Service Log User Guide - Approvers

Web application to manage student volunteer hours

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Computer Science and Information Systems
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Version 1.0

http://web2.murraystate.edu/servicelog

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Introduction

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 five hours a week. The scholarship office is tasked with documenting and monitoring the volunteer hours for more than 350 such students. Till this system was developed, 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 the Computer Information Sstudents, 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 - Approvers

The approver is required to periodically – usually on a bi-weekly basis – verify and approve the hours volunteered by the scholarship awardees. There is no paper involved. Once the times have been approved, the scholarship office will have the information they need. They can flag those students who have not met their obligations from the information approvers provide.

This guide will show the user/approver 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 a series of images the user will see while using the system. The rest of the manual is laid out as follows:

- Authentication procedure
- Features for approver
- Logout procedure

Authentication procedure

All visitors to the site are presented with the default login page shown in Figure 1.

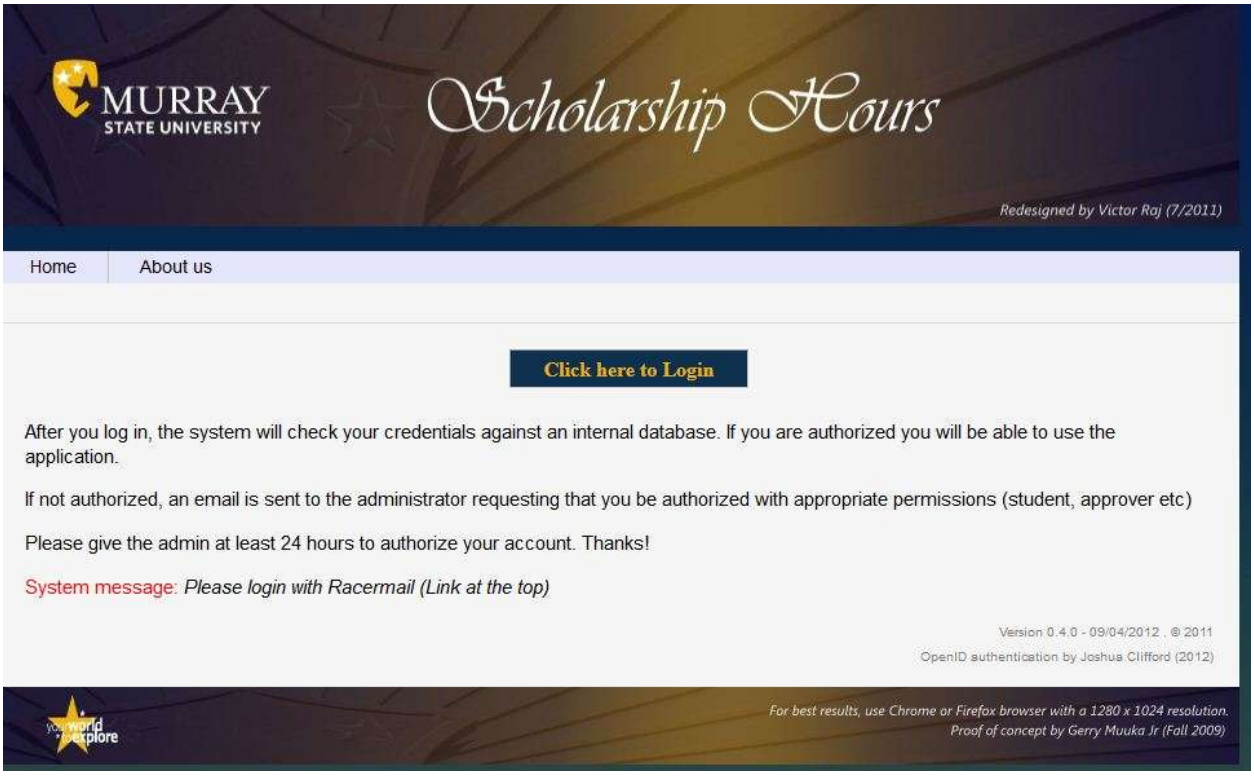


Figure 1: Initial "Home" screen requesting credentials.

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). Failure to provide a valid MSU email id will prevent the user from proceeding any further. If the user is already logged in to another gmail account, the system will request the user to logout of that account and login with the MSU email.

