

level





On DOM Load

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!

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:

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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

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

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FLIGHT DETAILS



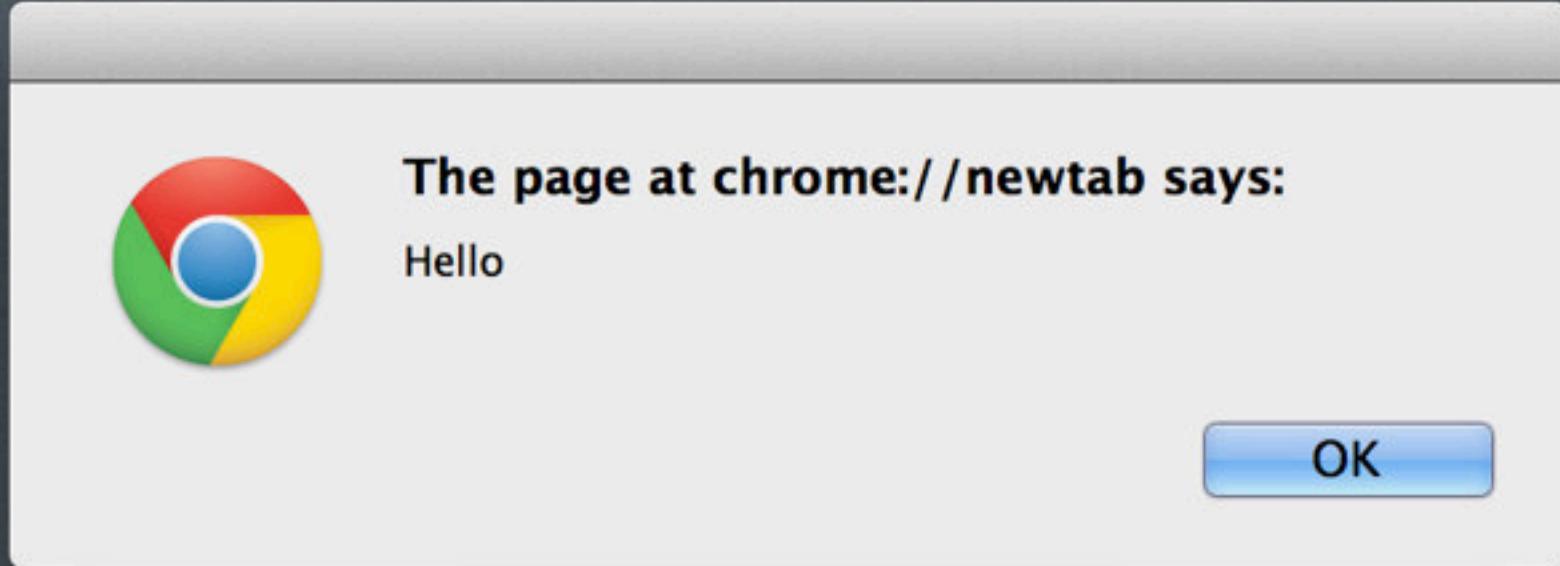
Call us at 555-25937 to make a reservation today!

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.

