One of the things which is very common in the programming world, is the use of Objects inside of Arrays and the use of Arrays inside of Objects. Let’s say we are building an app where we have a blog post, and each post has comments. Let’s see how we are going to represent that data.

It is going to be a complex structure, where our website will have an Array of posts. Each post will be its own object, and it will have properties like title, author and then maybe comments or votes or likes.

*var posts = [*

*{ // The first item of our Object*

*title: “Cats are mediocre”, // Property of the Object*

*author: “Colt” // Property of the Object*

*},*

*{*

*title: “Cats are actually awesome”,*

*author: “Cat Luvr”*

*}*

*]*

This makes an Array of posts; each post is its own Object. This is a kind of structure that we will see all the time, where we have a list and each item in that list is its own Object, whether it is an Array of comments, or an Array of posts, or an Array of friends where each one is its own Object. When we build web apps, we will see this all the time.

We can also embed an Array of comments in each individual post. The “comments” will be the key and the value will be an Array of values.

*var posts = [*

*{ // The first item of the Object*

*title: “Cats are mediocre”, // Property of the Object*

*author: “Colt”, // Property of the Object*

*comments: [“Awesome post”, “terrible post”]*

*},*

*{*

*title: “Cats are actually awesome”,*

*author: “Cat Luvr”,*

*comments: [“<3”, “Go to hell I hate you”]*

*}*

*]*

We now have our complete data structure. Let’s see what we get when we type in *posts*.

*posts*

* *[> Object, >Object]*

We have an Array with two items in it.

*posts.length*

* *2*

*posts*

* *[Object , Object]*

*author: “Colt”*

*comments: Array[2]*

*title: “Cats are mediocre”*

*\_\_proto\_\_:Object*

Now if we want to access out the title “Cats are mediocre” from the first Object in the Array, then we need to code as below.

*posts[0].title*

* *“Cats are mediocre”*

Thus, we get “Cats are mediocre” as our output.

If we want to access the second comment of the second Object. Then we will code as below.

*posts[1]*

* *Object {title: “Cats are actually awesome”, author: “Cat Luvr”, comments: Array[2]}*

*posts[1].comments*

* *[“<3”, “Go to hell I hate you”]*

*posts[1].comments[1]*

* *“Go to hell I hate you”*

This data structure is not too bad, but we will see some very complex data structure, where things are nested 5, 6 or 7 level deep. Eventually, we need to be able to go through and access one layer at a time like we did here.