Service Log User Guide - Students

Web application to manage student volunteer hours

9/6/2012
Murray State University
Dr. Victor Raj, Computer Science and Information Systems
Version: 1.0 (Student)

http://web2.murraystate.edu/servicelog

Arthur J. Bauernfeind College of Business

MURRAY STATE UNIVERSITY

Table of Contents

Introduction/Background 2
User Guide 3
Authentication procedure 3
Student functions 5
System error messages 5
Log your time 6
Logout 7

Introduction/Background

Murray State University awards scholarships that include a "work" requirement. Most of the awardees are associated with offices across campus where they are assigned routine office work. Others are used as tutors for lower level classes.

The students are required to work 5 hours a week. The scholarship office is tasked with documenting and monitoring the volunteer hours for more than 350 such students. Till now this was done manually and it was not unusual to see strips of student logs being manually entered into spreadsheets for spotting problem cases.

This web application grew out of a need to manage the capture, storage and dissemination of all these logs. At the request of the Director of the Scholarship office, Ms. Cruce, this became a capstone project (CIS420) for one of our students, Gerry Muuka Jr (CIS 2010).

All CIS students are required to complete a capstone project before they graduate to show they can handle all elements of designing a small software application. This includes all the steps from requirements gathering, system and database design to implementation and documentation. Gerry developed the project as a "proof of concept" and demonstrated it to the Director of the Scholarship Office in Fall 2009.

Since then the project went into the back burner as the University was looking at other third-party tools to manage this functionality. At some point it was determined that it was too expensive to go that route and the scholarship office was back to "square one". This time there were additional constraints placed by MSU's "core team" that essentially stated that software developed in-house will not be a high-priority; neither will it be supported with the current limited staff. In addition, we were encouraged to move the software off campus and use a secure authentication scheme to ensure that all credentials are entered securely.

This led to a complete rewrite of the original app using the openID protocol that is subscribed to by Google. This aspect of the redesign was assigned to a scholarship awardee – Josh Clifford (CSC, 2012) – who used his 5 hours a week volunteer hours to thrash out the issues related to this procedure. So in some ways this is a system (partially) built by a scholarship awardee for other scholarship awardees. The bulk of the system was developed by Dr. Victor Raj, Chair of the Computer Science and Information Systems department primarily to learn and exploit the power of scripting languages like Coldfusion to quickly crank out web applications.

The software was developed using Coldfusion, SQL Server and Eclipse IDE. Version control was managed by SVN. Those interested in developing similar projects are encouraged to contact Dr. Raj at vraj@murraystate.edu

User Guide

This guide will show the user how to use the Service Log Web Application. The system has three main types of users (“role”): Admin, Approver and Student. Depending on the assigned role, authorized users can login with their Murray State University credentials and (1) record their volunteer hours, (2) approve completed hours (3) add work locations (4) change role for a user (5) assign students/users to work locations and (6) designate approvers.

The system uses secure authentication service provided by Google’s “OpenID” model. All Murray State University users – those with MSU authentication credentials – can access the system. However, in order to actually use the system they need to be authorized by the administrator. This is a designated employee of the Scholarship Office.

This manual provides most of the images the student will see while using the system. The rest of the manual is laid out as follows:

- Authentication procedure
- Log hours worked
- Logout (close browser too)

Authentication procedure

Students cannot use this system unless they have a valid Murray State email ID.

