**AUTHENTICATION & AUTHORIZATION**

* **Authentication-**
* Authentication is a process in which user's identify is checked. To determine the identify of user,its credentials(username and password are used to identify.
* Authenticatrion is the process of determiming the authenticity of a user based on the user's credentials.
* Whenever a user logs on to an application,the user is first authenticated and then authorised.
* **Types of Authentication-**
* We have already discussed Authentication.
* In Web.Config you can set Authentication as any of **4 types** given here.

**[1]None(No Authentication)**

**[2]Forms Authentication**

**[3]Windows Authentication**

**[4]Passport Authentication**

* Authentication configuration is set as <authentication> element which inside <configuration> <system.web> element of Web.Config file.

**Syntax-**

<configuration>

<system.web>

<authentication mode="None | Forms | Windows | Passport">

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..............

</authentication>

</system.web>

</configuration>

* **Different types of Authentications are explained as follows:**

**[1] None(No Authentication]**

* This type of Authentication is set when you don't want to go for any type of Authentication process.
* If you specify "None" as Authentication "mode",ASP.NET will not go for any type of security for your web application.
* Generally Web Developers won't go for this type of Authentication.

**Example-**

<configuration>

<system.web>

<authentication mode="None"/>

</system.web>

</configuration>

**[2] Forms Authentication**

* This authentication is mostly used while developing web applications.
* Most importantly, this method is used while developing web sites containing any financial transactions.
* For example, Banking websites,online shopping websites,etc.
* In Forms Authentication, you are directly redirected to Login Page, even you have requested for some other page.
* Following steps are taken in Forms Authentication,

**Step-1:** User is directly redirected to Login page which is specified under <forms> element of Web.Config. In Login page user enters "Username" and "Password".

**Step-2:** When user clicks on "Login" / "Submit" button,validation is performed to ensure that user information is valid or not.

**Step-3 :** After user is authenticated through Web.Config or Database or Windows Credentials,user is redirected to previously requested page or to a specific page,depending on the coding of Login page.

**[3]Windows Authentication**

* Windows Authentication mode is the default Authentication mode.
* If you set Authentication mode to "WIndows", a user is authenticated on the basic of his/her Windows account.
* When you configure your ASP.NET application as windows authentication it will use local windows user groups to do authentication and authorization for your ASP.NET pages.
* When you go for "Windows Authentication",it takes settings directly from IIS.
* Windows Authentication in IIS can be set as per any one of the following.

[1] Basic Authentication

[2] Digest Authentication

[3] Integrated Authentication

**[4] Passport Authentication**

* It is directly concerned with Microsoft Service.
* This method uses centralized authentication service directly through Microsoft's Passport Service developed by Microsoft.
* This website is authenticates user and returns a token.
* If token is "positive" you are allowed to go further.
* "negative" token does not allow you to go ahead.
* **Authorization-**
* User is already Authenticated before authorization.
* But next question is, All user's don't have access to all the resources.
* So, after Authentication,Authorization is checked to see whether user is allowed to use particular web page or not.
* Authorization can be one of the following:

**[1] URL Authorization**

* In this we authorize you to go for particular URL.
* This authorization method is useful for spitting Administrators and Normal users.
* Where all Administrative level Web Pages are stored in a different folder.
* Then only particular URL is authorized for Administrative level users.
* So,only they can access certain group of web pages for Web Site Administration.

**[2] File Authorization**

* File Authorization is almost similar way to authorize you for particular file.
* This method is also used to split Admin pages and normal pages.
* If you have limited no. of files to authorize, you can use this method.
* But if no. of files are too many to authorize,better way would be URL Authorization.

**[3]Customize Authorization**

* You can also customize your Authentication .
* We have already discussed that there are many ways to Authorize user for using particular resorce(files,directories,etc.).