
art 4217

Advanced Digital Applications

Lesson 11 - 12 : JS + jQuery

Ashwin Anandani

Continue on your App UI

The rest of the pages

- Create a new CodePen for new pages
- Connect your pages using:

```
<a href="page2.html">
```

- Make sure you have only one CSS file (link to it in both HTML files)
-

Intro to jQuery

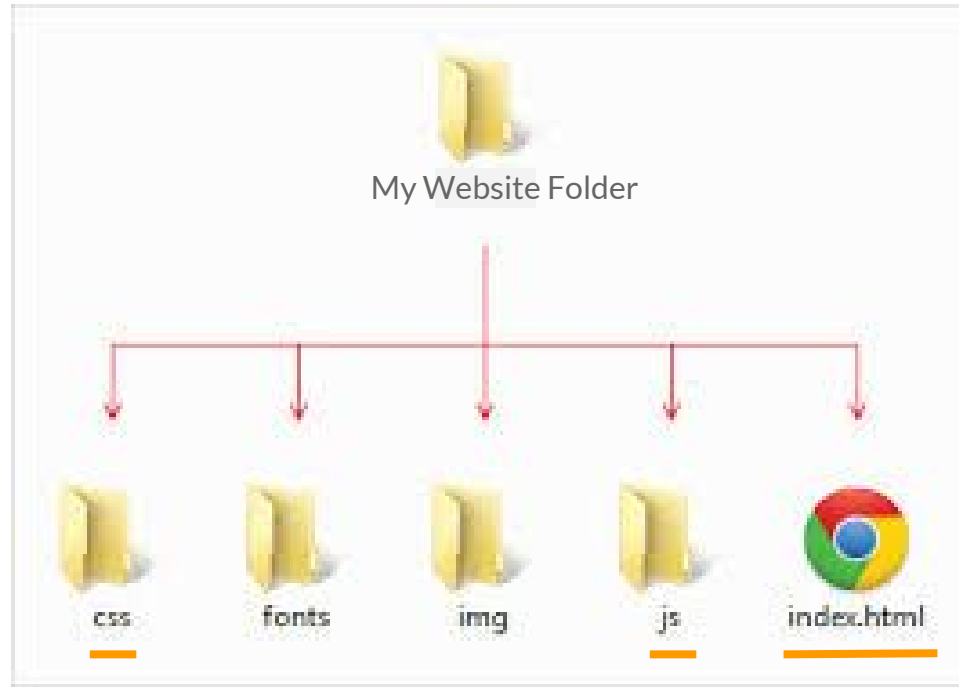
- A new type of code, for interactions
 - Hide/Show sample code
 - Practical: Try it yourself
 - Adding interactions into your code
-

Code Review

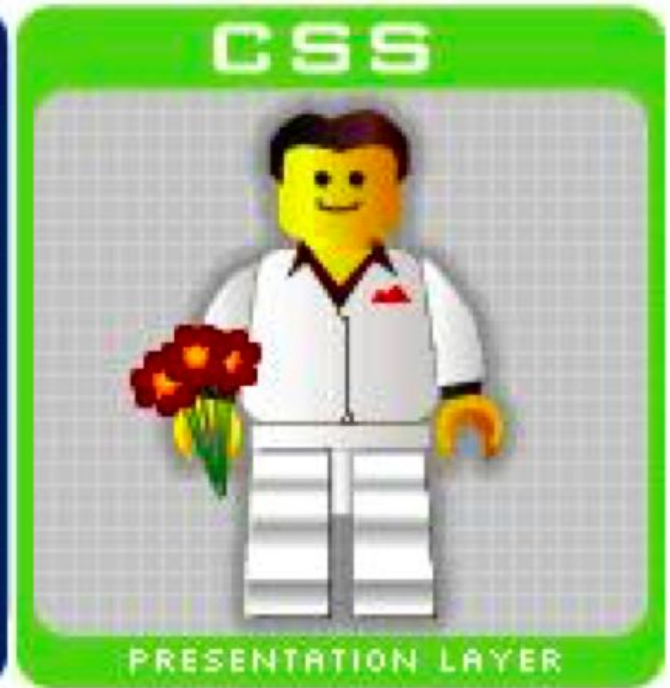
A little demonstration....