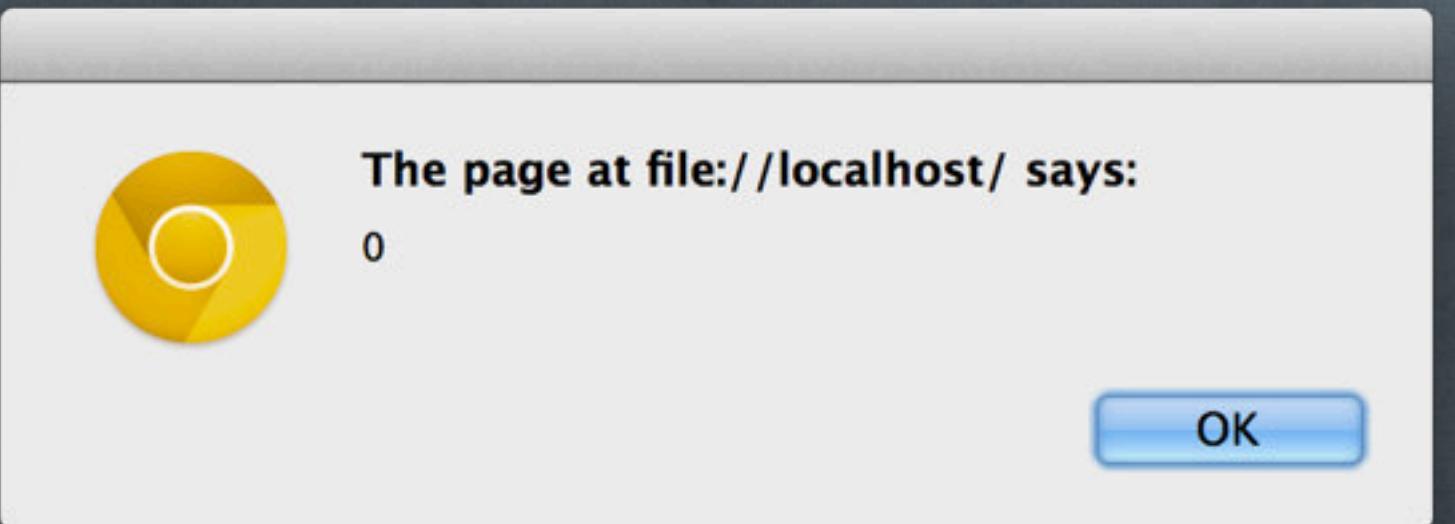
Debugging with Alert

application.js

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



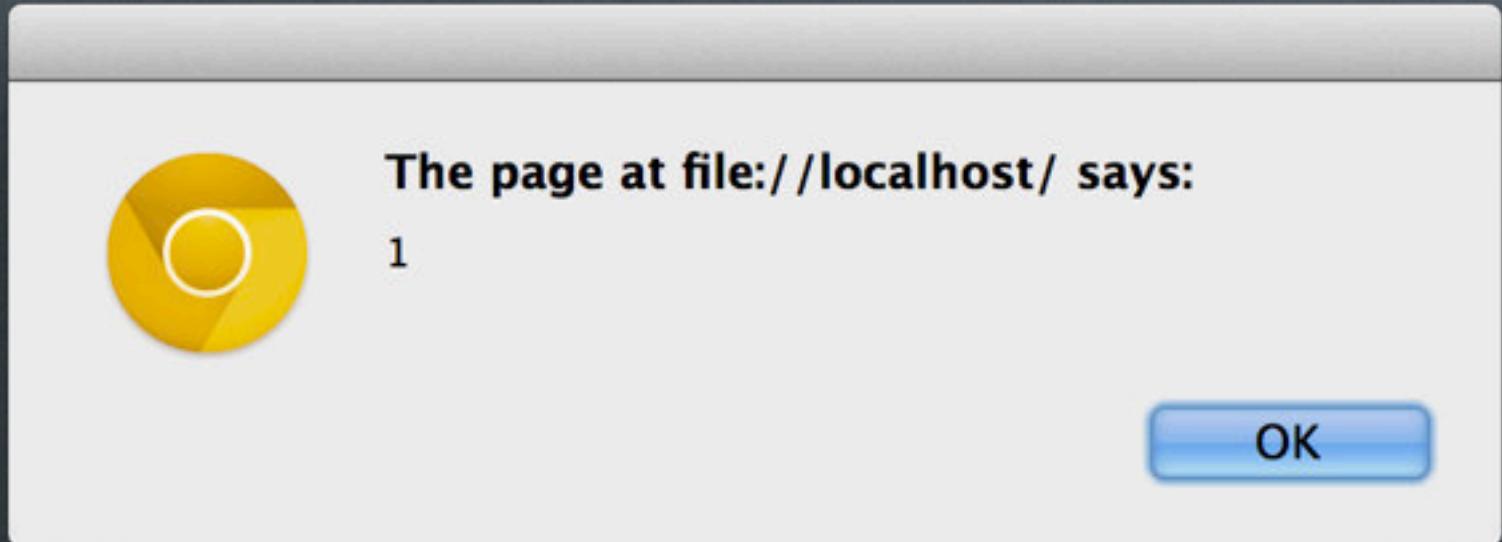
The alert dialog



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

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FLIGHT DETAILS



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

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



Expanding on on()

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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?

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



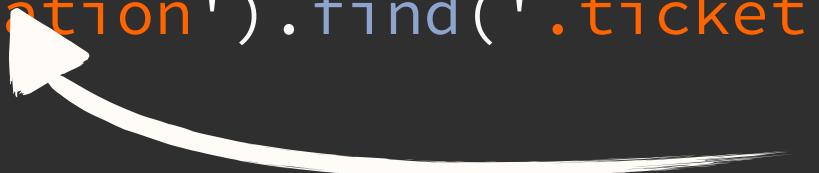
Mouse Events

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*



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?



