();  
        });  
});
```

DOCUMENT



4.4 Link Layover

TRYjQuery

event.stopPropagation()

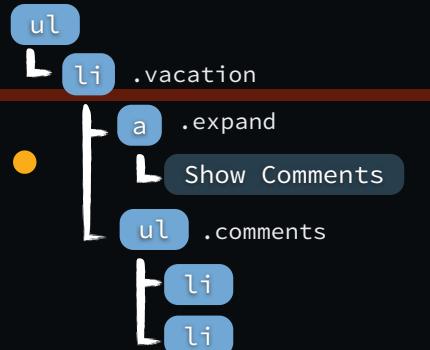
application.js

```
$(document).ready(function() {
  $('.vacation').on('click', '.expand',
    function(event) {
      event.stopPropagation();
      $(this).closest('.vacation')
        .find('.comments')
        .fadeToggle();

    });
});
```



DOCUMENT



The browser will still handle the click event but will prevent it from “bubbling up” to each parent node.

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4.4 Link Layover

event.preventDefault()

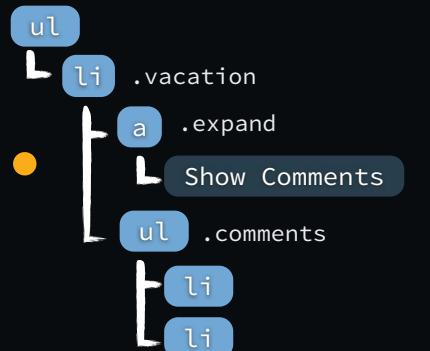
application.js

```
$(document).ready(function() {
  $('.vacation').on('click', '.expand',
    function(event) {
      event.preventDefault();
      $(this).closest('.vacation')
        .find('.comments')
        .fadeToggle();

    });
});
```



DOCUMENT



The click event will “bubble up” but the browser won’t handle it

TRYjQuery

4.4 Link Layover

jQuery Travels - Vacation Packages

Packages *We're preventing the default action of the browser now.*

Hawaiian Vacation

GET PRICE

[Show Comments](#)

European Getaway

GET PRICE

Visit Japan

GET PRICE

[Show Comments](#)

Orlando

GET PRICE

Denver

GET PRICE

Portland

GET PRICE

[Show Comments](#)

TRY **jQuery**