How sites are structured

Different code in different folders



Two Languages To Use



How HTML pages are structured

As a design

HTML

`<div id="header">`

`<div id="nav">`

`<div class="article">`

`<div class="section">`

`<div id="sidebar">`

`<div id="footer">`

HTML Tags

<head> will **not** be shown on the webpage

<title> : To set the name in the browser tab

<body> : Content of the page

<div> : Divider - used to create containers for control

<h1> ... <h6> : Header tags for titles (with pre-set sizes)

<p> : Use for regular writing

<a> : Link to another site

 : For images

CSS needs to talk to the HTML:
ID and **Class**

Class is for styles you want to use over and over

ID is for something really specific

```
<div class="col2" >  
<h2>HomePage</h2>  
  
```

CSS uses # to choose IDs, and . to choose **C**lasses

```
<div class="col2" >
<h2>HomePage</h2>
    
```

```
.col2 {
    float:left;
    width:46%;
    padding:0 2% 1em 2%;
    overflow:hidden;
    position:relative;
    left:-75%;
}
```

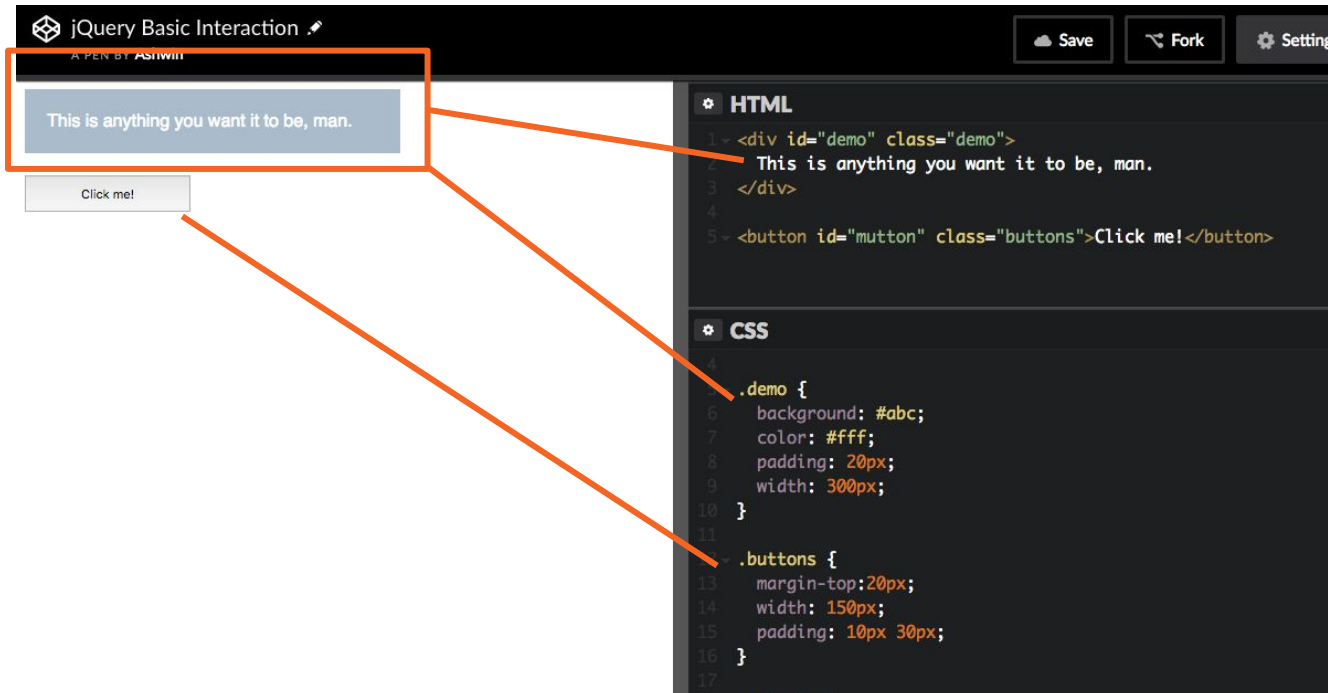
```
#floatRight {
    float:right;
}
```