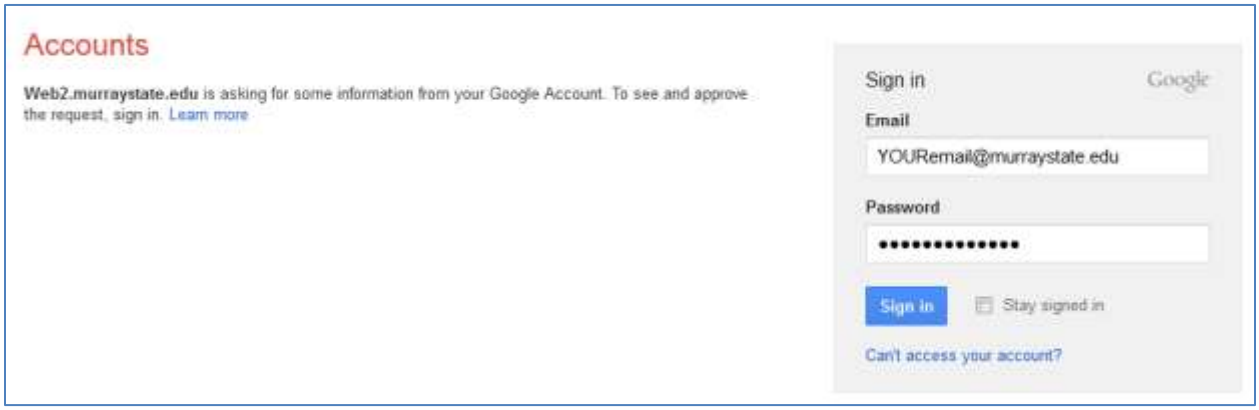


Figure 2: Secure site for capturing your RACERMAIL credentials

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

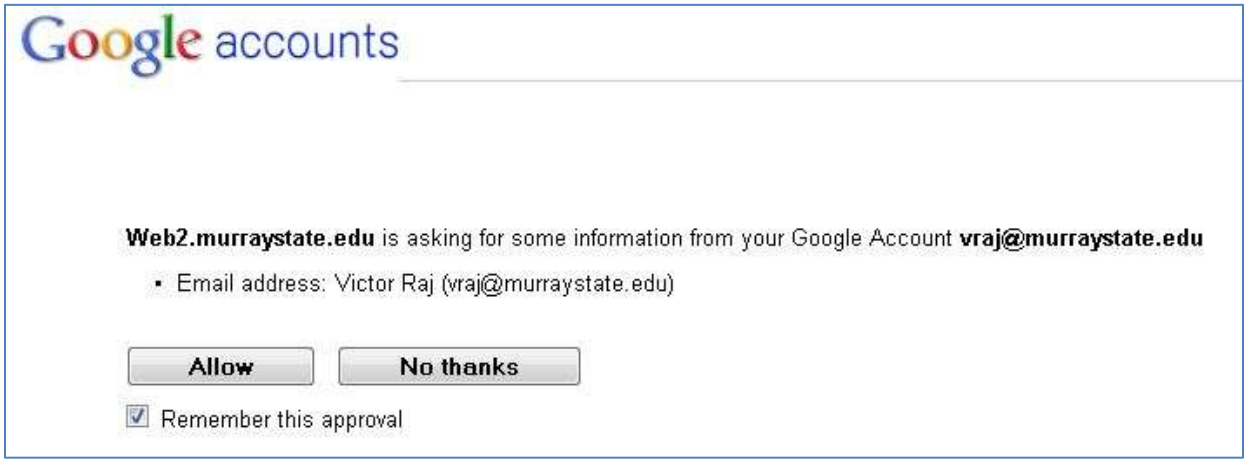
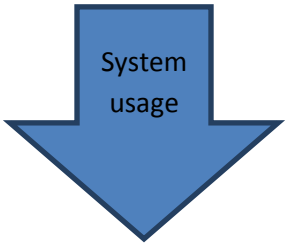


Figure 3: People already logged in will be asked if they would allow Google to share the credentials.

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



Home

All approvers will be taken to their home screen which looks like the one shown in Fig 4. The features are activated by the options in the menu-bar. An inverted carat (^) indicates that there are additional options under that option (see "Manage" 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.

