Unit 8

Warning!

Callbacks

Callbacks

 Generic way of saying "This is what I want you to do when you are done with your asynch operations"

```
$.get("something.html", function() {
    console.log("I run in the future!");
});
```

Lets kick it up a notch!

```
$.get("something.html", function() {
    $.get("somethingelse.html", function() {
        console.log("ok now I'm really done");
    }
});
```

```
var r1=false;
var r2=false;
$.get("something.html", function() {
   r1=true;
   if(r2) complete();
});
$.get("somethingelse.html", function() {
   r2=true;
   if(r1) complete();
});
```

Enter the Deferred

Deferreds represent Async values

```
content = somethingAsync();
console.log(content); //Error!
```

```
contentDeferred = somethingBetterAsync();
contentDeferred.done(function(stuff) {
   //I'm done!
});
```

```
contentDeferred = somethingAsync();
somethingDeferred = somethingElseAsync();
$.when(contentDeferred, somethingDeferred).done(
function(res1, res2) {
});
```

An asynch operation

- An asynch operation
- Your code can resolve or reject them

- An asynch operation
- Your code can resolve or reject them
- Have 3 events: Done, Fail, and Always

Promises

- Read Only Deferred
- Basically, you can't resolve or reject, just listen for done, fail, and always
- jQuery Ajax functions return promises

BTW

- This is all rolling into JavaScript natively
- ES6 (ECMAScript 6)
- They are a bit different

Demos

Making your own Deferreds

- For other async operations not covered by jQuery (IndexedDB, WebSQL)
- For things that may be async

Demos