Now let's make click events


Create some basic interactions

First we make a <div> to move

Keep it simple to start



The screenshot shows a web application titled "jQuery Basic Interaction" by "ASTWILL". It features a blue box with the text "This is anything you want it to be, man." and a button labeled "Click me!". An orange rectangle highlights the blue box, with three orange lines pointing from its corners to the corresponding HTML and CSS code in the right-hand panel. The HTML panel shows a `<div id="demo" class="demo">` containing the text and a `<button id="mutton" class="buttons">Click me!</button>`. The CSS panel shows styles for `.demo` (background: #abc, color: #fff, padding: 20px, width: 300px) and `.buttons` (margin-top: 20px, width: 150px, padding: 10px 30px).

jQuery Basic Interaction 

A PEN BY ASTWILL

Save Fork Settings

This is anything you want it to be, man.

Click me!

HTML

```
1 <div id="demo" class="demo">
2   This is anything you want it to be, man.
3 </div>
4
5 <button id="mutton" class="buttons">Click me!</button>
```

CSS

```
4
5 .demo {
6   background: #abc;
7   color: #fff;
8   padding: 20px;
9   width: 300px;
10 }
11
12 .buttons {
13   margin-top: 20px;
14   width: 150px;
15   padding: 10px 30px;
16 }
17
```

Then we add jQuery

Very important! But can also do other way around

The screenshot shows the 'Pen Settings' interface for a CodePen project titled 'jQuery Basic Interaction'. The 'JavaScript' tab is selected, showing the 'JavaScript Preprocessor' set to 'None' and the 'Add External JavaScript' section. A dropdown menu is open under 'Add External JavaScript', listing various libraries, with 'jQuery' highlighted. The 'PEN DESCRIPTION' field contains text explaining the purpose of the pen. The 'TAGS' field is empty. A green 'Save & Close' button is visible at the bottom right.

Pen Settings

HTML CSS **JavaScript** Behavior Screenshot

JavaScript Preprocessor

None

Add External JavaScript

These scripts will run in this order and before the code in the JavaScript editor. You can also link to another Pen here, and it will run the JavaScript from it. Also try typing the name of any popular library.

https://yourwebsite.com/script.js

https://codepen.io/username/pen/aBcDef

+ add another resource

Quick-add ✓ ---

- Angular
- Backbone
- Bootstrap
- D3
- Ember
- GreenSock TweenMax
- Handlebars
- jQuery**
- jQuery UI
- Lodash

PEN TITLE

jQuery Basic Interaction

PEN DESCRIPTION

Explain what's going on in your Pen here. This text is searchable, so it can also help others find your work. Remember to credit others where credit is due. Markdown supported.

TAGS COMMA SEPARATED, MAX OF FIVE

TEMPLATE?

Save & Close

I want to make a flip

Not really, but some of you do

Makes it
happen

Controls
speed and
makes it
smooth

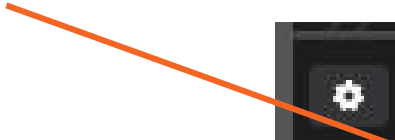
⚙ CSS

```
14 width: 150px;  
15 padding: 10px 30px;  
16 }  
17  
18 .animate {  
19   transform: rotate(180deg);  
20   -webkit-transform: rotate(180deg);  
21   transition: all 1s ease;  
22 }
```

The magic.

