

level 5

TRY jQuery



Taming CSS

Separation of Concerns

HTML
content

CSS
style

JavaScript
behavior

To style something based on user interaction, which would we use?

5.1 Taming CSS

TRY **jQuery**

Changing our Style

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

European Getaway

Visit Japan

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

Let's make all **.vacation** elements clickable...

DOM representation

DOCUMENT

div #vacations

 ul

 li .vacation

 p .price

...and allow people to click on the **** element

5.1 Taming CSS

TRY **jQuery**

Changing the Style

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).css('background-color', '#252b30');
    $(this).css('border-color', '1px solid #967');
  });
});
```

```
$(this).css('background-color', '#252b30')
.css('border-color', '1px solid #967');
```

```
$(this).css({ 'background-color': '#252b30',
  'border-color': '1px solid #967'});
```

Passing in a JavaScript Object as an argument is a common jQuery pattern

DOM representation

DOCUMENT

```
div #vacations
```

```
  ul
```

```
    li .vacation
```

```
      p .price
```

5.1 Taming CSS

TRY **jQuery**

Showing the Price

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).css({ 'background-color': '#252b30',
      'border-color': '1px solid #967'});
  });
});
```

```
$(this).find('.price').css('display', 'block');
```

```
$(this).find('.price').show();
```

Same as CSS syntax, but easier to read and understand

DOM representation

DOCUMENT

```
div #vacations
```

```
  ul
```

```
    li .vacation
```

```
      p .price
```

5.1 Taming CSS

TRY **jQuery**

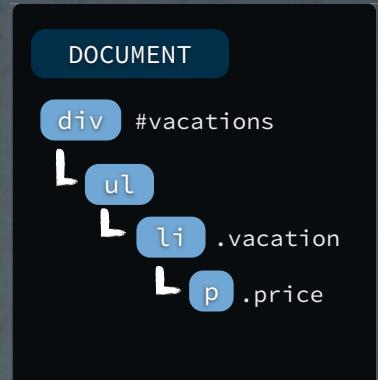
Showing the Price

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).css({'background-color': '#252b30',
                 'border-color': '1px solid #967'});
    $(this).find('.price').show();
  });
});
```

Highlights the Vacation Package and shows the price

DOM representation



5.1 Taming CSS

TRY **jQuery**

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

European Getaway

Visit Japan

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

*Our **.vacation** elements are highlighted when we click on them*

TRY **jQuery**

Moving Styles to External CSS

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).css({'background-color': '#563',
                 'border-color': '1px solid #967'});
    $(this).find('.price').show();
  });
});
```

application.css

```
.highlighted {
  background-color: #563;
  border-color: 1px solid #967;
}
.highlighted .price {
  display: block;
}
```

Can we move these to a CSS stylesheet?

DOM representation

DOCUMENT

div #vacations

L ul

L li .vacation

L p .price

5.1 Taming CSS

TRYjQuery

Moving Styles to External CSS

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).addClass('highlighted');
  });
});
```

It's now much easier to manipulate with external CSS styles

application.css

```
.highlighted {
  background-color: #563;
  border-color: 1px solid #967;
}
.highlighted .price {
  display: block;
}
```

DOM representation

DOCUMENT

div #vacations

L ul

L li .vacation

L p .price

5.1 Taming CSS

TRYjQuery

Moving Styles to External CSS

application.js

```
$(document).ready(function() {  
  $('#vacations').on('click', '.vacation', function() {  
    $(this).addClass('highlighted');  
  });  
});
```

We can only show price, but how would we hide price?

```
$(this).toggleClass('highlighted');
```

Adds the class if `$(this)` doesn't have it, removes it if `$(this)` already has it

DOM representation



jQuery Object Methods

.toggleClass()

.addClass(<class>)

.removeClass(<class>)

5.1 Taming CSS

TRY jQuery

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

European Getaway

Visit Japan

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

Our refactored page still works, and will be much easier to maintain

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Challenges

5.1 Taming CSS

TRYjQuery



Animation

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

European Getaway

Visit Japan

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

What can we do to add a bit more movement to this?

TRY jQuery

Adding Movement

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
  });
});
```

```
$(this).css({'top': '-10px'});
```



The box will jump up 10 px

```
$(this).animate({'top': '-10px'});
```



DOM representation



jQuery Object Methods

.animate(<object>)

Takes in a JavaScript object similar to the .css() method

5.2 Animation

TRY jQuery

Adding Movement

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
    $(this).animate({'top': '-10px'});
  });
});
```

Will adjust a CSS property pixel by pixel in order to animate it

DOM representation



5.2 Animation

TRY **jQuery**

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

FROM \$399.99

European Getaway

FROM \$749.99

Visit Japan

FROM \$859.99

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

Our animation can slide up but not slide down

TRY **jQuery**

Moving Back Down

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
    $(this).animate({'top': '-10px'});
  });
});
```