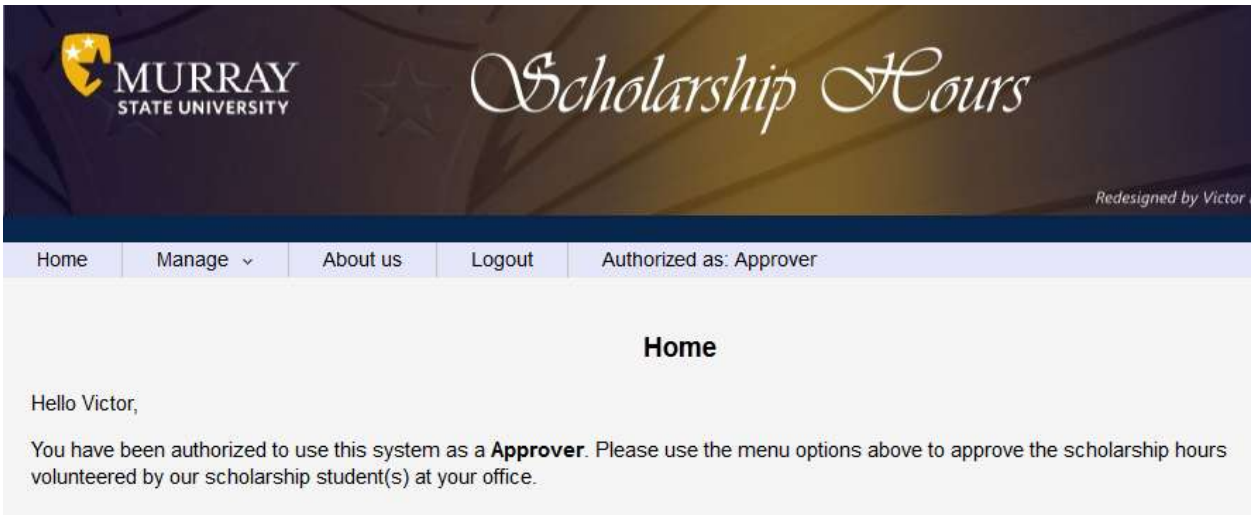


Figure 4: Home screen for APPROVER

System 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. Admin users will want to know what that message was in case any issues crop up.

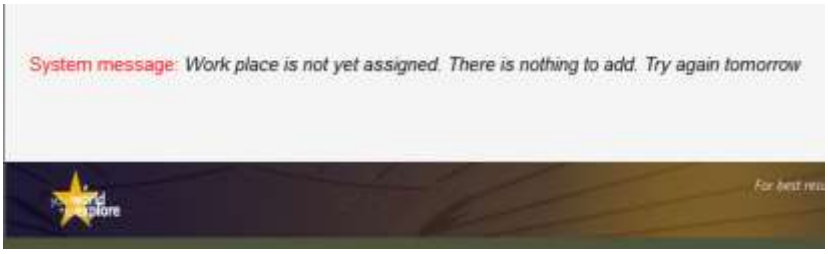


Figure 5: Error messages are always at the bottom.

The role of the user is shown at the top right – next to LOGOUT. This application has been tested exclusively with Firefox. But it should do just as well with Chrome or Internet Explorer.

Approver functions

Approvers have just three simple functions: Approve logs, View logs, and Logout.

Approve logs

Choosing "Approve logs" from the "Manage" menu option takes the user to Fig 6. Approvers will see only those students assigned to them. Users may pick a specific student from the "Filter for student" box, verify the times shown by marking the check box and complete the task by pressing the "refresh" icon beside the "delete" button at the bottom of the table. Changes are NOT saved until the refresh icon is clicked.

Figure 6: The table shows pending logs for all students assigned to you.

The system will let users know that there is unsaved work by showing a tiny red flag besides the cell where the change was made (See Fig 7).

Figure 7: Log approved but NOT saved. Notice the red marking at the left of the cell.

View student logs

Approvers may also drill down to details of any of their students' logs by choosing the "View all" option in the "Manage" menu item. Clicking on any of the underlined row on the left will pull up all the times recorded by the selected student. This is shown on the second table on the right (Fig 9). Approvers will not be able to see students assigned to other approvers on campus.

Figure 8: Approvers can see the logs of only those assigned to them.

Clicking on the underlined week will take users to a fresh pair of tables (Fig 9) that will retrieve even more details for the selected student. Corrections for previously approved entries (or even deletion of erroneous ones) may be made here.

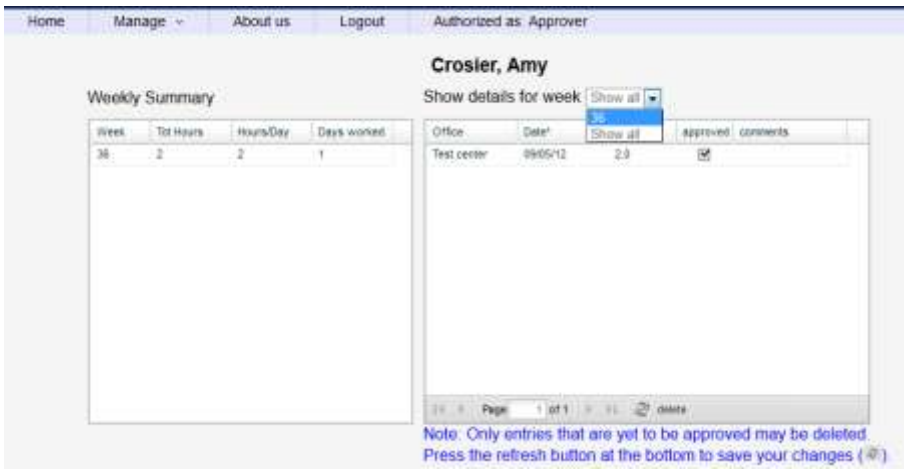


Figure 9: Review logs of previously selected student check/uncheck approval or delete entry as needed.

At this point all the features available for APPROVERS have exhausted, except one.

Logout

Failure to logout could leave the system open to abuse. Users are encouraged to close the browser too.

** END **