Make it flip when you click the button

This is like
saying
<html>



```
JS
1 $(document).ready(function() {
2
3     $("#mutton").click(function() {
4         $("#demo").toggleClass('animate');
5     });
6
7 });
```

The magic.

Make it flip when you click the button

This is like
saying
<html>

First we select
the object



```
JS
1 $(document).ready(function() {
2
3   $("#mutton").click(function() {
4     $("#demo").toggleClass('animate');
5   });
6
7 });
```

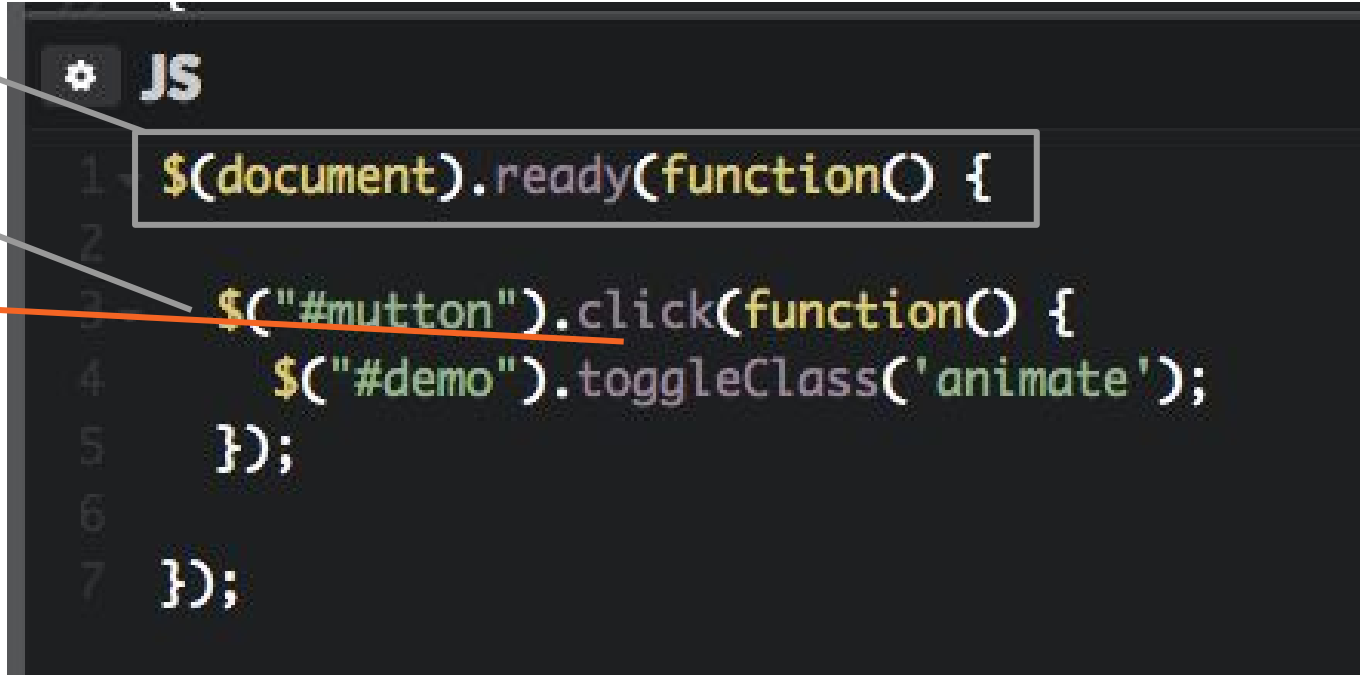
The magic.

Make it flip when you click the button

This is like
saying
<html>

First we select
the object

Then the
action



```
1 $(document).ready(function() {  
2  
3     $("#mutton").click(function() {  
4         $("#demo").toggleClass('animate');  
5     });  
6  
7 });
```

The magic.

