Intro to JavaScript
Class 4

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Switch Statement

- A switch statement is a way to test multiple conditions.

- It allows multiple conditions, and actions if those conditions are met.

- Negates the use of many nested if-else statements.

- Allows for a default option in case none of the conditions are met.

Switch Statement - Syntax

The _expression_ is the object that your conditionals will be checking against.
A _case_ statement is a boolean

```javascript
switch (a)
{
        case '+':
                $('#Result').val(y + x);
                break;
        case '-' :
            $('#Result').val(y - x);
                break;
        case '*':
                $('#Result').val(y * x);
                break;
        case '/':
            $('#Result').val(y / x);
                break;
        default:
                $('#Error').innerHTML('You just did something crazy, I can\'t help you');
                break;

}
```

Let's Revisit Class 1

How can we make our JavaScript Calculator Better?

What are JQuery plugins?

When certain web content is repeated often people create re-useable plugins to make them easier to create.

Some examples are calendars, autocomplete textboxes, and photo albums.

Where can I find different plugins?

- On the JQuery site

- Google

- Ask people about their favorites!

What is an API?

An application programming interface or API is a set of data structures, protocols, routines and tools for accessing a web-based software application.

It provides all the building blocks for developing programs with ease. An application programming interface may be language dependent or language independent. A language dependent API is available only in a particular programming language.

APIs run silently in the background. They are completely invisible to software users and web surfers. They're primary role is to provide a channel for applications to work with each other to make sure the user gets the required functionality and information

AJAX : Not just toilet cleaner

Ajax stands for _A_synchronous _J_ava_S_cript and _X_ML

It is used on the client side to communicate with servers in a way that wont slow people down or lock up their browsers.

How do I learn about an API?

Example: Facebook API

developers.facebook.com

Example: Meetup API

http://www.meetup.com/meetup_api/

Why do I need a developer key?

Most APIs require you to use a key to access their information.

This allows them to track who is asking for what, and how many times.

They can control how often certain things are accessed.

Asking an API for data

A popular way for JavaScript to access API data is through REST.

REST is a way to ask an API for information by using a URL.

REST Urls are created with the following syntax:

http://UrlOfSite.com/ApiLocation?
name=parameter&name=parameter

What does my request get me?

Asking an api for information via a REST url gives back different types of data:

- JSON
- Text
- XML
- RSS

It all depends on the API you are using.

Jargon Alert: JSON

Stands for JavaScript Object Notation

JSON is built on two structures:

- A collection of name/value pairs. In various languages, this is realized as an *object*, record, struct, dictionary, hash table, keyed list, or associative

JSON: Why do we use it?

- JSON is organized and easy to use.

- It is a universal way for interfaces to communicate across platforms

- It is faster than XML and RSS to load in a browser.

LAB: Work with Meetup API