

**USER GUIDE**

**University Survey System (USS)**

1. Welcome

Welcome to the University Survey System (USS)! This is a free (if you paid for it, go get your money back!) software package that was initially developed for the Career Services Department at Eastern Washington University. It was the basis of the Computer Science Senior Project / Senior Capstone classes for Nicholas Estrada, Matt McGee, Andy Sorenson, and Maxwell Winston, and was finished in the spring of 2018. The Career Services Department was in need of a system through which the level of awareness of their offerings among the other departments on campus could be determined, and through which links to resources could be provided to those departments accordingly. The capabilities of the software have been expanded to provide an easy-to-use survey system for all EWU faculty. It offers multiple configurations for the administrator to choose from, a simple and efficient user interface, and the ability to export data for use with other software.

We hope you enjoy using our product!

1. Getting Started

If you are viewing this document, you have, most likely, already managed to access the software in the EWU network, and have created an account in order to administer surveys. In the interest of complete disclosure, however, we’ll start from the beginning.

1. Where to find the software: Unpack USSv1.0.tar.gz, and open the INSTALL.sh file. Follow the instructions on your screen. Specific installation instructions are listed in the included README.txt file. The contents of the README.txt file are listed below, as well. Install the software on the web hosting service of your choice. Technical information can be found in section 5 of this document, “Technical Requirements”.

Installation README file:

Version 1.0, 2018

To install:

1) Make sure dependencies are satisfied.

This software requires mysql, apache2, ssmtp, and php

IMPORTANT:

php mail must be set up correctly for account activation or password recovery

Go To:

https://askubuntu.com/questions/47609/how-to-have-my-php-send-mail#368046

For instructions on how to set that up.

2) Open a terminal and navigate to this directory

3) `sudo ./INSTALL.sh`

4) Follow the onscreen prompts

Known bugs:

- Password on signup and login are not hashed before being posted.

This is not a problem if https is used.

There is a function in utils.js that can be wired in easily to do this.

- Loading of results page is a bit clunky

1. Accessing the software: After installation, the USS can be found at: http(s)://www.<yourDomain>/pollster/pSignup.html.
2. Creating an account: Your user name will need to be unique within the USS, and you will need a valid email address. There are no requirements for your password, although we would strongly recommend using a combination of 8 or more characters, using upper- and lower-case letters, numbers, and special characters (such as: #$%) to keep your account secure. Once your account has been established, you can change your password and email address at any time through the “My Account” link on the Welcome page, but your user name will be permanently connected to the account. A single user can create multiple USS accounts, but each account must have a unique user name and email address associated with it.

Upon successful account creation, you will be redirected to the Survey Administrator Dashboard. For subsequent visits to the website, this page can be reached from the login page, at: http(s)://www.<yourDomain>/pollster/pLogin.html.

1. Using the USS
2. Creating a survey: Click on the “New Survey” button. You will be taken to a page to begin building your survey. Enter a title for the survey. This field is required. This title will be visible to everyone who takes the survey. It will also be used to identify the survey on your dashboard, and as an index to store results when a survey is completed.

The other text box on this page, labeled “Enter Survey Instructions for the User”, is for instructions that will be presented to survey-takers when they first access the survey. These instructions will be specific to this survey. You are not required to enter instructions, but this is the only place where you can guarantee that all survey respondents will see any instructions or explanations that you’d like to impart before they begin answering questions.

