**Bower** *"A package manager for the web"*

Websites are made of lots of things frameworks, libraries, assets, utilities... **Bower** manages all these things for you.

**Bower** works by fetching and installing packages from all over, taking care of hunting, finding, downloading, and saving the stuff you’re looking for. **Bower** keeps track of these packages in a manifest file, *bower.json*. How you use packages is up to you.

**Bower** is optimized for the front-end. **Bower** uses a flat dependency tree, requiring only one version for each package, reducing page load to a minimum.

**Bower and Visual Studio**

You may have heard that with ASP.NET 5 and Visual Studio 2015, Microsoft will be using Bower as a client-side package manager. That means that packages like jQuery, Bootstrap and Angular will no longer be referenced using NuGet. This might scare you initially, but I very strongly believe that this is a good thing.

Why is this a good thing?

NuGet is a great package manager for .NET libraries and the Microsoft eco-system. The web however, is much larger than Microsoft. The web development world has largely settled on Bower as the defacto package manager for client side libraries. We can’t expect a developer who creates a fancy new JavaScript library to publish their library as a NuGet package. That developer might have nothing to do with the Microsoft ecosystem and expecting them to learn it so we can use their package is just not reasonable. This brings us to the current state of client side packages on Nuget. Many packages are not available on Nuget. Equally as frustrating, some packages are available but are horribly out of date. This seems to be getting worse lately.

**Installing Bower**

Bower can be installed using **[npm](https://npmjs.org/)**, the Node package manager. If you don’t already have npm installed, head over to the [Node.js website](http://nodejs.org/) and download the relevant copy of Node.js for your system. The npm program is included with the install of Node.js.

Bower Requires NodeJs , npm And Git to be installed in your system.

1. **Installing Git :**
   1. Download Git for windows http://git-scm.com/downloads
   2. Run setup to install git.
2. **Installing NodeJs:**
   1. Download Last version of nodeJS <https://nodejs.org/download/>
   2. Run setup to install nodeJS.
3. **Installing Bower:**

Open command prompt and run command:

*npm install -g bower*

**Getting Started**

1- Create manifest file bower.json.

Bower includes a handy utility that will help you to create a bower.json file for your project. Executing the *bower init* command at the root of your project will launch an interactive program that will create the file for you.

2- Create bower configuration file .bowerrc :(Optional)

Installed packages will be placed in a bower\_components directory. This is created in the folder which the bower program was executed. You can change this destination using the configuration options in a .bowerrc file.

Create file .bowerrc in the root of your project.

Sample file:

*{"directory": "app/components/" }*

Note:

Directory: The path in which installed components should be saved. If not specified this defaults to bower\_components.

For more information about .bowerrc *http://bower.io/docs/config/*

3- Installing Packages:

To add a new Bower package to your project you use the install command. This should be passed the name of the package you wish to install.

*bower install <package>*

Example: *bower install jquery*

You can install a specific version of the package by adding a pound-sign (#) after the package name, followed by the version number.

*bower install <package>#<version>*

Example: *bower install jquery#1.1*

4- TFS ISSUE:

If you need to add, update or remove bower package, make sure to check out for edit bower.json file and the bower directory.

Reference:

<http://www.bower.io/>

<http://blogs.msdn.com/b/cdndevs/archive/2015/02/17/using-bower-with-visual-studio-2013.aspx>

<http://blog.teamtreehouse.com/getting-started-bower>