DOM representation

DOCUMENT

div #vacations

 ul

 li .vacation

 p .price

How do we set 'top' to '0px' if a second click occurs?

```
if(<vacation has the class highlighted>) {
  // animate the vacation up
} else {
  // animate the vacation back down
}
```

"**If statements**" allow your code to make decisions at runtime

5.2 Animation

TRYjQuery

Moving Back Down

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
    if(<vacation has the class highlighted>) {
      $(this).animate({'top': '-10px'});
    } else {
      $(this).animate({'top': '0px'});
    }
  });
});
```

DOM representation

DOCUMENT

div #vacations

 ul

 li .vacation

 p .price

jQuery Object Methods

.hasClass(<class>)

```
$(this).hasClass('highlighted');  
↳ true
```

Returns **true** or **false**

5.2 Animation

TRYjQuery

Moving Back Down

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
    if($(this).hasClass('highlighted')) {
      $(this).animate({'top': '-10px'});
    } else {
      $(this).animate({'top': '0px'});
    }
  });
});
```

DOM representation

DOCUMENT

div #vacations

 ul

 li .vacation

 p .price

Our vacation package will move up and down

5.2 Animation

TRYjQuery

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

FROM \$399.99

European Getaway

FROM \$749.99

Visit Japan

FROM \$859.99

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

Could we speed this up a little? Our customers don't have all day.

TRYjQuery

Changing the Speed

```
$(this).animate({'top': '-10px'});  
$(this).animate({'top': '-10px'}, 400);
```

We can optionally pass in the speed as a second argument to **animate()**

```
$(this).animate({'top': '-10px'}, 'fast');
```



```
$(this).animate({'top': '-10px'}, 200);
```



```
$(this).animate({'top': '-10px'}, 'slow');
```



```
$(this).animate({'top': '-10px'}, 600);
```



Effects methods like **animate()**, **slideToggle()** and **fadeToggle()** can also be given a specific speed as a String or in milliseconds

5.2 Animation

TRY **jQuery**

Moving Back Down

application.js

```
$(document).ready(function() {  
  $('#vacations').on('click', '.vacation', function() {  
    $(this).toggleClass('highlighted');  
    if($(this).hasClass('highlighted')) {  
      $(this).animate({'top': '-10px'}, 'fast');  
    } else {  
      $(this).animate({'top': '0px'}, 'fast');  
    }  
  });  
});
```

DOM representation



And with this we now have specific speeds for our animation

5.2 Animation

TRY **jQuery**

jQuery Travels - Vacation Packages

Packages

Hawaiian Vacation

FROM \$399.99

European Getaway

FROM \$749.99

Visit Japan

FROM \$859.99

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

Our jQuery animation is now using a '**fast**' speed

TRY **jQuery**

The Next Step with CSS Animations

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
    if($(this).hasClass('highlighted')) {
      $(this).animate({ 'top': '-10px' }, 'fast');
    } else {
      $(this).animate({ 'top': '0px' }, 'fast');
    }
  });
});
```

DOM representation

DOCUMENT

div #vacations

ul

li .vacation

p .price

Isn't this still styling? Shouldn't it be inside of a stylesheet?

Animation Duration

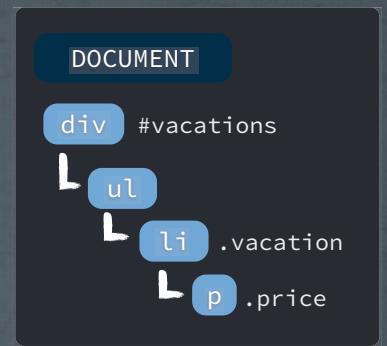
application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
  });
});
```

application.css

```
.vacation {
  transition: top 0.2s;
}
.highlighted {
  top: -10px;
}
```

DOM representation



Will only work with browsers that implement CSS transitions

5.2 Animation

TRY **jQuery**

Working with Modern Browsers

application.js

```
$(document).ready(function() {
  $('#vacations').on('click', '.vacation', function() {
    $(this).toggleClass('highlighted');
  });
});
```

application.css

```
.vacation {
  -moz-transition: top 0.2s;
  -o-transition: top 0.2s;
  -webkit-transition: top 0.2s;
  transition: top 0.2s;
}
.highlighted {
  top: -10px;
}
```

DOM representation



Unlike jQuery, with CSS we have to account for specific browsers

5.2 Animation

TRY **jQuery**

jQuery Air Atlantic - Vacation Packages

Packages

Hawaiian Vacation

FROM \$399.99

Europoean Getaway

FROM \$749.99

Visit Japan

FROM \$859.99

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

CSS Animations are a huge topic, but worth looking into

TRY jQuery