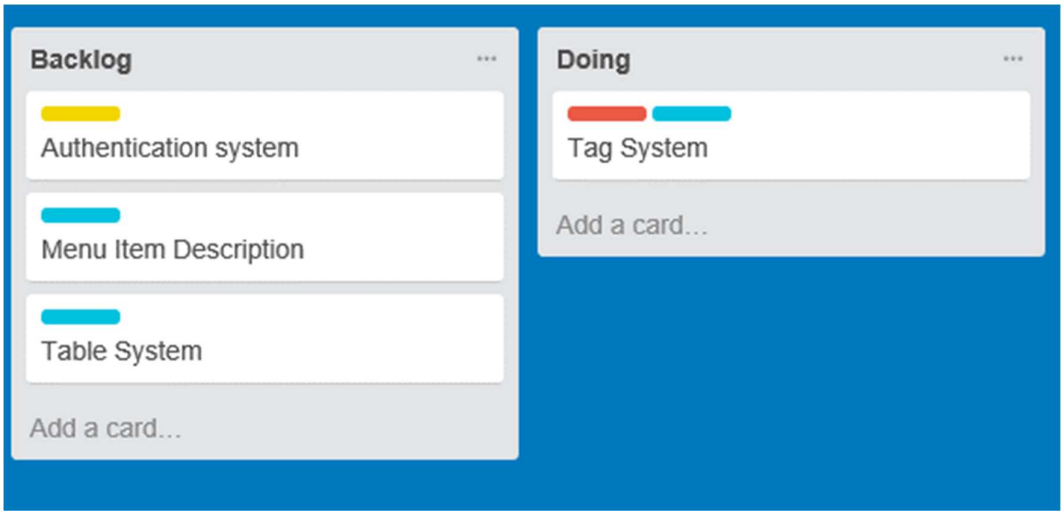
Test Driven Development – Tag System



Tag is moved from a backlog task to a doing task

```
using Microsoft.VisualStudio.TestTools.UnitTesting;
using RESTFull.Models;

namespace TESTFull
{
    [TestClass]
    public class TagTest
    {
        [TestMethod]
        [DataRow("Chicken","Caesar Salad")]
        [DataRow("Veggie", "Caesar Salad")]
        [DataRow("Chicken", "Fried Chicken")]
        public void TestNewMenuItem(string a, string b)
        {
            Tag T = new Tag() { TagName = a, MenuName = b};

            Assert.AreEqual(a, T.TagName);
            Assert.AreEqual(b, T.MenuName);

            //Required Attribute
            Assert.IsNotNull(T.TagName);
        }

        [TestMethod]
        public void TestMenuItemRequired()
        {
            Tag T = new Tag() { MenuName="SomeMenu"};

            Assert.IsNotNull(T.TagName);
        }
    }
}
```

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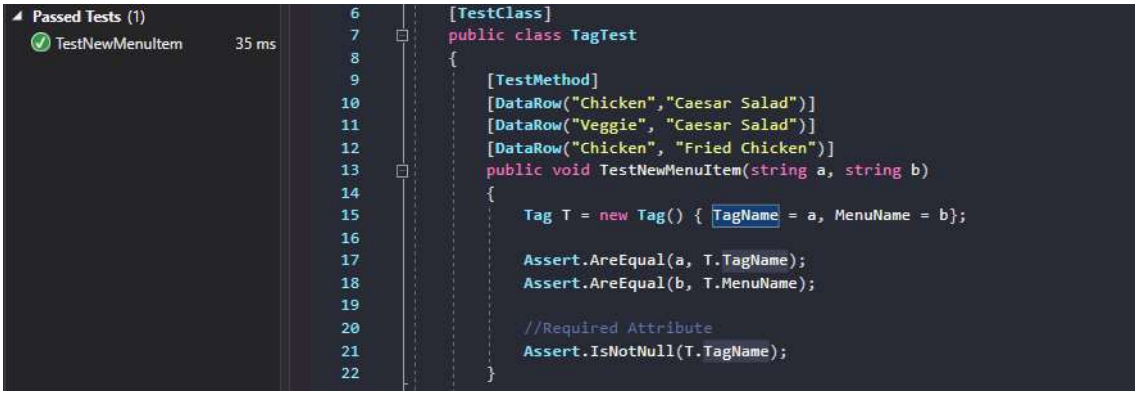
Kevin has already defined some unit tests to develop around, opening RESTFull I can implement the tag system to satisfy these tests:

```
namespace RESTFull.Models
{
    ///<summary>
    /// Tags are used to link food items with a certain "food based category"
    ///</summary>
    public class Tag
    {
        public string TagName { get; set; }
        public string MenuName { get; set; }
    }
}
```

Running the unit tests with this modified code we get this output:



The following test failed however, as the Tag name isn't necessarily a required field

```
        [TestMethod]
        public void TestMenuItemRequired()
        {
            Tag T = new Tag() { MenuName="SomeMenu"};

            Assert.IsNotNull(T.TagName);
        }
```

Due to the structure of a Model in MVC architecture, it isn't good to include a constructor for our model as it is supposed to be as slim as can be; to work around this, I will include "Required" attributes on the model as a means of ensuring the value won't be null in production;

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```
///<summary>
/// Tags are used to link food items with a certain "food based category"
///</summary>
public class Tag
{
    [Required]
    public string TagName { get; set; }
    public string MenuName { get; set; }
}
```

It is now implied that the Tag will not be valid without a name, meaning we shall change the test to pass;