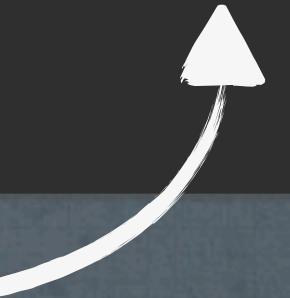
Extract out and name our event handler

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

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

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



Keyboard Events

jQuery Travels - Trip Planner

Packages

Hawaiian Vacation

\$399.99 per ticket

Tickets:

1



Total Price: \$399.99

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

Changing this “Tickets” input field should recalculate the total

TRYjQuery

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...



Keyboard and Form Events

application.js

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



Keyboard Events

keypress

keydown

keyup



Form Events

blur

select

change

focus

submit

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

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

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  
    });  
});
```

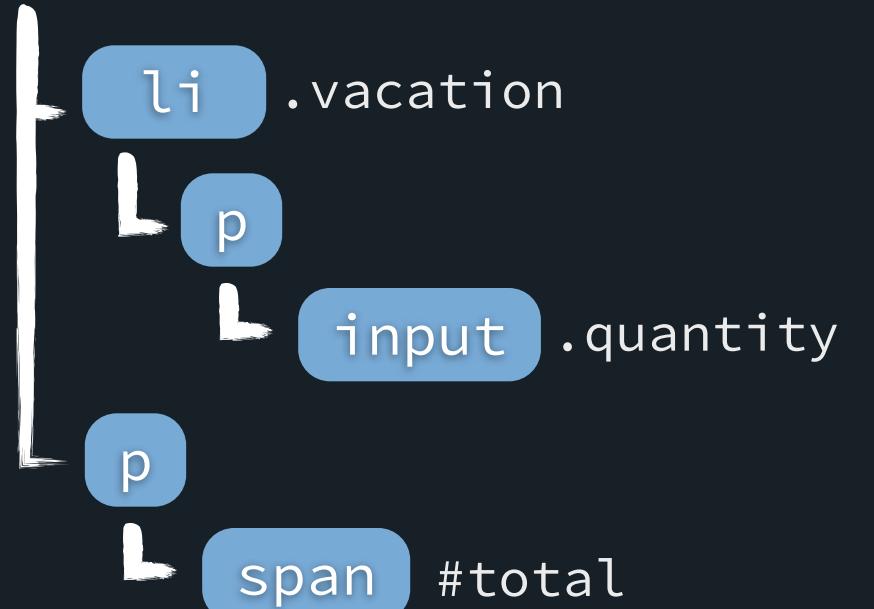
```
var price = $(this).closest('.vacation').data('price');  
↳ '399.99'
```

Returns price as a string

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

Use + to convert the string to a number

DOCUMENT



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'
```