Make it flip when you click the button

This is like
saying
<html>

First we select
the object

Then the
action

Then the object it
affects

```
JS
1 $(document).ready(function() {
2
3   $("#mutton").click(function() {
4     $("#demo").toggleClass('animate');
5   });
6
7 });
```

The magic.

Make it flip when you click the button



```
JS
1 $(document).ready(function() {
2
3     $("#mutton").click(function() {
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5     });
6
7 });
```

Then the object it
affects

The **'method'**
(add / remove
class)
and its
'parameter'
(the class to
toggle)

The magic.

Make it flip when you click the button

```
JS
1 $(document).ready(function() {
2
3   $("#mutton").click(function() {
4     $("#demo").toggleClass('animate');
5   });
6
7 });
```

Then the object it
affects

The **'method'**
(add / remove
class)
and its
'parameter'
(the class to
toggle)

Create a 'toggle' button

To start and stop an animation

- Use codepen.io
 - Create a `<div>` and a `<button>`
 - Use `.toggleClass('animate')`
to make an animation stop and start
-

See the whole thing

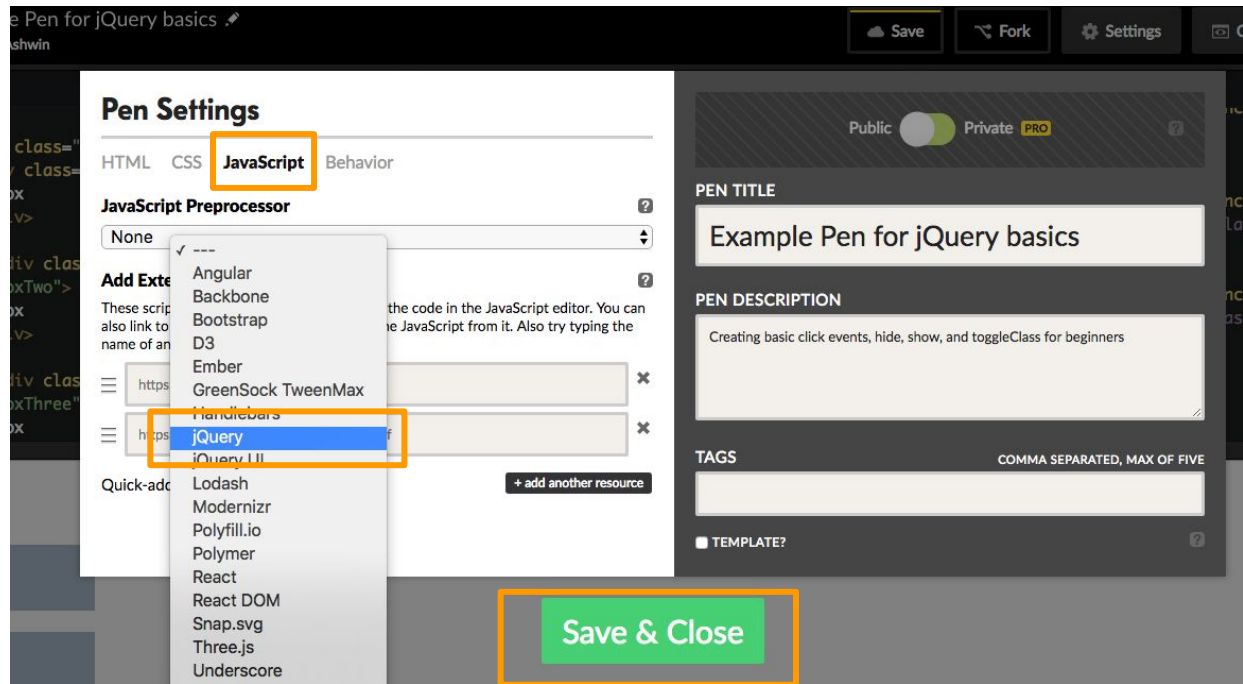
codepen.io/ashwinbsd/pen/gWodPq

How does it work?

