# **Service**

A service is there to allow your app to organize, share code, variables and functions.

“Essentially, factories are functions that *return the object*, while services are *constructor functions of the object* which are instantiated with the new keyword.”

Quote from: <http://www.codelord.net/2015/04/28/angularjs-whats-the-difference-between-factory-and-service/>

Here is where some ambiguity comes in, services can appear to be similar to factories, as in it will provide a service to the app. Yes a service can be used similary to a factory for a http request, but generally a services purpose is to provide a ‘service’, or a way of sharing code around your app, a factory is a ‘provider’ i.e. getting data from database or server or whatever it may be.

A service should be used for commutation between controllers, as controllers cannot directly access each other.

Useful links:

[**https://ilikekillnerds.com/2014/11/angularjs-call-controller-another-controller/**](https://ilikekillnerds.com/2014/11/angularjs-call-controller-another-controller/)

[**https://daveceddia.com/sharing-data-between-controllers-best-practice-use-a-service/**](https://daveceddia.com/sharing-data-between-controllers-best-practice-use-a-service/)

[**https://docs.angularjs.org/guide/services**](https://docs.angularjs.org/guide/services)

**Creating a Service**

Start of by creating an angular app if you haven’t already:

**var app = angular.module("app", [**

**]);**

And create the service definition like so:

**app.service("serviceName", function() {**

**return {**

**}**

**});**

But how do I add a function or variable to the service. As the service function returns an object we must return our service object or the methods we wish to make public

**app.service("sharedService", function() {**

**value = 1;**

**getValue = function(){**

**return value;**

**}**

**return {**

**getValue: getValue**

**}**

**});**

**Similarly, we could return an object, and this will hold all the service functions and variables that we are allowing to be accessed. (just a different way in JavaScript to work this out)**

**app.service("sharedService", function() {**

**service = {};**

**value = 1; //basically making this a private variable – see getter method below**

**service. getValue = function(){**

**return value;**

**}**

**return service;**

**});**