



GYMNASIUM

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# JAVASCRIPT FOUNDATIONS

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*Lesson 5 Assignment*

*Server Communication*

# CORE CONCEPTS

1. A server is a computer connected to the Internet, running software that allows other computers to connect to it.
2. Sending data to a server is called a server request. When the server sends something back, that's a server response.
3. The simplest server request is to request a single file. But servers can do more than just serve files. They can connect to databases, run other software and connect to other computers, and return all kinds of dynamic data.
4. For JavaScript to make a server request to a server on a different domain, that server must allow such requests. If a request is denied, you will get an Access-Control-Allow-Origin error.
5. An Access-Control-Allow-Origin error can also mean that you are calling a server from your local file system. Again, this depends on what the server allows.
6. The jQuery "get" method is one of the easiest ways to accomplish server communication. jQuery also has a post method for sending POST type requests.
7. Server responses are usually in JSON or XML format. From a JavaScript viewpoint, JSON can be easily deserialized into a JavaScript object, and is much easier to work with.

## ASSIGNMENT

1. Quiz
2. Using the movie finder application, search without entering any text, or enter some random text that will not return a result. Check the data object that is returned. Rather than a Search array, you will see that it has a property called Error. Alter the code so that if you get an error, rather than a search result, you will display an alert with a message that makes sense.
3. Using the movie finder application, look at the data that comes back in the onDetailsResult function. There are many properties that are not used in our application. Pick one of those properties and add it to the details template. Don't worry too much about styling it for now, unless you want to.
4. Find another open web service, and research it to learn the service address, parameters and response type. Use jQuery's get method to make a call to that service and get back a result. A good place to look for web services is the Programmable Web site. <http://www.programmableweb.com/apis/directory> This lists and reviews many web services and provides information and links about each service. You can search for sites with a variety of filters for categories and data types, etc. Without too much effort you should be able to find an open service that interests you. You might even want to build out a full application.

# RESOURCES

- An important thing to remember when using third party APIs is that someone is providing you a service and you are using their resources. There are generally rules and terms that you agree to by using the service.
- Go to the Open Weather Map and Open Movie DataBase sites and read their terms of service to understand what you are allowed and not allowed to do. Do this also for any service you wind up using in the fourth assignment above.
- <http://openweathermap.org/api>
- <http://www.omdbapi.com>