**Sewbie Tracking Service**

**Functional Requirement:**

User’s activities should be tracked and stored in the data base.

Activities include mouse click, mouse over etc.

For this requirement a tracking service should be developed.

AJAX calls should be used to handle the service request.

Performance is important here.

The tracking service should not affect other functionalities of the sewbie.

The tracking service should be created with one way communication.

UI thread is not held up during communication with the service should be ensured.

**Functional Approach**

1. We will use JQuery events to process the user activities

This will minimize the changes required and we will not modify the server side

Code and markup of controls in the page

1. We will use one way decorator in the operation contract to create one way

Communication between the client code and the service.

1. For storing user activities table namely **UserActivities** will becreatedin the database

Fields in **UserActivities** includes the following

1. UserID – int
2. Page – varchar (Page Name)
3. Control – varchar (Control Id)
4. Event - varchar (control Events)
5. Activity\_Detail - varchar
6. Activity\_Level – varchar (normal,special (Ex Payment Mode click,Shopping Cart checkout etc) )
7. Activitiy\_DateTime – DateTime (Db - Date Time)

**Technical Approach :**

1. Tracking service method declaration

[OperationContract(IsOneWay=true)]

[WebInvoke(Method = "POST", BodyStyle = WebMessageBodyStyle.Wrapped,

RequestFormat = WebMessageFormat.Json, ResponseFormat = ebMessageFormat.Json)]

Void StoreUserActivity(UserActiviy useractivity);

1. IQuuery AJAX Call

**var** searchServiceUrl **=** <http://localhost/TrackingService.svc>";

**function** StoreUserActivity(e) {

**var** typeObj **=** GetUserActivityData();

**var** funcUrl **=** specServiceUrl **+** "/ StoreUserActivity";

**var** dataToSend **=** { 'UserActiviy'**:** typeObj };

     $.ajax({

        type**:** "POST",

        url**:** funcUrl,

        data**:** JSON.stringify(dataToSend),

        contentType**:** "application/json; charset=utf-8",

        dataType**:** "json"

     });

}

function GetUserActivityData () {;

var obj = new Object();

obj.UerID="1";

obj.Page = "Sewbie Product Display";

obj.Control = "BtnNext";

obj.Event = "Mouse Clcik";

obj.Activity\_Detail = "User clicked the next page button";

obj. Activity\_Level = ="Normal";

obj.DateTime = ="11/13/2013 10:30:01 AM";

return obj;

}