Understanding jQuery

First we add jQuery

This is like Bootstrap; a way to code quicker



Then we start to write it

- It has to start with this:

```
$ (document) .ready (function () {
```

Then we start to write it

- And it has to end with this:

}) ;

Then we start to write it

- It has to start with this:

I'm using jQuery

```
$(document).ready(function() {
```

Then we start to write it

- It has to start with this:

I'm using jQuery

```
$ (document) .ready (function () {
```

This is the thing I want to
do something to

Then we start to write it

- It has to start with this:

I'm using jQuery

Method (the action)

```
$ (document) .ready (function () {
```

This is the thing I want to
do something to

Then we start to write it

- It has to start with this:

Method (the action)

```
$ (document).ready(function () {  
  
    //ALL YOUR CODE  
  
}
```

Key interactions

Hide

- INSIDE that other stuff, is this stuff:

```
$ ("#TheID").click(function() {  
    $("#Thing").hide();  
});
```

Key interactions

Show

```
$("#TheID").click(function() {  
    $("#Thing").show();  
});
```

Key interactions

ToggleClass

- This is more common

```
$("#TheID").click(function() {  
    $("#Thing").toggleClass('hidden');  
});
```

The class to turn
on and off

Key interactions

ToggleClass

- The CSS for that is then:

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

JS uses IDs to select stuff

So you can continue to use #id when writing it

HTML:

```

```

CSS:

```
#floatRight {  
    float: right;  
}
```

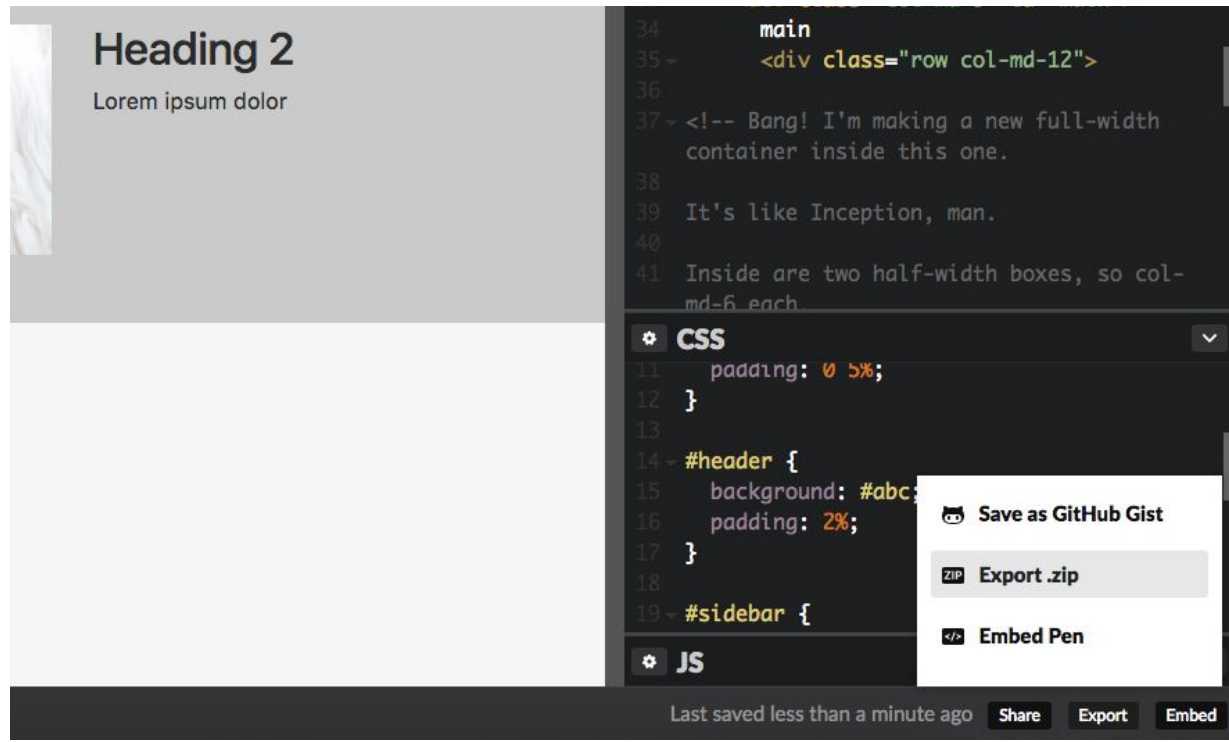
JS:

```
$(document).ready(function() {  
    $("#floatRight").click(function() {  
        $("this").toggleClass('animate');  
    });  
});
```

