



# Project Design

Version 2.0

May 03, 2017

## Revision Signatures

By signing the following, the team member asserts that he/she has read the entire document and has, to the best of his knowledge, found the information contained herein to be accurate, relevant, and free of typographical error.

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## Revision History

The following is a history of document revisions.

Version	Changes	Date
0.1	Partial Draft	12/09/16
1.0	Post EYH Overhaul	4/24/17
2.0	Final Edits	5/03/17

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# 1 Introduction

## 1.1 Purpose

This document provides the design description of the Scheduling Your Horizons (SYH) system. It includes design constraints, system architecture, database design, UML models, user interface design, use case models, and report prototypes.

## 1.2 Project Overview

Expanding Your Horizons Network (EYHN) is an organization that was founded to pique girls' interest in STEM fields. Every year, chapters of the organization host conferences around the globe where young girls watch presentations and participate in workshops led by women adult role models who are working in a STEM field. There are currently more than 80 conferences in 32 U.S. states, Europe, and Asia with up to 25,000 girls attending each year.

The Texas Christian University (TCU) Computer Science Department was originally approached in 2005 by the EYHN, Texas Wesleyan University (TxWes) branch to create a software solution for its scheduling and registration system. The system was well received and has been operational for the past eleven conferences. It is now out of date and can no longer be used. Scheduling Your Horizons (SYH) will replace this system while expanding upon the original functionality to allow user registration.

## 1.3 Section Overview

The Design Constraints (Section 2) contains the assumptions and dependencies, constraints, and development methods.

The System Architecture (Section 3) contains a diagram of the system including all the components and their descriptions.

The Database Design (Section 4) provides an overview of the schemas, tables, reports, and other objects for the system.

The UML Models (Section 5) display the sequence, state, class, and activity diagrams to visualize the design of the system.

The UI Interface (Section 6) provides screenshots of each web interface that is used to interact with the entire system.

The Glossary (Section 7) defines all acronyms, technical, and project-specific terms used in the document.

The Use Case Models (Appendix A) provides all the use case models with diagrams and tables for our system.

The Additional Use Case Data (Appendix B) contains supplemental data that could not fit into use case diagrams.

The Report Prototypes (Appendix C) shows the prototypes of all the reports that can be generated from the system.

## 2 Design Constraints

### 2.1 Assumptions and Dependencies

The SYH team will assume that all users shall be using a modern web browser (Safari, Firefox, Edge, Chrome, etc.) to access forms and have access to the internet.

The web forms assume that users will have basic knowledge (such as what the event is, the event's date, etc.) before visiting our web form and signing up.

The SYH team will assume that Administrators will have moderate computer technical skills, while Organizers and Participants will have limited to no computer technical skills. Organizers and Participants are defined in the SYH Software Requirements Specification document.

### 2.2 Constraints

#### 2.2.1 Time Constraints

The system must be able to accept participant registrations by February 1<sup>st</sup>, 2017 for participants to meet EYHN registration deadlines. The scheduling and report generation systems must be complete by March 24<sup>th</sup>, 2017.

The schedule generation algorithms must complete within 10 seconds of starting and all other reports must finish being generated within 5 seconds of starting.

#### 2.2.2 Operational Constraints

Several operational constraints have been placed upon the scheduling system. These include the following:

- The system shall only place a user-defined number of students from the same school in a group.
- The size of the group shall be determined by the total number of students divided by the total number of groups plus or minus 2
  - Plus 2 shall be the maximum number of students.
  - Minus 2 shall be the minimum number of students.
- Each group must attend four workshops, with these workshops taking place at four separate time slots.
- A primary Presenter (see Requirements Document for more information of primary Presenters) shall not present to more than one group at each time slot.

