Final Exam Review

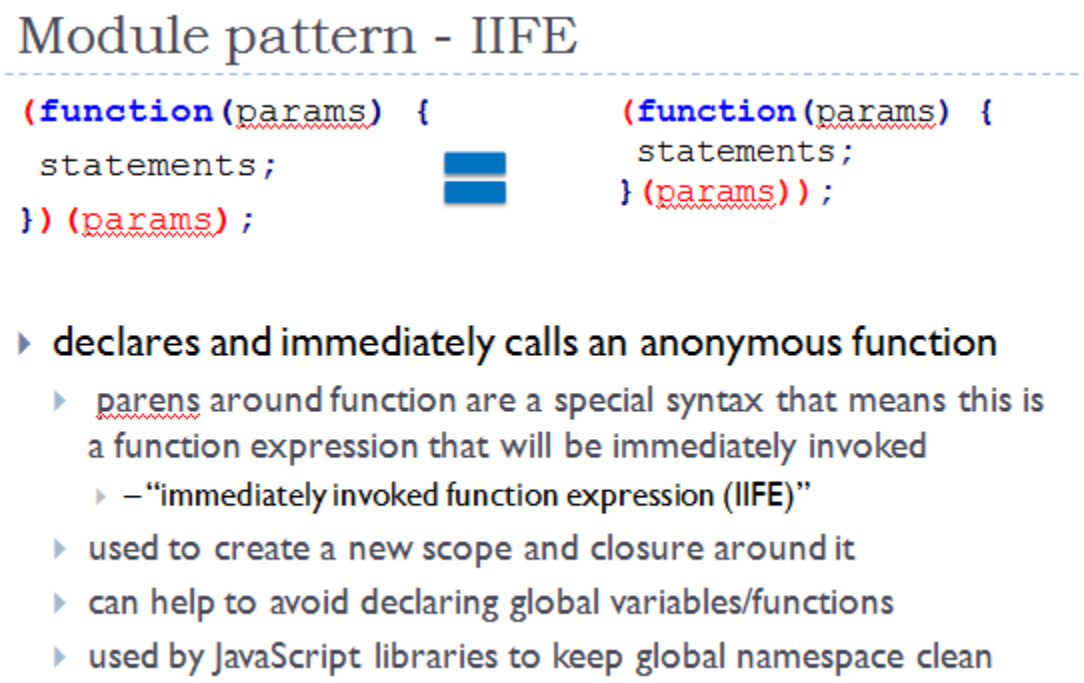
The final exam will consist of those questions:

1. Multiple Choices – 10 questions – total 30 points
   (For the multiple-choice questions any number of answers can be correct, possibly none, possibly all, possibly some.)
2. Short answer questions – JSP Elements - 4 questions – total 8 points
3. Programming questions – ? questions
   a. JSP, Servlet, JSTL – 8 points
   b. JSP, Servlet, jQuery, AJAX, Module Pattern – 17 points
   c. Revealing Module Pattern, private/public methods, object literal – 4 points
   d. JSP, Servlet, jQuery, AJAX, Module Pattern, GSON, JSON – 20 points
4. SCI question – 1 question – 3 points

Location: L113, L115. Total **90** points

Time: May 25, 10am ~ 12:30am, 2.5 hours (Arrive 10 minutes earlier)

Here is a review of Programming Question c:



Module Pattern Example

```
// old: 3 globals
var count = 0;
function incr(n) {
 count += n;
}
function reset() {
 count = 0;
}

incr(4);
incr(2);
console.log("count: " +
  count);
```

```
// new: 0 globals
(function() {
 var count = 0;
 function incr(n) {
   count += n;
 }
 function reset() {
   count = 0;
 }

 incr(4);
 incr(2);
 console.log("count: " +
  count);
})();
```

Revealing Module Pattern

```
var Module = (function() {
 var privateMethod = function() {
 // private
 };
 var someMethod = function() {
 // public
 };
 var anotherMethod = function() {
 // public
 };
 return {
   someMethod: someMethod,
   anotherMethod: anotherMethod
 };
})();
```

Creating objects via object literal

```
var name = {
  'fieldName': value,
  ...
  'fieldName': value
};
var pt = {
  'x': 4,
  'y': 3
};
alert(pt.x + ", " + pt.y);
```

- in JavaScript, you can create a new object without creating a class
- the above is like a Point object; it has fields named x and y
- the object does not belong to any class; it is the only one of its kind, a singleton
  - typeof(pt) === "object"