000.1 TypeScript - Visual Studio setup

TypeScript Kata List – Blog Page

TypeScript Kata List – Github Page

# Duration

[minutes]

# Brief

Setting up Visual Studio .NET for code katas.

# Instructions

* Install Visual Studio 2015 community edition. This is a free version of Visual Studio 2015.  
  <https://www.visualstudio.com/en-us/downloads/download-visual-studio-vs.aspx>
* Install Web Essentials for VS2015.  
  <https://visualstudiogallery.msdn.microsoft.com/ee6e6d8c-c837-41fb-886a-6b50ae2d06a2>
* Install Power Tools for VS2015.  
  <https://visualstudiogallery.msdn.microsoft.com/34ebc6a2-2777-421d-8914-e29c1dfa7f5d>
* TypeScript for Visual Studio 2015  
  <https://www.microsoft.com/en-us/download/details.aspx?id=48593>

# Kata

Visual Studio and related tools are now installed including Gulp, a task runner. We’ll start this kata series as a setup tutorial and make this the basis for future katas.

# Visual Studio solution

A basic Visual Studio 2015 solution is available at the following GitHub location.  
<https://github.com/robertdunaway/katas-typescript/tree/master/000.1%20TypeScript%20-%20Visual%20Studio%20setup>

This is the basic solution we will be using for TypeScript Katas. When you open the solution Visual Studio will download all the packages needed and then execute the default Gulp task.

# Gulp Tasks

Gulp tasks remove much of friction of development. There are thousands of tasks that can be performed by Gulp but for our purposes we are only using a few.

This Gulp implementation does the following:

clean-wwwroot – Deletes all files in the wwwroot directory.

copy-to-wwwroot – Copies all files from the “src” directory to the wwwroot directory.

minifyhtml – Minifies all HTML files in the wwwroot directory and creates maps to them.

tscompile – Transpiles all TypeScript files in the wwwroot directory to JavaScript then minifies and maps them.

tslint – TypeScript lint of all TypeScript files.

watch – Watches all files for changes and takes actions to keep things running smoothly.