* State Management in Asp.net :-

→ State represents the currently available data.

→ Currently available data with the control is known as control state.

→ Currently available data with the web page is known as page state.

→ Currently available data with user is known as user state.

* Stateless Nature :-

→ In Web Applications the control state of page state of user state will not be maintained at server side of at client side. This is known as "stateless Nature".

→ This is because Web Applications will work with Http protocol and Http protocol is "stateless Protocol."

* Statefull Nature :-

→ Keeping the control state of page state of user state between client request to server and server response to client is known as "statefull Nature"

→ Maintaining the state in Asp.net is most Important to keep the data of the control,

Page and User available for the User throughout the User Interaction to the website.

→ To Maintain the state between request and responses Microsoft is providing following state Management techniques.

1. Hidden fields
2. Control state
3. View state
4. Query string
5. Cookies

→ Client side Techniques

6. Session
7. Application
8. Cache

→ Server side Techniques

1. Hidden fields :-

→ Hidden fields are used to maintain the required data in the form of variables of HTML fields.

→ Once a hidden field is created it will travel from server response to client and client request to server.

→ Originally hidden fields are HTML Techniques and used with input type like:

* <input Type ="Hidden" Name="a" Value ="10"/>
* <input Type ="Hidden" Name="b" Value ="20.5"/>
* <input Type ="Hidden" Name="uName" Value="Raju"/>

* Advantages of hidden fields:-

→ hidden fields are best suited to used in following scenarios.

1. Where we want to maintain state for small amount of data.
2. Where security of the data is not primary concern.

* Drawbacks of Hidden fields:-

1. → as hidden fields store the data in plane Text format. it is not suitable for storing sensitive data.

2. ~~Size~~ Size limitations:-

→ Hidden fields can be used to store small amount of data. and when we want to store large amount of data hidden fields are not suitable.

3. Hidden fields will increase network traffic

→ if We create more hidden fields always hidden fields travel from server response to client and client request to server this will increase the network traffic and there are changes of applications become low.

* Example with hidden fields:-

Value of a [ ]

Value of b [ ]

Value of UserName [ ]

[Submit]

→ Create a new webpage with the name Sample1.aspx. design the page.

→ Go to source and write the following code to create hidden fields.

* <input Type="hidden" name="a" Value="10" runat="Server" />
* <input Type="hidden" name="b" Value="20.5" runat="Server" />
* <input Type="hidden" name="Uname" Value="Raju" runat="Server" />

→ Go to .cs file and Write the following code for submit button click event.

```
Protected void btnSubmit_Click(object sender, EventArgs e)
{
    txtSample1.Text = a.Value;
    txtSample2.Text = b.Value;
    txtSample3.Text = UName.Value;
}
```

* Working With Query String in Asp.net :-

→ A query string is key and value pair which is appended At the end of URL Address.

→ Query string is used to transfer the required data from one page to a other page.

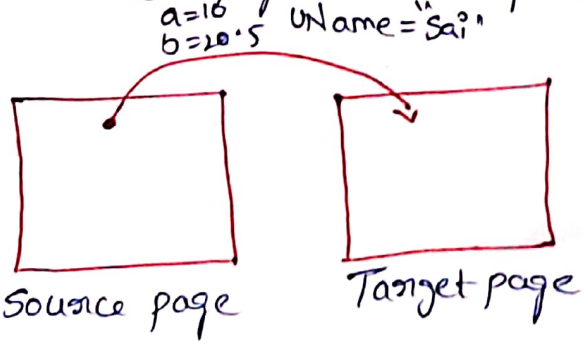
→ query string will store the data in plain Text format.

→ Query string is usually visible in address bar of the browser.

→ With in the query string each key and value Pair data is seperated using "&" (Ampherscent).

→ Maximum characters that are allowed in Query string are 2084 including URL Address.

→ if we would like to transfer the values from source page to target page like :



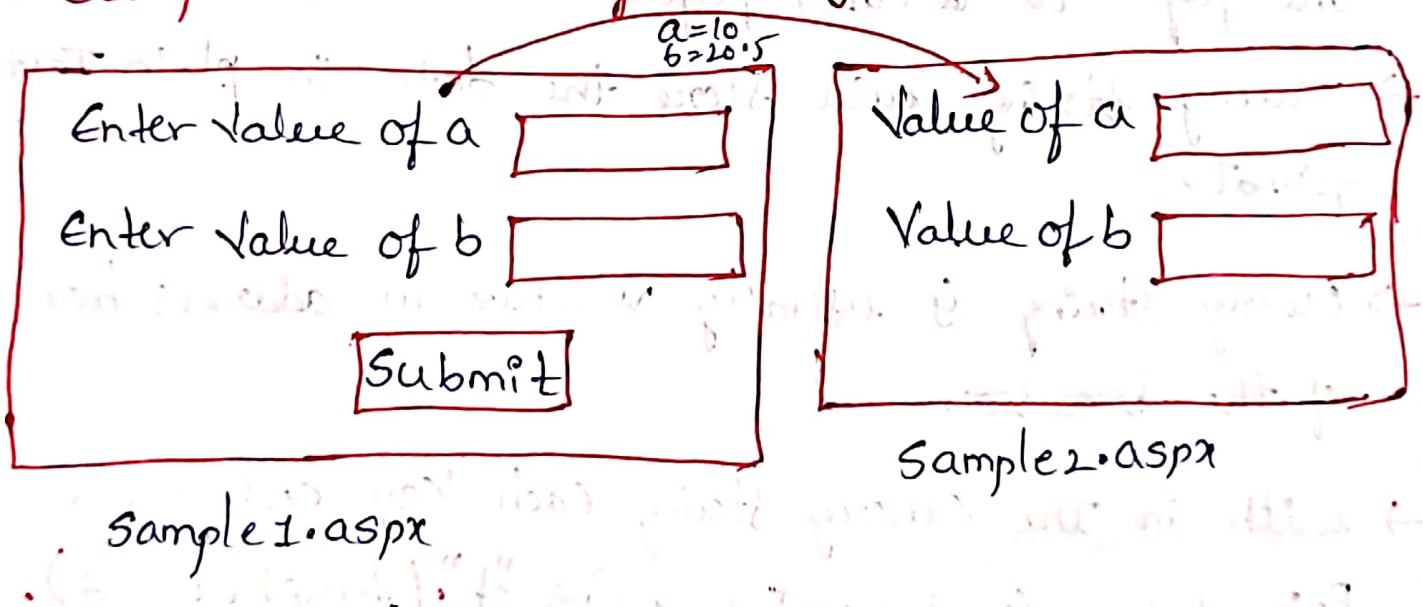
→ In Source page We Will Write the following code.

* Response.Redirect("Target page URL?a=10&b=20.5&uName=sai");

→ In Target page to access this Query string data We use following code.

* Request.QueryString["a"] → 10
* Request.QueryString["b"] → 20.5
* Request.QueryString["uName"] → sai

→ Example With Query String:-



Sample1.aspx

Sample2.aspx