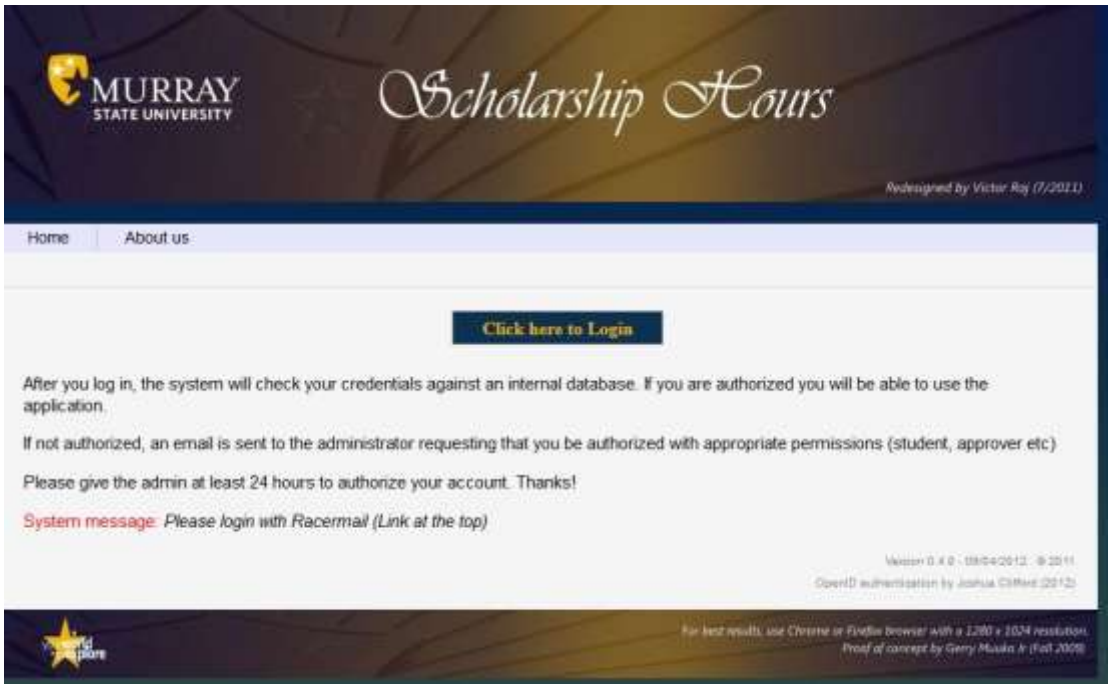


Figure 1: Initial "Home" screen requesting credentials

Once a user clicks on the "Click here to Login" link they will be taken to a secure area where they can provide their RacerMail credentials (Fig 2). If the user is already logged in with another gmail account, the system will require that account to be closed (logged out) before moving forward.

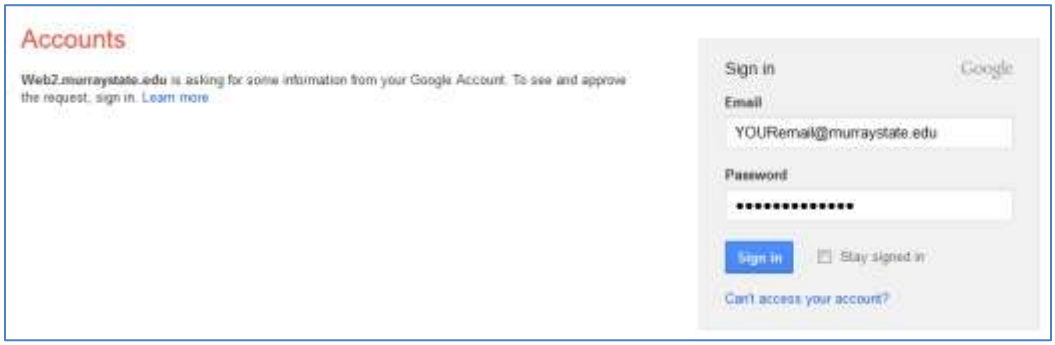


Figure 2: Secure site for capturing your RACERMAIL credentials

If the user is already logged in, the following screen will appear. Pick "Allow" to move forward.