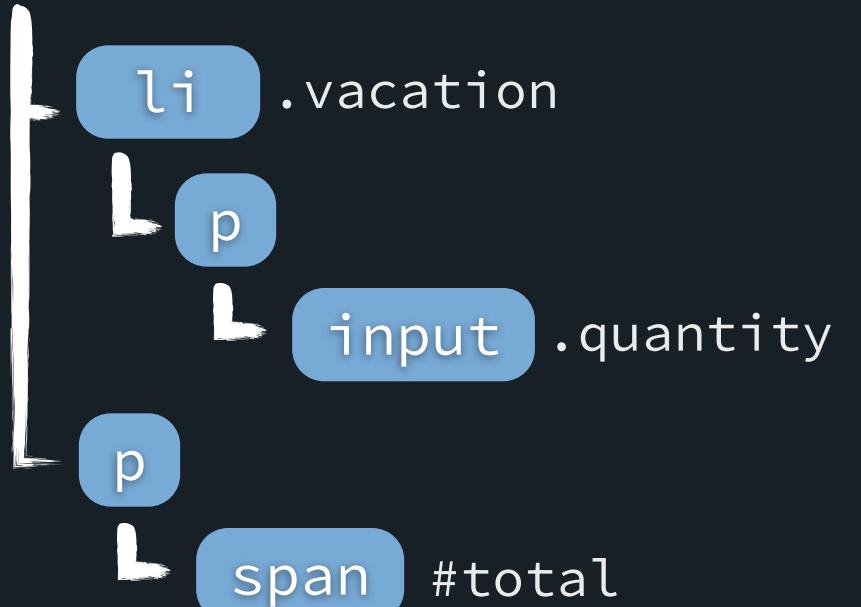
Sets quantity to a string

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



Sets quantity to a number

DOCUMENT



jQuery Object Methods

`.val(<new value>)`

`.val()`

Setting the Total Price

application.js

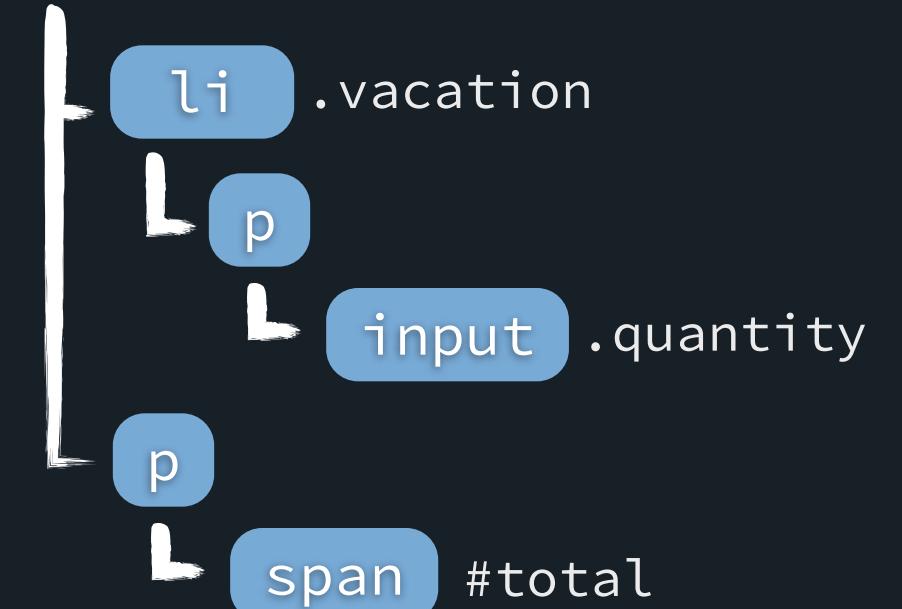
```
$document).ready(function() {  
    $('.vacation').on('keyup', '.quantity', function() {  
        var price = +$(this).closest('.vacation').data('price');  
        var quantity = +$(this).val();  
        // Set the total to price * quantity  
    });  
});
```

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



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

DOCUMENT

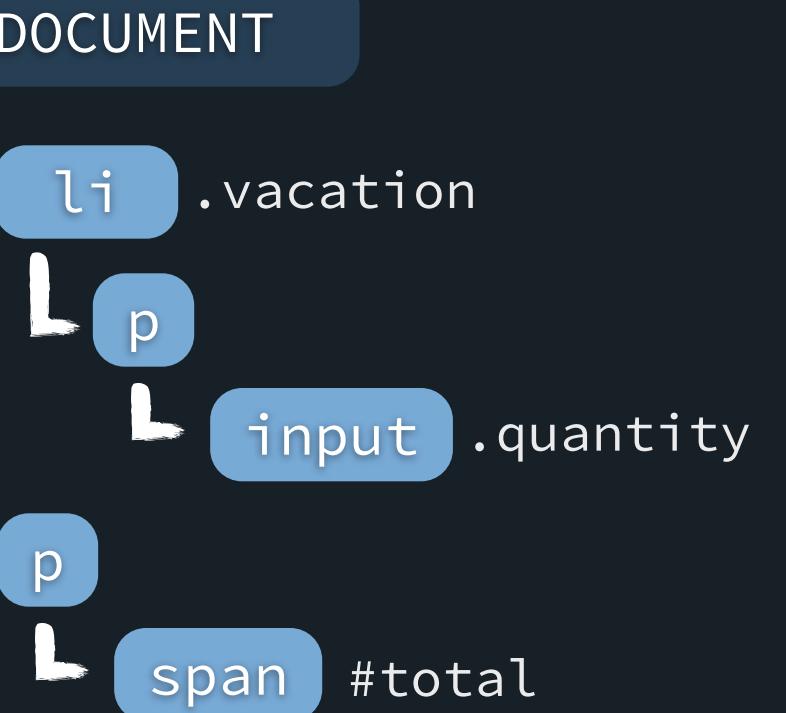


The Completed Event Handler

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



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!