1. Click on the “Add Section” button. Sections exist so that different information and links to resources can be provided depending on the section the user reaches. If you don’t want to provide feedback to the user when they are done with the survey, or if the feedback you provide is not dependent on the “score” the user achieves, you only need to create one section. Otherwise, in the “Enter Minimum Section Score”, enter the total number of points the user must achieve in order to progress to the next section. This can be changed at any time while you’re creating the survey, and the individual questions in the section will collectively need to be worth at least as many points as the Minimum Section Score, or no one will be able to progress beyond the current section. The minimum section can be zero, as well, in which case the user will progress to the next section (if there is one) regardless of the way they answer questions.
2. Click on the “Add Question” button. Three fields will appear. In the “Enter Question Text” field, enter the question as you want the user to see it. In the “Enter Weight” field, enter the number of points this question is worth. This should be some portion of the Minimum Section Score, or zero, if this question holds no weight in scoring.
3. Choose a question type. Click on the field, and the four possible types of questions will appear in a dropdown list. Multiple choice questions have one possible correct answer. Checkboxes can have one or more correct answers. True/False questions can have one correct answer. Scaled questions can have one correct answer, but are often used for qualitative reasons, rather than for scoring. The Multiple Choice and Checkbox question types allow for any number of optional answers to be displayed using the green plus (+) sign to the right of the field. Individual fields may be removed using the red “x” further to the right of the field. Enter the text for each possible choice, and choose the number of points that specific response is worth, if applicable. If there is a correct answer to the question, or if (in the case of the Checkbox type) there are multiple correct answers, click on the selector to the left of the answer field(s) to indicate that it is (or they are) the correct choice(s).
4. When you have created all of the questions that make up the section, double check that the number of points possible for a question total at least the number chosen to represent the weight of the question, and that the combined question weights total at least as many points as the quantity chosen for the Minimum Section Score. This functionality is unregulated to allow for any number of possible configurations in surveys but, as such, requires some consideration on the part of the administrator.
5. Repeat steps 5 through 8 until you’re satisfied with your survey. Click on the “Save” button at the bottom of the survey. You will be directed to the Survey Management screen, the right side of which contains two fields: “Survey Groups” and “Resources”, a “Delete Survey” button, and a toggle switch. At the same time, a tab for your newly-created survey will appear in a list on the left side of the screen.

The “Survey Groups” section provides one or more randomly-generated personal identification numbers. The administrator can name the group to be associated with each PIN, and can create or remove any number of PINs associated with the survey. This PIN number is specific to this survey, and will expire one week after it is created. It can be sent by email to any department, person, or group for which the administrator would like survey results combined.

The “Resources” section is where the administrator tailors feedback to the user according to the section they reach in the survey. There will be one Resource field for each section in the survey. Text, labelled links to resources, and bulleted lists can be displayed to the user with these fields. Enter text in the top Resource field. Text can be accentuated by clicking the bold (**𝐀)** icon, the italic (*𝐴*) icon, or by creating a bulleted list with the (•) icon. Links to web-based resources can be included by clicking on the (**🔗**) icon. When clicked, a field will appear for the URL (web address) of the resource. Enter the web address, and click “OK”. A field will appear for the administrator to choose the text to be displayed to the user for that link (instead of displaying the web address you just entered). When the “OK” button is clicked, the links will show in the top Resource field for the section, and the text that will be displayed to the survey-taker will be displayed in the bottom Resource field for the section. The text and links can be intuitively combined to offer useful information to the user.

At the top of the Survey Management screen, there is a “Delete Survey” button, which will permanently delete the currently selected survey (in this case, the one you just created). On the right side of the screen is a toggle switch to make the survey “live”. The toggle defaults to “live,” and will show a green background. When switched to the left, the survey can be altered, but cannot be completed by anyone.

1. Click the “Save” button at the bottom of the screen when all sections have been filled out. You will see the welcome message on the right side of the screen, and your surveys will be listed on the left side of the screen in tabs. These tabs indicate whether the survey is active or “live,” contain a “Manage” button that will bring up the Survey Management screen, and contain an “Edit” button that allows the survey contents to be modified.

The top of this column contains buttons that allow the administrator to create a new survey, view account information, or return to the Welcome screen.

