**Design Patterns**

<http://msdn.microsoft.com/en-us/magazine/cc301852.aspx>

**SOLID Principles**

In computer programming, SOLID is a mnemonic acronym introduced by Michael Feathers for the "first five principles" identified by Robert C. Martin in the early 2000s that stands for five basic principles of object-oriented programming and design.

**Dependency Injection**

Dependency injection is a software design pattern that allows the removal of hard-coded dependencies and makes it possible to change them, whether at run-time or compile-time. There are multiple ways to inject dependencies and also there are multiple frameworks to support Dependency Injection. In this session focus will be on Unity Dependency Injection framework and how to use Unity to inject dependencies through controller in MVC web application and how to inject dependencies through View in WPF.

**OData**

**NHibernate**

**ASP.NET MVC 4.0**

**Application High Availability & Fault   Tolerance via Clustering**

How does one achieve high availability within an application? Does it simply require the addition of servers and duplicate applications? What application considerations need to be taken to enable proper clustering? These are a few questions that we aim to address with this Tech Talk.

**XAML and MVVM** (Using WPF)

|  |  |
| --- | --- |
|  | **MVVM is a specific implementation targeted at UI development platforms which support the event-driven programming in Windows Presentation Foundation (WPF) and Silverlight on the .NET platforms using XAML and .NET languages.** **XAML forms a user interface markup language to define UI elements, data binding, eventing, and other features.** |

**jQuery**

**jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.**

**Windows Azure**

**Windows Azure is a cloud computing platform and infrastructure, created by Microsoft, for building, deploying and managing applications and services through a global network of Microsoft-managed datacenters. It provides both platform as a service (PaaS) and infrastructure as a service (IaaS) services and supports many different programming languages, tools and frameworks, including both Microsoft-specific and third-party software and systems.**

**Visual Studio LightSwitch 2012**

**Entity Framework**

**Entity Framework (EF) is an object-relational mapper that enables .NET developers to work with relational data using domain-specific objects. It eliminates the need for most of the data-access code that developers usually need to write.**

**CQRS**

**odern web applications such as Facebook, Amazon, eBay are facing great challenges at the internet scale. The only possible way to handle this level of load is to scale out. However, in many situations just scaling out along does not fully solve the problem. CQRS (Command Query Responsibility Segregation) is a new software architecture pattern that emerges to help in situations like this.**

**SINGLE PAGE APPS (SPA)**

ASP.NET SPA helps you build applications that include significant client-side interactions using HTML 5, CSS 3 and JavaScript. It’s now easier than ever before to getting started writing highly interactive web applications.

**HTML 5**

“The new features of HTML5 including new markups and new JavaScript APIs which have enabled a rich web experience for both users and developers”

**Smart Client Applications**

(Click Once deployment, Microsoft Sync Framework, SQL Server Compact Edition)

**Lambda Expression & LINQ Queries**

 A lambda expression is an anonymous function that you can  use to create delegates or expression tree types. By using  lambda expressions, you can write local functions that can be passed as arguments or returned as the value of function calls. Lambda expressions are particularly helpful for writing LINQ query expressions

**BUILDING EXTENSIBLE APPLICATION USING**

**MANAGED EXTENSIBLE FRAMEWORK (MEF)**

The MEF simplifies the creation of extensible applications. MEF offers discovery and composition capabilities that you can leverage to load application extensions.

**ASP.NET Security**

**This session covers fundamental concepts of ASP.NET security that helps you develop secure ASP.NET applications, such as authentication, authorization, single sign on, impersonation and delegation, prevention of attacks, etc.**