#### 2.2.3 Development Constraints

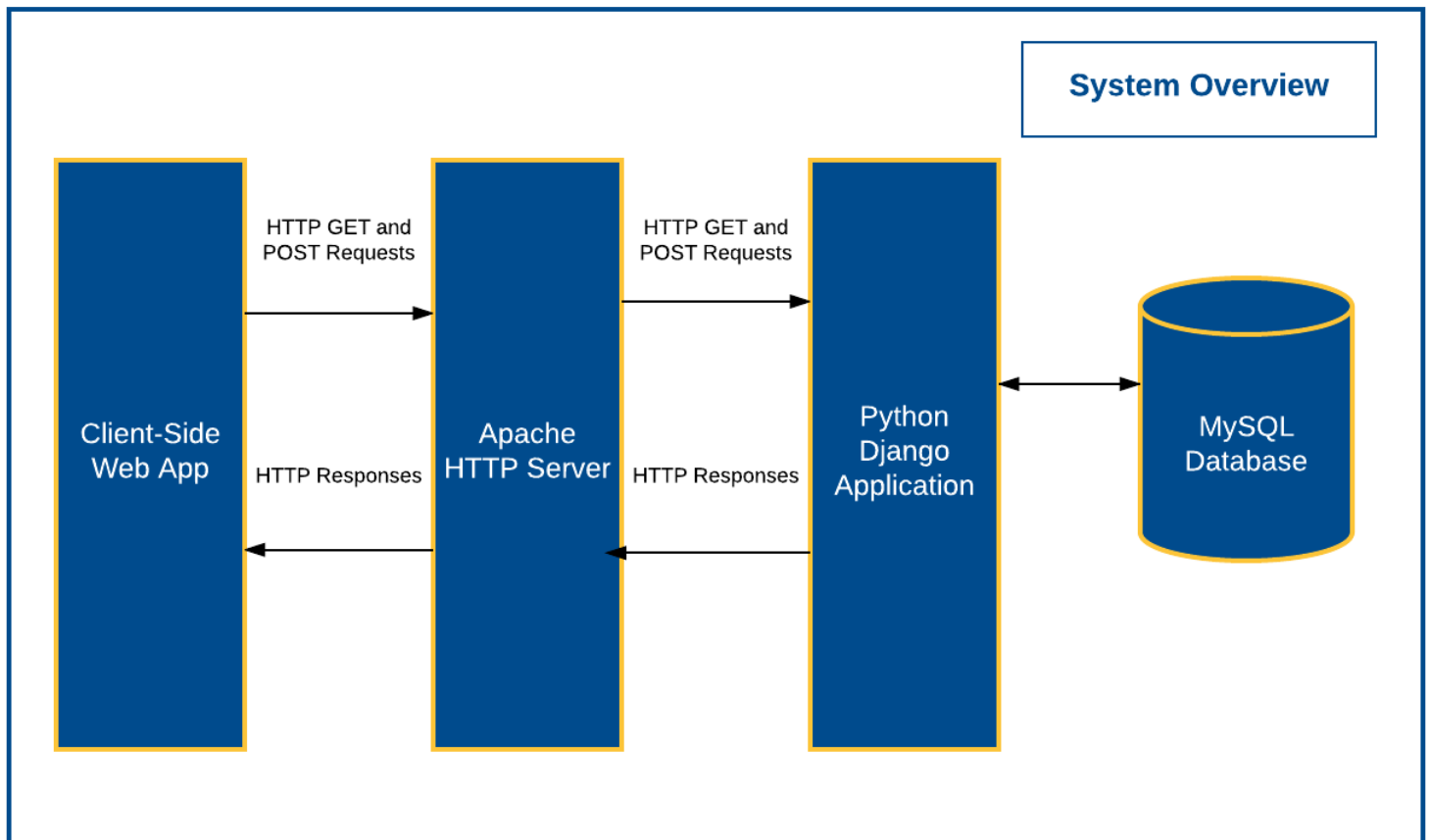
The assumed backend server will have Docker 17 installed, allowing a CentOS 7 image to be run containing the major application dependencies: Python 3.6, MariaDB, Apache Web Server 2.4, and Django 1.10.