1. Click on the PIN and copy the provided link that leads to the survey-taker (“user”) login page, either with or without the PIN (if the link without the PIN is chosen, be sure to include the PIN in the email), and email it / them to any entity that you wish to have take that survey. PINs can be used for any number of groups, and by any number of people in a group, but survey results can only be divided by PIN (using group names).
2. When a user receives an email containing a link to a survey, they should click on the link, where they will see a screen that says “Take the Survey” at the top. There is a field marked “PIN” for the user to enter their PIN into, and a “Submit” button that will take them to the survey the PIN is designated for. No further instruction or information is provided to the user until they log in, so the administrator should include basic information, such as the source and reason for the survey, in the email with the link. The anonymity (or lack thereof, if the recipients are chosen specifically) should also be mentioned in the invitation email.
3. When a user completes and submits the survey, the results will automatically be combined with the other results for that survey, and will be displayed on the administrator dashboard when the survey is selected.
4. PINs may be deleted from a specific survey by the administrator at any time. A PIN can only be used for one survey. If a survey is deleted from the system, all PINs associated with that survey are deleted at the same time. Otherwise, PINs remain in the system and do not expire, so that a survey may be periodically reactivated (set to “live”) and sent to the same people or groups to judge changes in survey responses over time.
5. If a survey tab is selected by clicking anywhere on it besides the two buttons, the results that have been returned for that survey are displayed on the left. The default view is the average result across all groups, which can also be selected using the “All Groups” button at the top right of the panel. Results for each PIN that was distributed for this survey can be viewed individually by clicking on the appropriate group name at the top left of the panel. The panel displays the number of responses, the average time it took for recipients to complete the survey, the standard deviation of the times (this exists to give the administrator an indication if a very few respondents took a very long time to complete the survey – for instance, if someone left it open on a screen and went to lunch), and the average level (“RLEVEL”) that the respondents reached in the section continuum. Obviously, this part is only pertinent if the survey is weighted and scored, and has more than one section. The bottom of the screen contains two buttons. One allows for results to be viewed in graph form, and the other allows for the results to be exported for use with other software, such as Excel. The rest of the right column displays the results of each question in the survey for whatever group is selected, and a bar graph with text indicating the percentage of respondents who chose a given answer. The bar graph for the correct answer to a question (if there is one) will be shaded green. Others will be shaded blue.
6. The “My Account” button allows the administrator to change the email address associated with the account, or change passwords, or both. The user name associated with the account cannot be changed, but an administrator can have as many different accounts as they deem necessary.
7. The Notifications button at the bottom left of the dashboard is used to see a list of completed surveys and user comments that have been submitted since the administrator was last logged in, categorized by survey name.
8. Below the Notification button is a “Log Out” button, to log out of your account.
9. At any time, the EWU logo or the “University Survey System” text can be used to visit the user (survey-taker) login page. There is also a link, if it is activated by the administrator, to the Administrator Account Creation page, and a link to the Administrator Login page. There is a link to a Help menu, where information about the software, contact information, and the User Guide can be accessed.
10. On the “User Login” page, if the administrator loses or forgets a password to an account, the *forgot username/password* button can be clicked. On the page that appears, a user name or email address can be entered to reset the password for the corresponding account. When submitted, a link to the Password Reset page will be sent to the email address associated with the account. The link can only be used once, and will expire 30 minutes after it is created. If the link is not used within that time, the administrator will be redirected, and will have to start the process over on the Administrator Login page.
11. Troubleshooting

Any inquiries, requests, or bug reports can be directed to the Eastern Washington University Computer Science department. In order to access the resources you need, please mention that this software was a project for the Senior Project/Senior Capstone classes, led by Brian Kamp, during winter quarter of 2017 and spring quarter of 2018.

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1. Technical Requirements

**Installation requirements:**

-160 MB disk space

-Ubuntu Apache server

-MySql database

**Development:**

The USS was developed using PHP, HTML, JavaScript, CSS, JSON, ajax, charts.js, JQuery, MySQL, and Bootstrap. XAMPP version 7.2.1 was used as a stack package for development. Individual component specifications are included below.

**Component specifications:**

+ Apache 2.4.29

+ MariaDB 10.1.30

+ PHP 7.2.1 (VC15 X86 32bit thread safe) + PEAR

+ phpMyAdmin 4.7.4

+ OpenSSL 1.1.0g

+ ADOdb 518a

+ Mercury Mail Transport System v4.63 (not included in the portable version)

+ FileZilla FTP Server 0.9.41 (not included in the portable version)

+ Webalizer 2.23-04 (not included in the portable version)

+ Strawberry Perl 5.16.1.1 Portable

+ Tomcat 7.0.56

+ XAMPP Control Panel Version 3.2.2 by hackattack142 (Great Thanks!!))

See: http://www.apachefriends.org/f/viewtopic.php?f=16&t=46743

+ XAMPP mailToDisk 1.0 (write emails via PHP on local disk in <xampp>\mailoutput. Activated in the php.ini as mail default.)