

HACKING SCORM TO GATHER SOCIAL METRICS FOR ONLINE RESOURCES

JavaScript Samples

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Sample files available at: <http://www.threesisters.net/gary/hackingscorm>

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OVERVIEW

1. Identify metrics to track
2. Identify SCORM data model elements that can be used to track the metrics
3. Identify API methods required to record metrics
4. Create or modify the JavaScript files needed to interact with the SCORM API
5. Create a mechanism to launch resources using the API

RESOURCES & REFERENCES

Sample files from ADL:

<http://www.adlnet.gov/Technologies/scorm/SCORMSDocuments/2004%204th%20Edition/Content%20Examples.aspx>

The JavaScript Anthology by James Edwards & Cameron Adams

<http://www.sitepoint.com/books/jsant1/>

Rustici Software

<http://www.scorm.com/scorm-explained/>

Ostyn Consulting

<http://www.ostyn.com/>

<http://www.ostyn.com/resscormtech.htm#scripting>

devlishgenius

Flash and Javascript Overlay

<http://devlishgenius.blogspot.com/2008/01/this-article-is-based-upon-project-we.html>

RESOURCE LIST PAGE

```
/* contains functions used to interact with the API and launch the tutorial page */  
  
var IID = API_1484_11.getLearnerIDFromPortal();  
var courseWindow=0;  
var win;  
  
function popUpWindow(URLStr, c, wd, ht, overflow){  
    wd = parseFloat(wd) + 80;  
    ht = parseFloat(ht)+100;  
    // close any course windows that are open  
    if(courseWindow){  
        if(!courseWindow.closed) courseWindow.close();  
    }  
    //check that API is still available  
    if (API_1484_11.sessionState == -2 ) {  
        API_1484_11.sessionState = API_1484_11.SessionState.RUNNING ;  
        var learnerID = API_1484_11.getLearnerIDFromCookie() ;  
        if ( learnerID != -1 ) {  
            API_1484_11.transState = API_1484_11.TransState.ACTIVE ;  
            API_1484_11.loadLearnerData( learnerID ) ;  
        } else {  
            API_1484_11.transState = API_1484_11.TransState.ACTIVE ;  
            learnerID = API_1484_11.getLearnerIDFromPortal() ;  
        }  
    }  
    //1. set course ID via API  
    API_1484_11.setCourseId(c);  
    //2. build course link  
    var cl = "http://somePathToYourStuff/" + URLStr + "/player.html";  
    if (overflow == " || !/^(scroll|resize|both)$/.test(overflow)){  
        overflow = 'both';  
    }  
    win = window.open(cl, "", 'width=' + wd + ',height=' + ht  
    + ',scrollbars=' + (/^(scroll|both)$/.test(overflow) ? 'yes' : 'no')  
    + ',resizable=' + (/^(resize|both)$/.test(overflow) ? 'yes' : 'no')  
    + ',status=no,toolbar=no,menubar=no,location=no'  
    );  
}
```

```

function popUpWindowNT(URLStr, c, wd, ht){
    //use for resources that aren't tracked
    wd = parseFloat(wd) + 80;
    ht = parseFloat(ht)+100;
    // close any course windows that are open
    if(courseWindow){
        if(!courseWindow.closed) courseWindow.close();
    }
    var cl = "http:// somePathToYourStuff /" + URLStr + "/player.html";

    win = open(cl, 'courseWindow',
'toolbar=no,location=no,directories=no,status=no,menubar=no,scrollbars=no,resizable=no,copy
history=yes,width='+wd+',height='+ht);
    attachEventListener(window, "unload", engageUnload, true);
//adds unload listener for when window is closed
}

```

SAVING RATINGS

Call the functions to store ratings:

```

<a href="javascript: setRating('use', '1', 'wasUseful')" id="useful1">Yes</a> | <a
href="javascript: setRating('use', '-1' )" id="useful0">No</a>

```

JAVASCRIPT FUNCTIONS

```

function getSavedRatings() {
    vUse = parseFloat(SCORM2004_CallGetValue('cmi.score.scaled'));
    setUsefulColor(vUse);
    vRec = parseFloat(SCORM2004_CallGetValue('cmi.score.min'));
    setRecommendColor(vRec);
    vRat = parseFloat(SCORM2004_CallGetValue('cmi.score.raw'));
    setNumRateColor(vRat);
    if (vUse !=0 || vRec !=0 || vRat!=0) { ratingssubmit = true;};
    /* temp commenting to avoid errors
        ratingssubmit = false;*/
}

```

```

// probably could use a single function and looping though the child nodes.
function setUsefulColor(cmiVal){
    if(cmiVal=="1") {returnObjById("useful1").style.color="#006600";}
    if(cmiVal=="-1") {returnObjById("useful0").style.color="#006600";}
}
function setRecommendColor (cmiVal) {
    if(cmiVal=="1") {returnObjById("recommend1").style.color="#006600";}
    if(cmiVal=="2") {returnObjById("recommend0").style.color="#006600";}
}

function setNumRateColor (cmiVal) {
    if(cmiVal=="1") {returnObjById("numRate1").style.color="#006600";}
    if(cmiVal=="2") {returnObjById("numRate2").style.color="#006600";}
    if(cmiVal=="3") {returnObjById("numRate3").style.color="#006600";}
    if(cmiVal=="4") {returnObjById("numRate4").style.color="#006600";}
    if(cmiVal=="5") {returnObjById("numRate5").style.color="#006600";}
}

function setRating(cmiElement, cmiValue) {
    switch ( cmiElement ) {
        case "use":
            returnObjById("useful1").style.color="#333333";
            returnObjById("useful0").style.color="#333333";
            blnUse = SCORM2004_CallSetValue('cmi.score.scaled', cmiValue )
            if ( blnUse == true) {
                setUsefulColor(cmiValue); // sets the color of the link
            } else {
                alert("can't save your rating at this time");
            }
            break;
        case "rate":
            returnObjById("numRate1").style.color="#333333";
            returnObjById("numRate2").style.color="#333333";
            returnObjById("numRate3").style.color="#333333";
            returnObjById("numRate4").style.color="#333333";
            returnObjById("numRate5").style.color="#333333";
            if (SCORM2004_CallSetValue('cmi.score.raw', parseFloat(cmiValue) ) == true) {
                setNumRateColor(cmiValue);
            } else {
                alert("can't save your rating at this time ");
            }
            break;
        case "recommend":

```

```
returnObjById("recommend1").style.color="#333333";
returnObjById("recommend0").style.color="#333333";
if (SCORM2004_CallSetValue('cmi.score.min', parseFloat(cmiValue) ) == true) {
    setRecommendColor(cmiValue);
} else {
    alert("can't save your rating at this time ");
}
break;
}
}
function returnObjById( id ){
    if (document.getElementById)
        var returnVar = document.getElementById(id);
    else if (document.all)
        var returnVar = document.all[id];
    else if (document.layers)
        var returnVar = document.layers[id];
    else
        var returnVar = null;
    return returnVar;
}
```