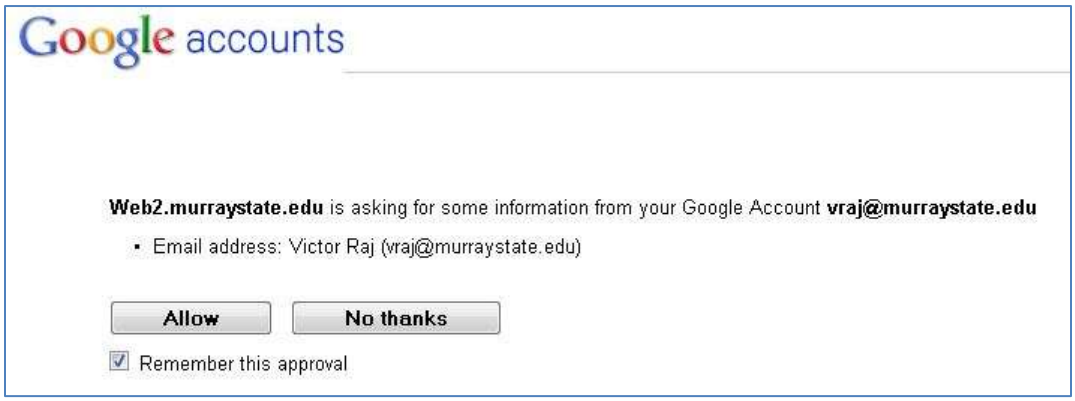
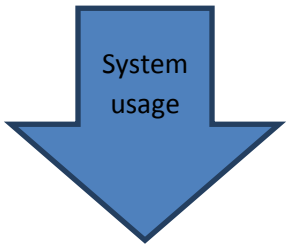


Figure 3: People already logged in will be asked if they would allow Google to share the credentials.

Once logged in, the actual home screen will differ based on the authenticated user's role within this application.



Student functions

After successful authentication with a valid MSU email ID, students will be taken to the home screen which looks like the one shown below (Fig 4). If the student is not yet assigned to a place of work the following screen with the "*No data...*" message will be displayed.

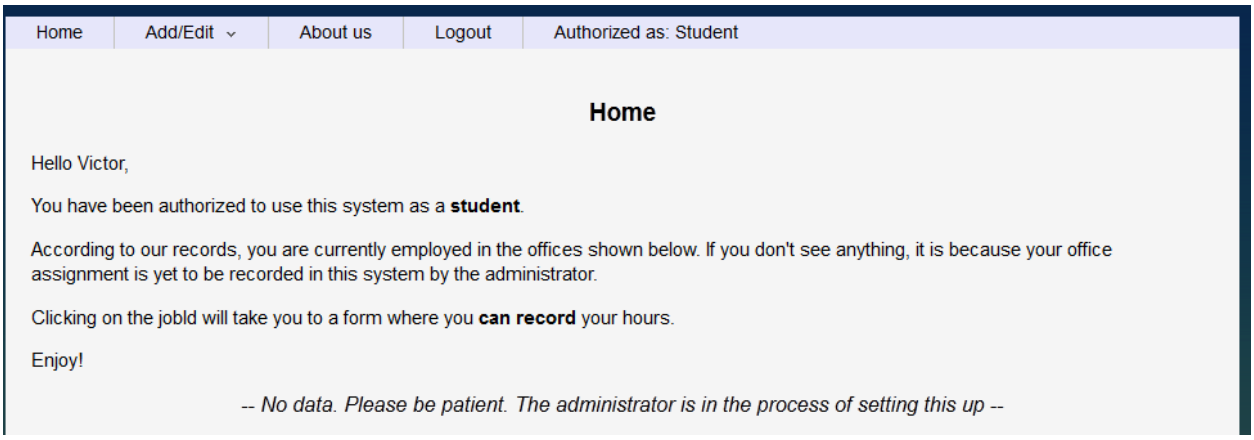


Figure 4: Home screen for STUDENT

All features are activated by the options in the menu-bar. An inverted carat (^) indicates that there are additional options under that option (see "Add/Edit" in Fig 4). By holding the mouse on that item the sub-menu will pop-out. This takes a little practice. Click only after the desired feature appears.

System error messages

The system was designed for ease-of use. Error messages or system feedback will be provided at the bottom of the screen. It will also contain useful information for the system admin in case there is an error. Admins will want to know what that message was in case any issues crop up.