See all three:

CodePen.io/ashwinbsd/pen/doEedx

Export your code in the end



The screenshot shows a code editor interface with a preview pane on the left and a code editor on the right. The preview pane displays a heading "Heading 2" and a paragraph "Lorem ipsum dolor". The code editor shows HTML, CSS, and JS code. A context menu is open over the CSS code, offering options to "Save as GitHub Gist", "Export .zip", and "Embed Pen". At the bottom, there is a status bar indicating "Last saved less than a minute ago" and buttons for "Share", "Export", and "Embed".

Heading 2
Lorem ipsum dolor

```
34      main
35      <div class="row col-md-12">
36
37      <!-- Bang! I'm making a new full-width
38           container inside this one.
39      It's like Inception, man.
40
41      Inside are two half-width boxes, so col-
42           md-6 each
```

CSS

```
11      padding: 0 5%;
12  }
13
14  #header {
15      background: #abc;
16      padding: 2%;
17  }
18
19  #sidebar {
```

JS

- Save as GitHub Gist
- Export .zip
- Embed Pen

Last saved less than a minute ago **Share** **Export** **Embed**

Add additional pages from the UI

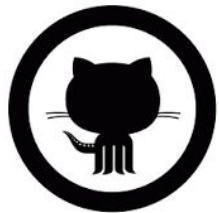
And link them to each other

- Use ``
 - Understand how to link your CSS correctly
 - One CSS file for all HTML files
 - Use `<link ref="style.css">`
-

Sync all your work

To GitHub, and give me address

Continue using GitHub



You may need to **clone**

If so, ask me about it

If you don't see stuff online

- Make sure you're using username.github.io
- Make sure it is in the folder *with the same name* on your computer
- Make sure you have Committed & Sync-ed using

Github Desktop



Get it working properly online

There's a lot of debugging now

- Use ``
 - Understand how to link your CSS correctly
 - One CSS file for all HTML files
 - Use `<link ref="style.css">`
-

Finish off for the final!

Final Presentation Schedule + Deets

Please tell us all:

The following items must be your presentation

- What is the overall idea/concept
 - AND Which 2 softwares did you use?
 - What kinds of people will use/consume this
 - How did you create your app layout?
 - Guide us through one block of your code
-

7 minutes each

5 mins presentation + 2 mins Q & A

GROUP 1

5 min break

1. Ng Ka Wun
2. Wong Hoi Fung
3. Kong Sze Man
4. Wong Yee Lei
5. Ng Yu Kwan

GROUP 2

5 min break

6. Tam Yuet Yau
7. Yick Yau Sze
8. Lee Wai Fong
9. Yau Chun Yam
10. He ZhiWen (Kris)

GROUP 3

11. Yau King Yeung
 12. Li Hoi Kit
 13. Lai Ka Chun
 14. Chan Chung Yin (Ricky)
 15. Li Wing Chi
-

This deck is now at:

[http://ashportfolio.github.io/art4217/decks/
lesson-11-12.pdf](http://ashportfolio.github.io/art4217/decks/lesson-11-12.pdf)
