DEPOT/U

Promises – Http Server – Ajax

Agenda

9am	Lecture
10:30am	Lab
12:30pm	Lunch
1-5pm	Lab – cont'd

Promises

- JavaScript is single threaded
- *Promises* to return a value if successful or a reason if there is an error
- Promises have two instance methods
  - .then(onResolved, onRejected)
  - .catch(onRejected)
- Promises can be chained
  - promise.then().then().then().catch();

Promises – cont'd

- Promises can be resolved or rejected

```
var promise = new Promise(function(resolve, reject) {
    //do stuff
    //when success
    resolve(true);
    //when failure
    reject(false);
});
```

Promises – Static Methods

- Promise.all()
  - executes .then() after all promises in the iterable have completed
- Promise.race()
  - returns immediately as the first promise in the iterable is resolved or rejected
- Promise.reject()
  - returns a rejected promise
- Promise.resolve()
  - returns a resolved promise

HTTP Server

- Accepts requests
- Responds based on url, method, post data
- Sets content-type appropriately
  - text/json, application/javascript, text/html, etc.
- Sets response errors and messages when invalid request is received

- Note: *JavaScript in the browser cannot access the file system*

Ajax

- Asynchronous JavaScript and XML
- XMLHttpRequest
  - Allows the browser to make server calls without refreshing the page
- Most frameworks support Ajax (Angular, jQuery, PlatypusTS)

```
$.ajax({
    url: 'data.json'
}).done(function(result) {
    //do something with data
});
```

Week 3 Lab 2

Promises