# **Introduction to Service Oriented Architecture**

Some important characteristics of Service Oriented Architecture

* SOA services should be **independent** of other services. Altering a service should not affect the client calling the service.
* Services should be **self-contained**.
* Services should be able to **define** **themselves** (in the Web Service Description Languatge (WSDL))

ASP.Net Web services

and Windows Communication Foundation (WCF)

provide Microsoft's implementation of SOA.

## **Creating a Web Service in ASP.Net**

Web services use open standards and protocols like **HTTP**, **XML** and **SOAP**

## **Difference between WCF and Web service**

* In a web service we need to add the [WebService] attribute to the class.  
  In WCF we need to add the [ServiceContract] attribute to the class.
* Add the [WebMethod] attribute to the method in a web service.  
  Add the [OperationContract] attribute to the method in WCF.
* For serialization in a web service use the System.Xml.serialization namespace.  
  WCF uses the System.Runtime.Serialization namespace for serialization.
* We can host a web service in IIS only.  
  We can host WCF in multiple environments, like IIS, Windows Activation Service (WAS), self-hosting, Windows Service, Console hosting or Windows Forms hosting.