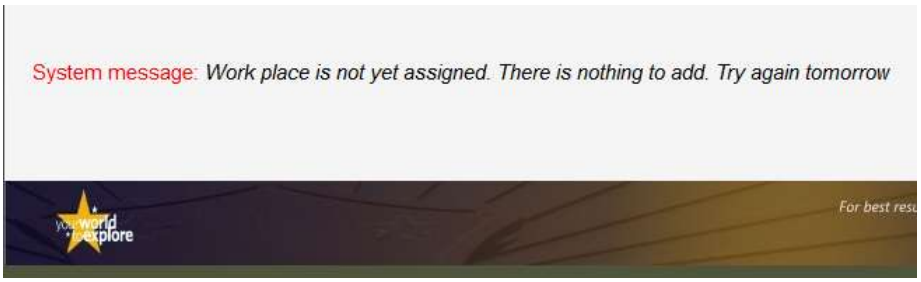


Figure 5: Error messages are always at the bottom.

Log your time

If the student is assigned to a place of work, the following form (Fig 6) is displayed on the HOME page after logging in. Clicking on the job ID (underlined) will allow the student to enter the time worked at that location (Fig 7)

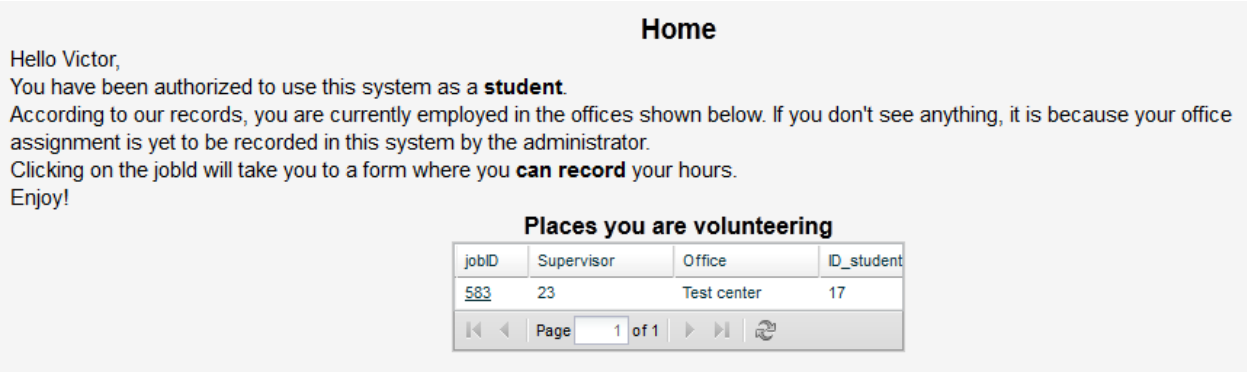


Figure 6: Home screen showing assigned place of work.

Fig 7 shows the form used to enter the hours worked. User can record hours volunteered at multiple locations by choosing the appropriate location in the "combo box". The example in Fig 7 shows only one location ("Test Center") in the "Job Location" combo box.

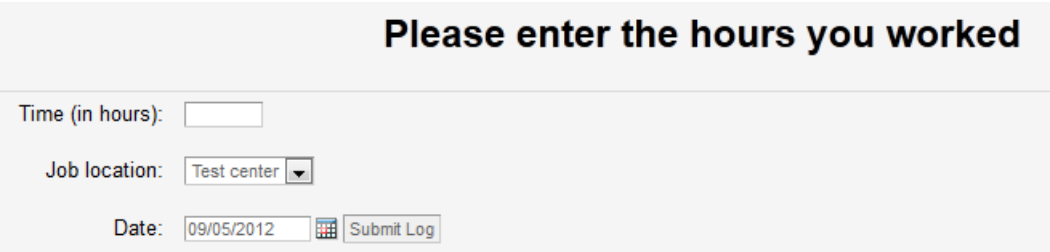


Figure 7: Log time volunteered here.

Clicking on the calendar icon pops the calendar for easy recording of dates.