Link Layover

jQuery Travels - Vacation Packages

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

Hawaiian Vacation

GET PRICE

Show Comments



Europoean Getaway

GET PRICE

Visit Japan

GET PRICE

Show Comments

Orlando

GET PRICE

Denver

GET PRICE

Portland

GET PRICE

Show Comments

Preparing for Flight

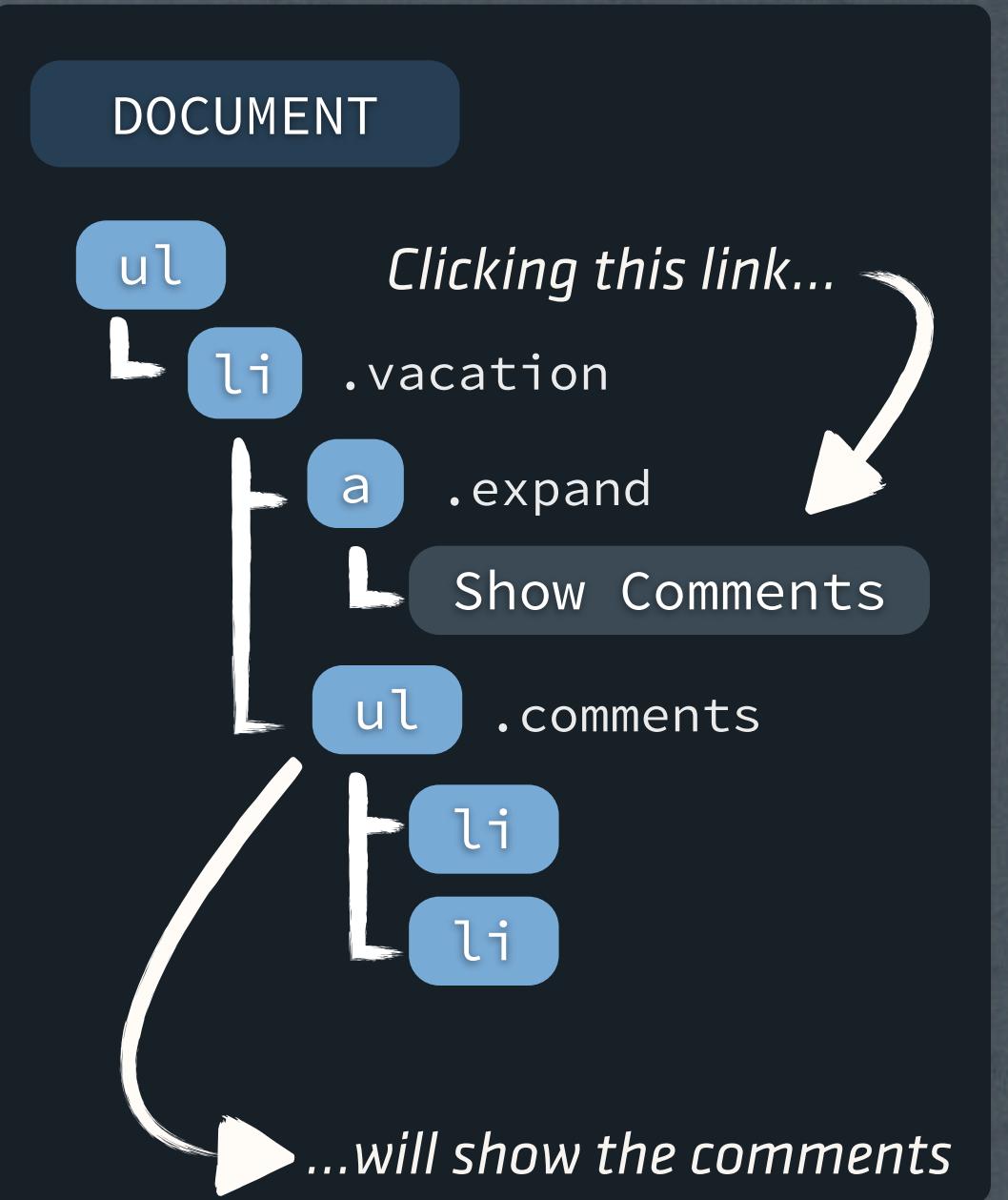
application.css

```
.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



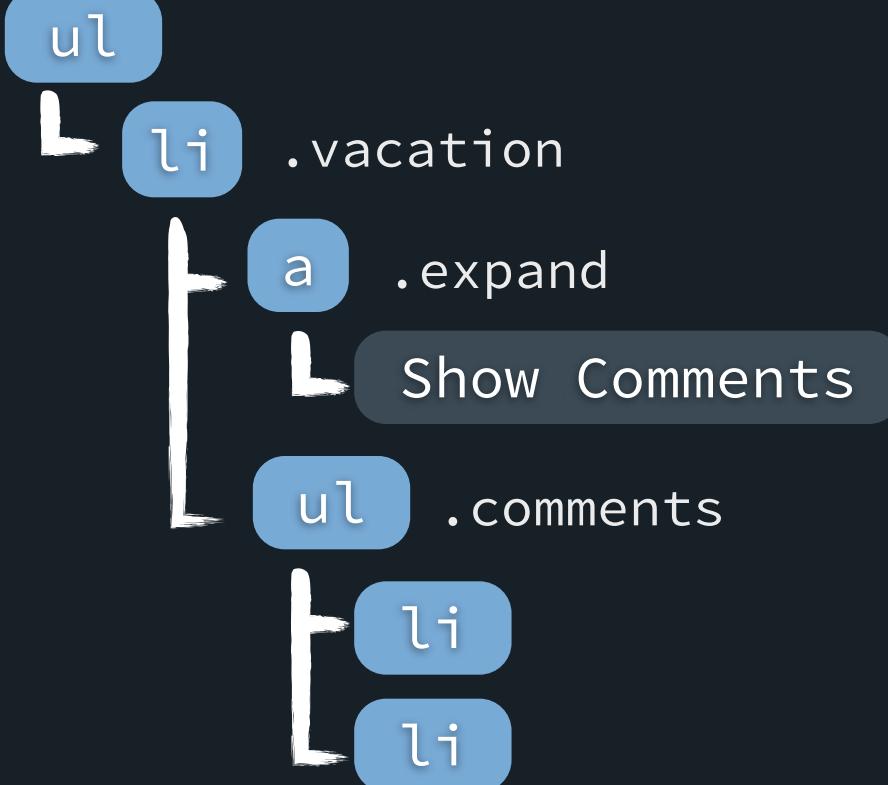
Preparing for Flight

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



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