## 3 System Architecture

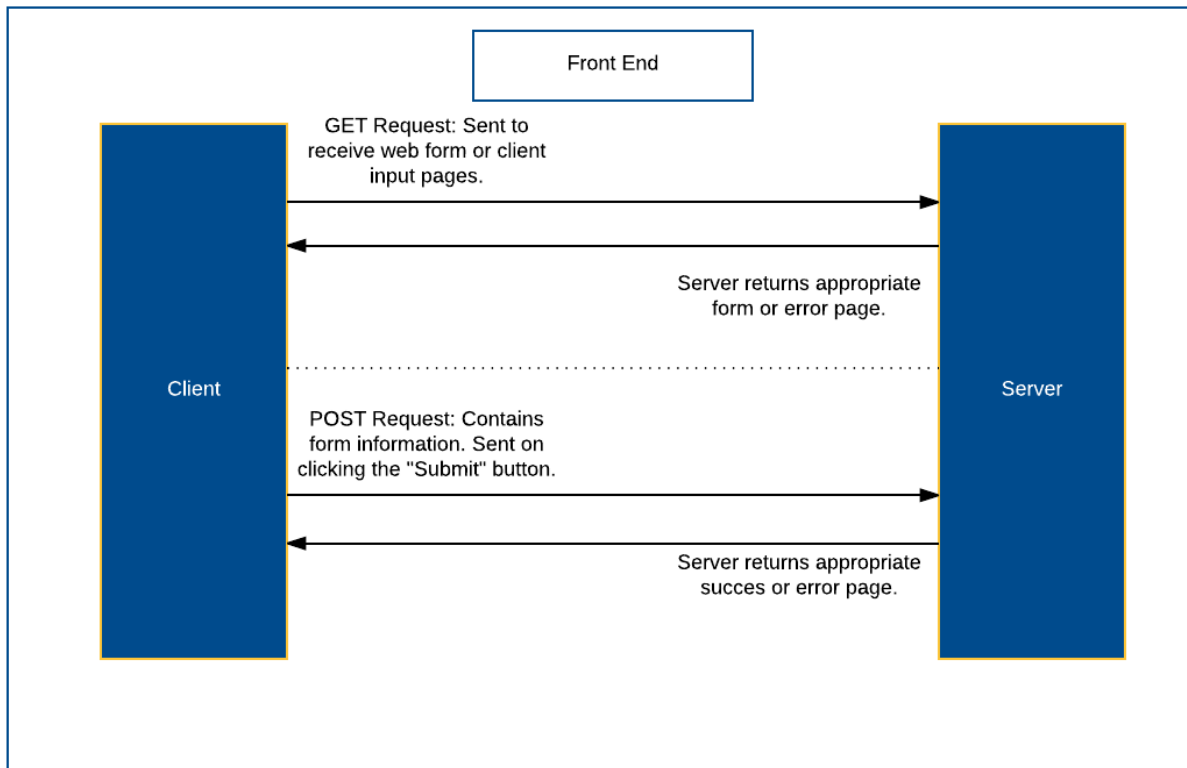
### 3.1 Overall System Design

Our system architecture utilizes a technology stack consisting of Linux, Apache, MySQL, and Python. The Apache server receives requests and communicates with the Python application through the web server gateway interface (WSGI), which then interacts with the database.



## 3.2 Client Side Web App

The client side web app consists of HTML with limited JavaScript logic that verifies form information and modifies the user interface. The client sends a GET request to the appropriate URL and receives the corresponding form or error page from the server. The client completes the form on the page, then clicks a submit button which sends a POST request containing the form information back to the server. For a more detailed overview of the system interactions between the client and the server see **Section 5**.

