

Übung 2 – Mensch-Machine-Interaktion 2

Exercise 2 (optional): Tracking Interactions in Web Forms

To evaluate the usability of a complex web form it can be of interest to collect information about how people fill in the forms. In particular it is interesting:

- in what order people fill in forms
- how long they spend on a particular input field
- if they change a field they have filled before
- if they copy & paste information

Task. Extend a form – without changing the appearance – and add the capability to track user interaction. It should be tracked when a form element is changed, when the mouse is placed on a particular element, and when text is selected in a text field. The information should be stored and transmitted with the submission of the form data.

This technique can be used to do a usability test without additional infrastructure at the client side. It is however important to inform the users / participants that they are tracked. A similar approach may be used to monitor regular usage and provide help depending on the users actions. Similarly here it is important that the user has knowledge about the data collection.

Samples of forms:

- http://www.google.com/advanced_search?hl=en
- <http://www.alltheweb.com/advanced?advanced=1&>

Some information on JavaScript Events:

- http://www.uni-regensburg.de/EDV/kurs_info/brf09510/kurs_info/formoverview.html

A simple example is given on the next page.

Basic Example.

```
<html>
<head>

<script Language="JavaScript">
var liste ="";
function copyandsubmit(){

    document.form2.textX.value = liste;
    return true;
}
</script>
</head>

<body>

<h1>Example: Interaction tracking on a web form with JavaScript</h1>

<a href="#" onMouseOver="window.status='MouseText!!!'; liste=liste+' T0';
document.form2.resultArea.value=liste; return true"
>Hi There...</a>

<HR>

<a href="#" onMouseOver="window.status='MouseText!!!'; liste=liste+' T1';
document.form2.resultArea.value=liste; return true"
>just some text...</a>

<form name="form2"
action="mailto:albrecht.schmidt@ifi.lmu.de?Subject=FormEvaluation" method=post
enctype="text/plain" onsubmit="return copyandsubmit();">

<input type="textarea" name="F1" size=20 value="Hello?"
onfocus="window.status='Focus 1!!!';
    var tDate = new Date(); liste=liste+' F1@'+ tDate.getHours() + ':' +
tDate.getMinutes() + ':' + tDate.getSeconds();
    document.form2.resultArea.value=liste; return true"
onchange="window.status='Change 1!!!';
    var tDate = new Date(); liste=liste+' C1@'+ tDate.getHours() + ':' +
tDate.getMinutes() + ':' + tDate.getSeconds();
    document.form2.resultArea.value=liste; return true"
onselect="window.status='Select 1!!!';
    var tDate = new Date(); liste=liste+' S1@'+ tDate.getHours() + ':' +
tDate.getMinutes() + ':' + tDate.getSeconds();
    document.form2.resultArea.value=liste; return true"
onmouseover="window.status='Mouse 1!!!';
    var tDate = new Date(); liste=liste+' M1@'+ tDate.getHours() + ':' +
tDate.getMinutes() + ':' + tDate.getSeconds();
    document.form2.resultArea.value=liste; return true"
>

<BR>

<input type="hidden" name="textX" value="not set!">

<br>

<textarea cols="50" name="resultArea" rows="10" WRAP="SOFT">
empty
</textarea>

<br>
```