ul

li

.vacation

a

.expand

Show Comments

ul

li

li

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

ul

li

.vacation

a

.expand

Show Comments

ul

li

li

TRYjQuery

jQuery Travels - Vacation Packages

Packages

Why does the page jump to the top?

Hawaiian Vacation

GET PRICE

Show Comments



Europoean Getaway

GET PRICE

Show Comments

Visit Japan

GET PRICE

Show Comments

Orlando

GET PRICE

Denver

GET PRICE

Portland

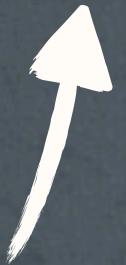
GET PRICE

Show Comments

How the Browser Handles the Click

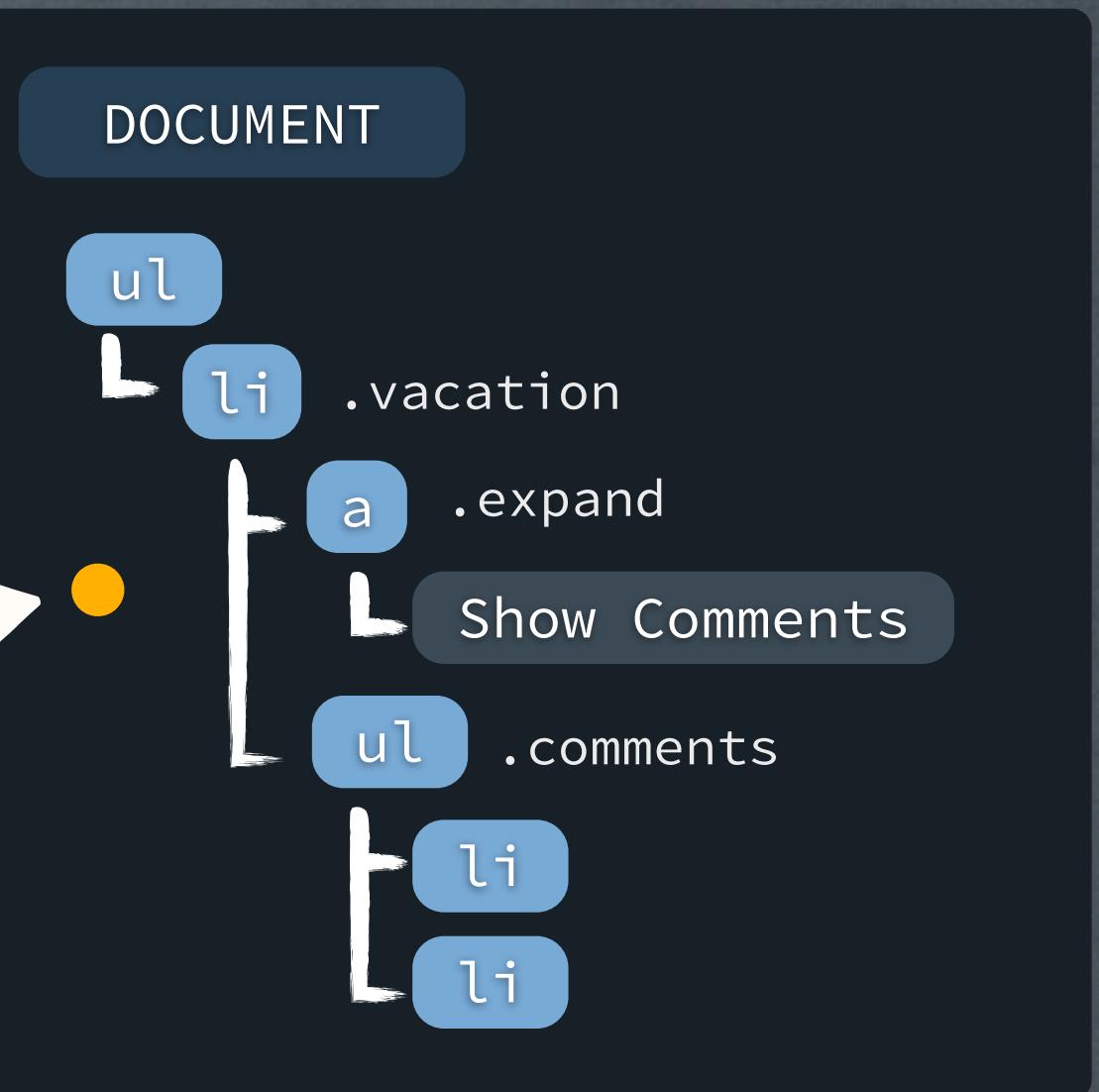
index.html