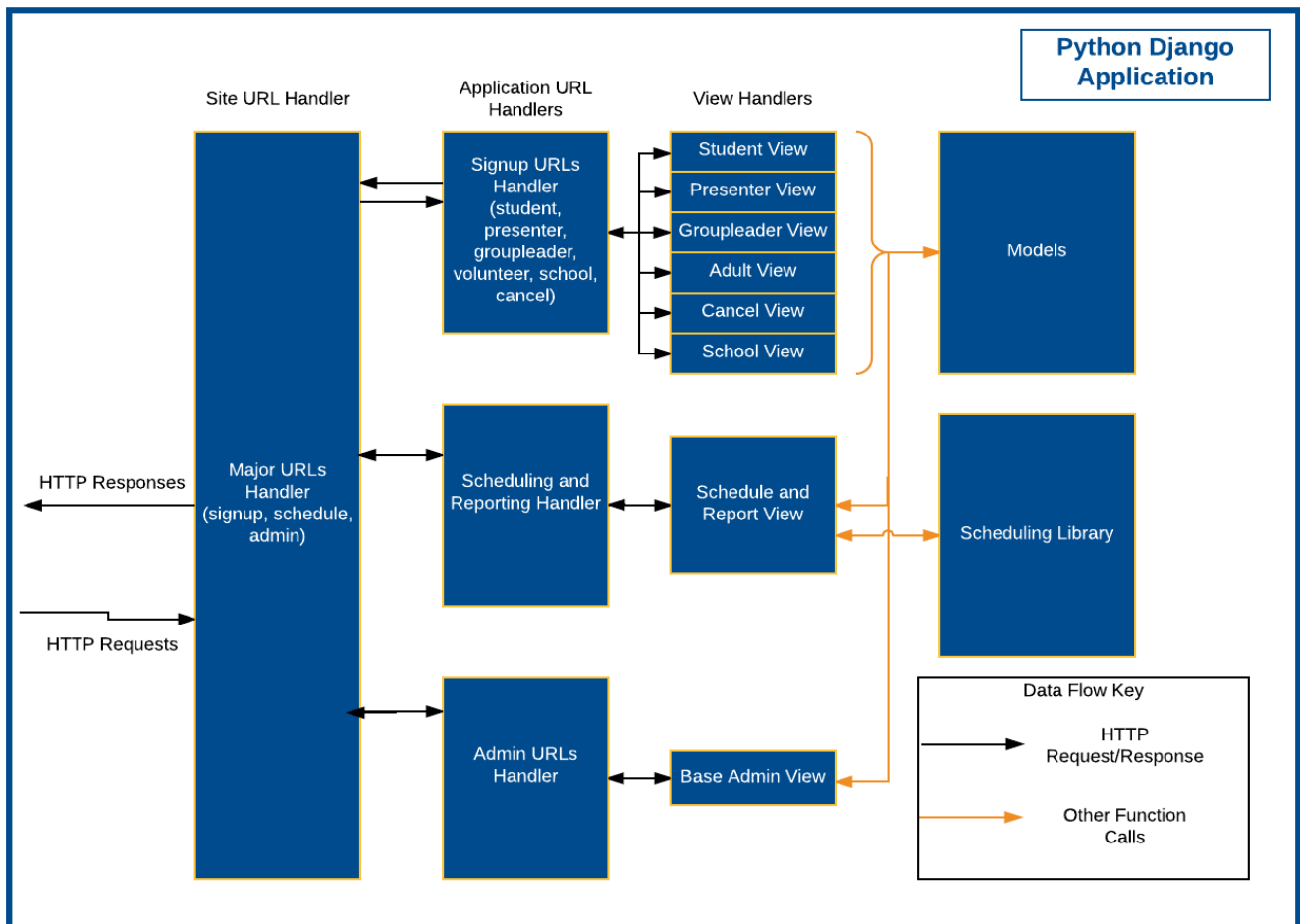


### 3.3 Python Django Application

The application will follow the standard Django architecture. The overall site URL handler will receive HTTP requests and direct them to the appropriate application based on the request URL. The three applications are:

- Signup: (/signup) The signup application will contain forms that Participants will fill out to sign up for the conference.
- Schedule: (/schedule) The schedule application will allow Administrators to generate and modify the conference schedule, download reports defined in **Appendix C**, and reset the system for new registration.
- Admin: (/admin) The admin application will allow Administrators to access and modify the database.

Once a request is routed to the correct application, the application level URL handler directs the request to the correct view object. These view objects interact with various model objects that act as the interface between the Python code and the database. The schedule and report view object makes use of our scheduling library via function calls to generate the schedule.

