

ANNOUNCEMENTS

❖ Midterm #2

TWO-DIMENSIONAL ARRAYS

- ❖ JavaScript does not support actual two-dimensional arrays.
- ❖ You can simulate two-dimensional arrays by using arrays of arrays.
- ❖ About two-dimensional arrays
 - ❖ You can pass them and return them from functions like one-dimensional arrays.
 - ❖ Any modifications in the function will be permanent.
 - ❖ You can have ragged arrays.
 - ❖ Nested loops (in particular for loops) are used with two-dimensional arrays.
- ❖ **Example:** TwoDimensionalArrays.html
- ❖ **Example:** Let's define a two-dimensional array of strings

BREAK STATEMENT

- ❖ break cause the innermost loop to exit immediately.
- ❖ It is only legal if it appears inside a loop or switch statement.
- ❖ **Example:** Break.html
- ❖ break can also be used with a label.

OBJECTS

- ❖ **Object** – entity that aggregate multiple values in a single unit.
- ❖ **Property** – Entity associated with an object that has a name and a value. They are like variables (you can store values in them and read values from them).
- ❖ **Object** (alternate definition) – unordered collection of properties, where each property has a name and a value.
- ❖ A property value can be any data type we have seen, including objects.

OBJECTS

- ❖ You use the . (period) operator to access an object's properties
 - ❖ **<OBJECT>.<PROPERTY>**
- ❖ A property value can be any data type we have seen including objects.
- ❖ You can create your own objects by either:

```
var myObj = {};  
var myOtherObj = new Object();
```
- ❖ You can create properties by assigning a value to it (we do not use var).

```
myObj.created = "Monday";
```
- ❖ You can update the property by assigning a new value.
- ❖ You can delete a property with the delete operator.

```
delete myObj.created;
```
- ❖ You can check for the existence of a property using the "in" operator.
- ❖ **Example:** ObjectEx.java