```
<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*



The Event Object

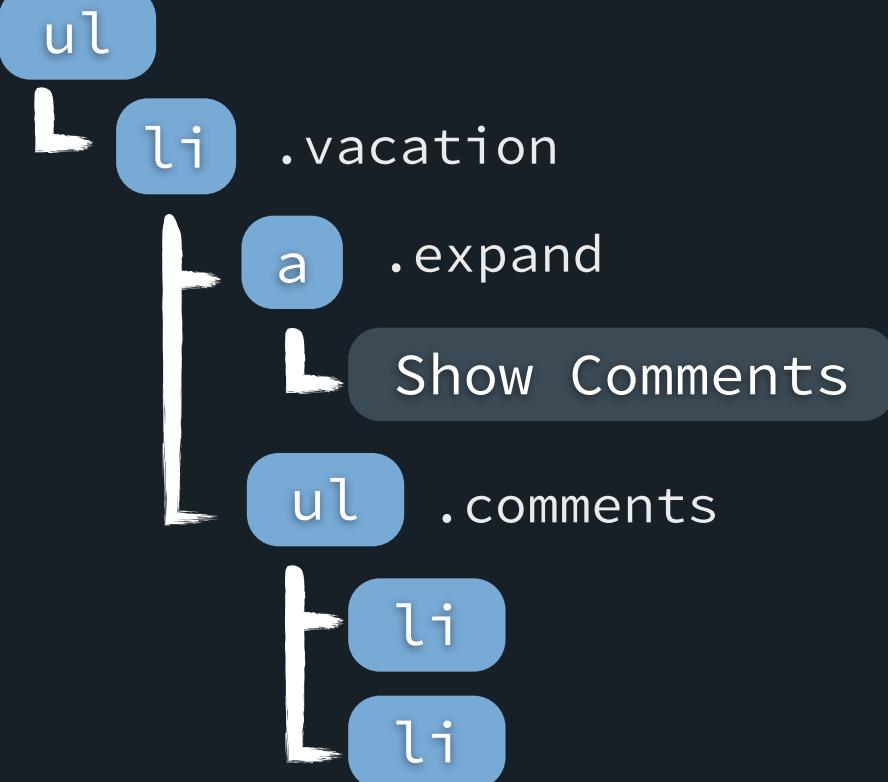
application.js

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



▶ Add the event parameter

DOCUMENT



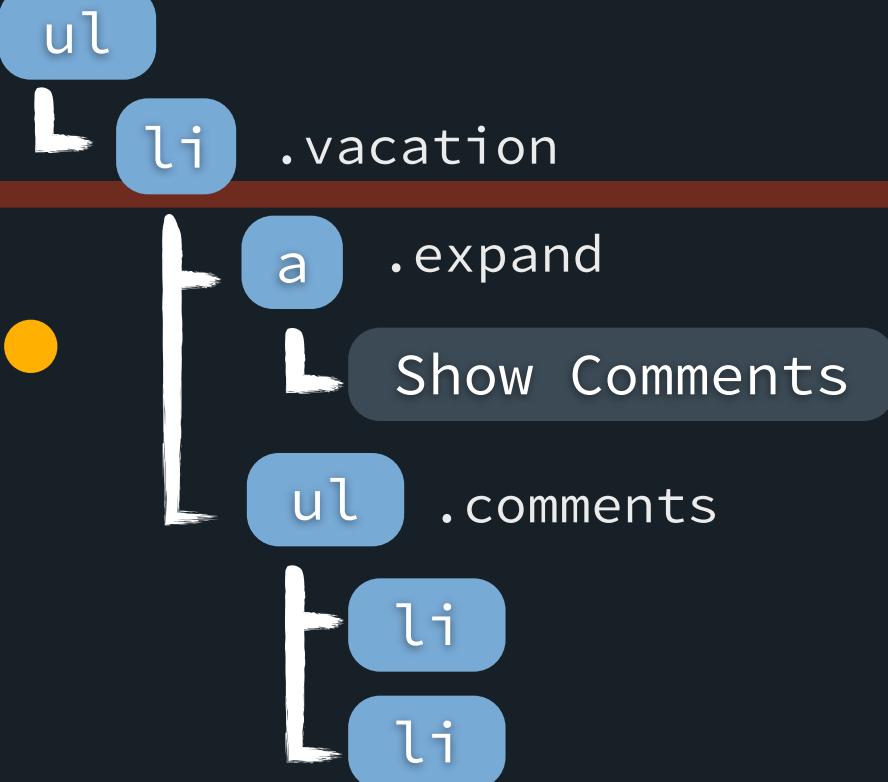
event.stopPropagation()

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.

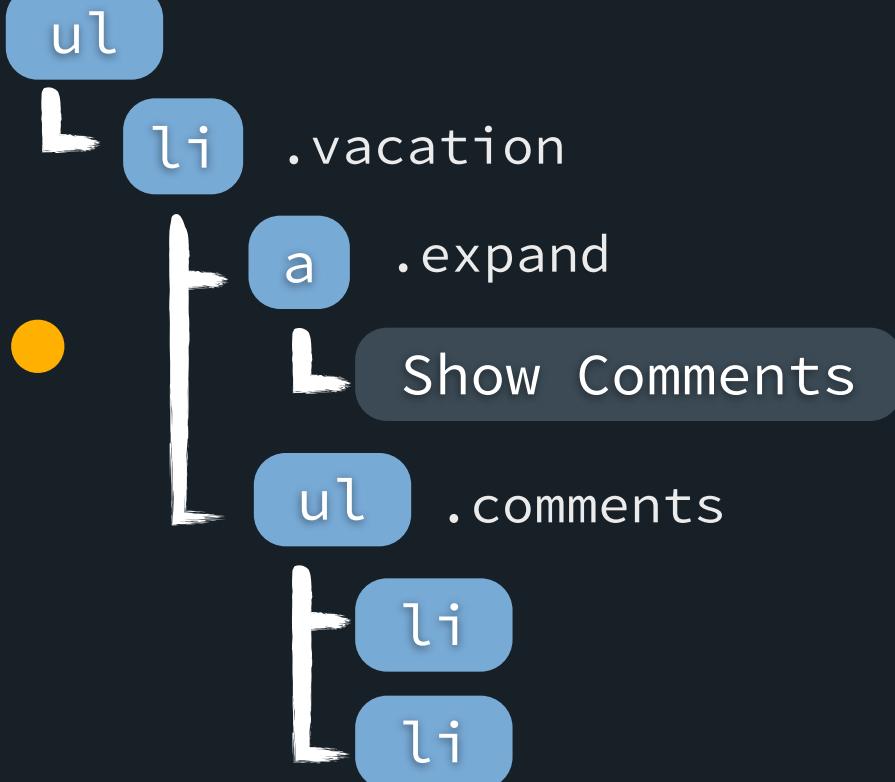
event.preventDefault()

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

jQuery Travels - Vacation Packages

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

Hawaiian Vacation

GET PRICE

[Show Comments](#)

Orlando

GET PRICE

Europoean Getaway

GET PRICE

Visit Japan

GET PRICE

[Show Comments](#)

Denver

GET PRICE

Portland

GET PRICE

[Show Comments](#)