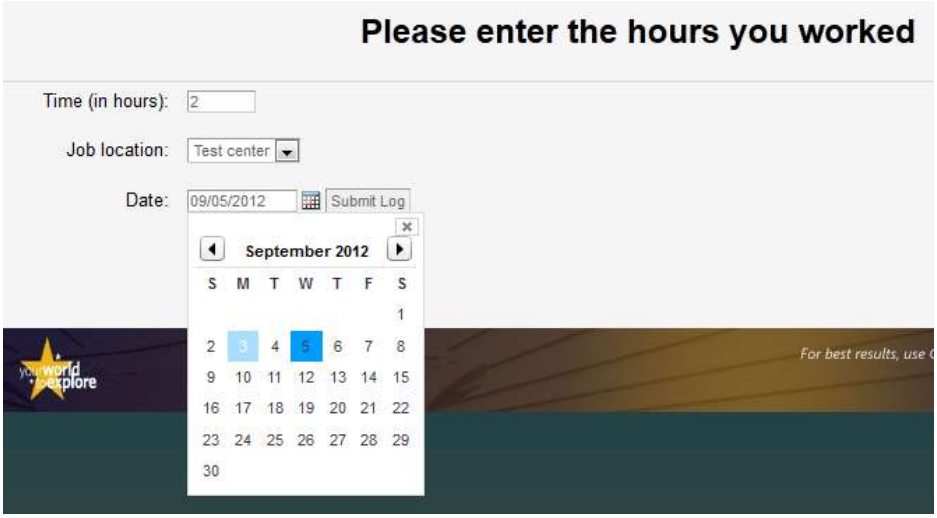


Figure 8: Clicking on the calendar icon beside the SUBMIT LOG button will display a handy calendar.

After pressing SUBMIT, a summary of hours volunteered for the week as well as a suitable message (success/failure) is displayed.

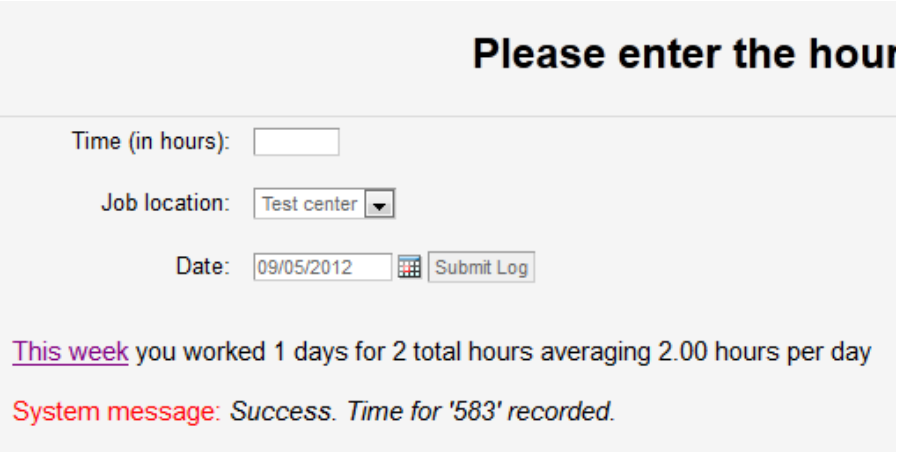


Figure 9: Press "submit log" to log your time.

Logout

Pressing the LOGOUT menu item will take the user to the default page. It is a good practice to close the browser too.

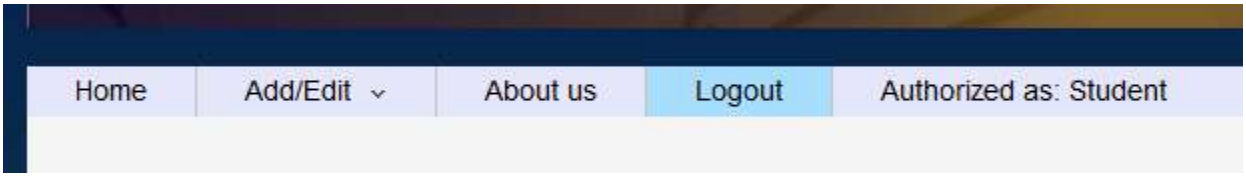


Figure 10: Press LOGOUT when done. Close browser too.