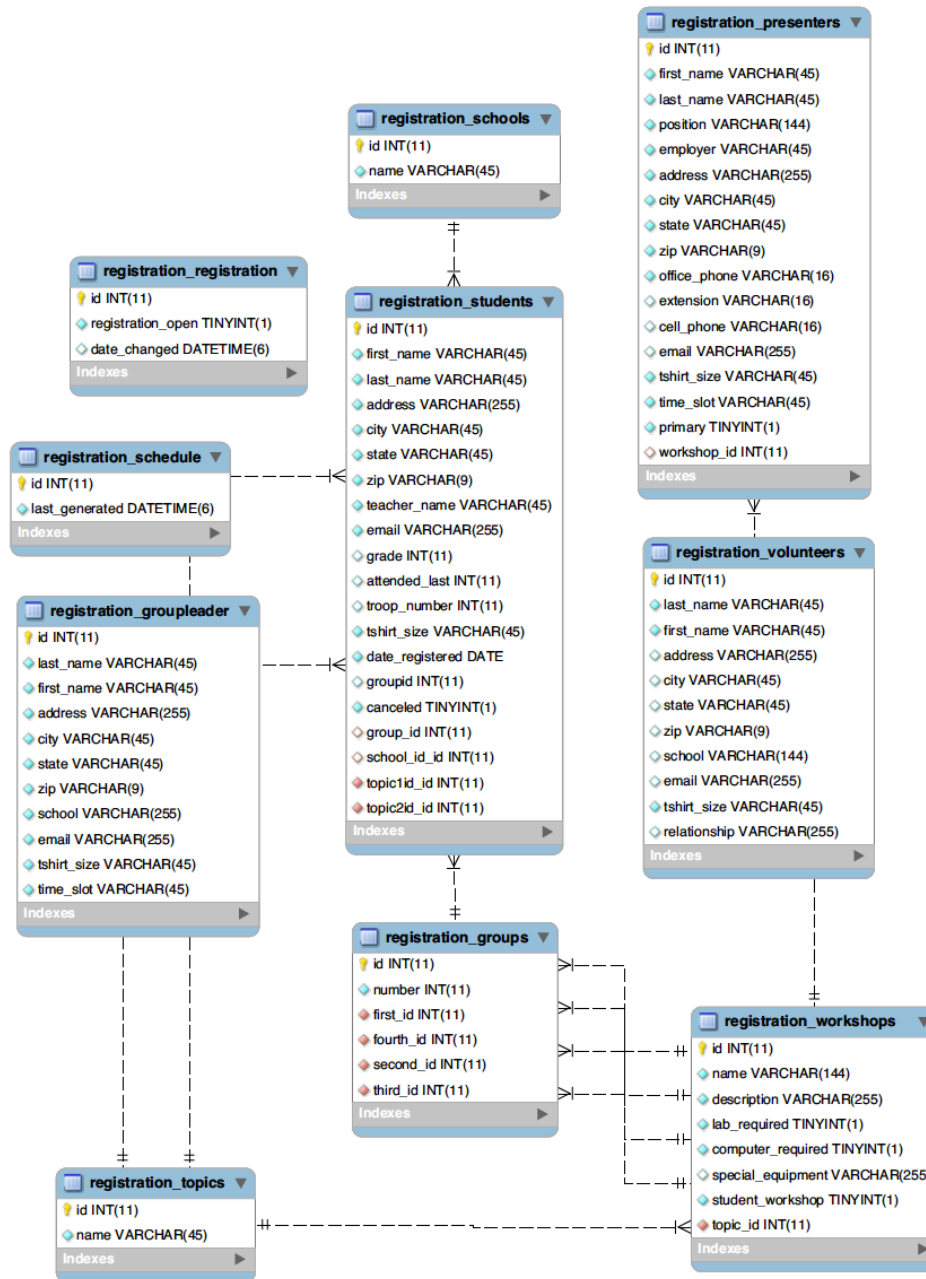


## 4 Database Design

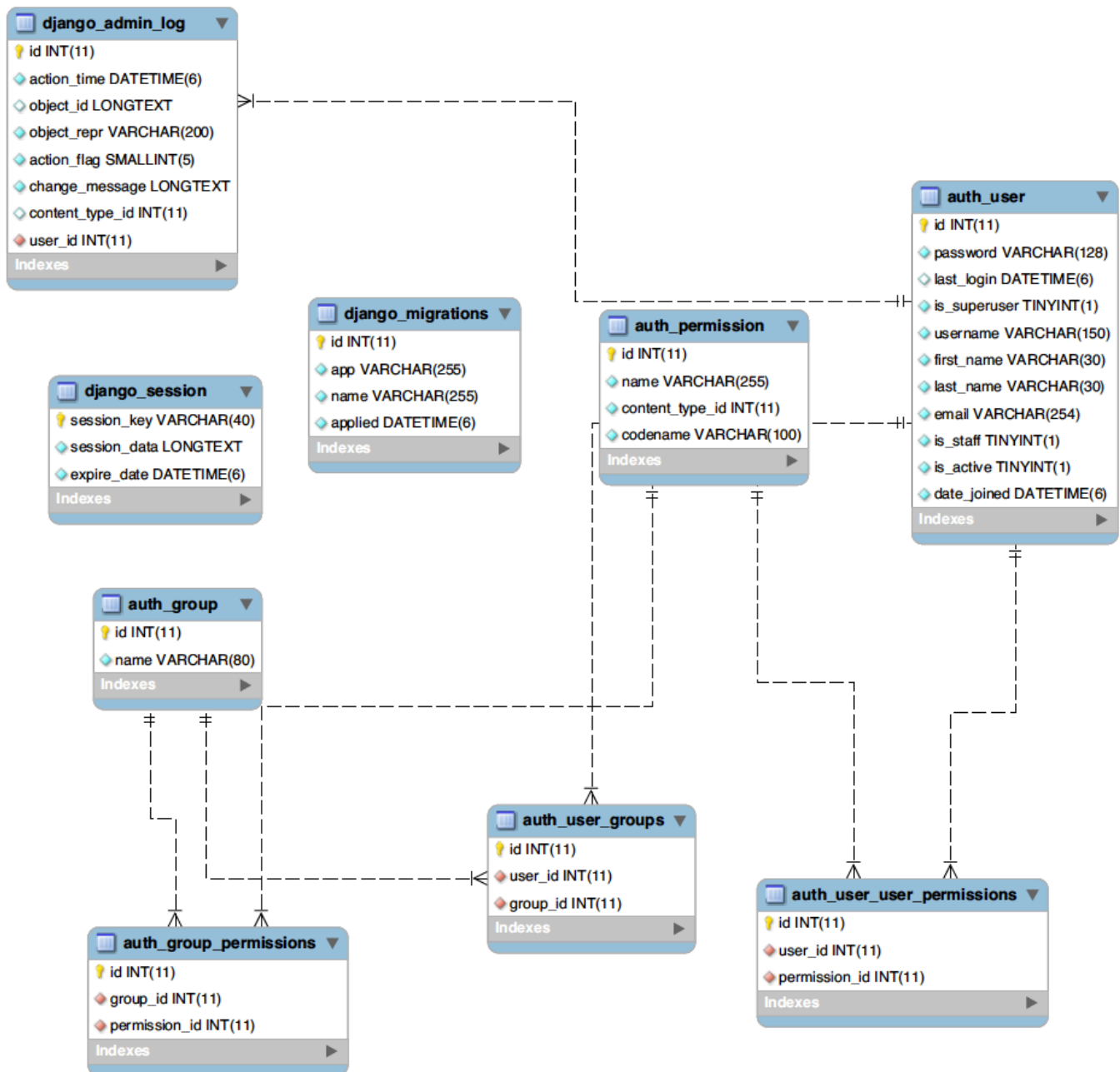
### 4.1 Overview

The database is defined using Django’s Models framework. The Django framework handles table names and maintains the database without the need to write SQL. The Django models framework also provides a standard interface between the Python code and the database.

### 4.2 Tables for Registration, Scheduling, and Report Generation



### 4.3 Tables for Admin System



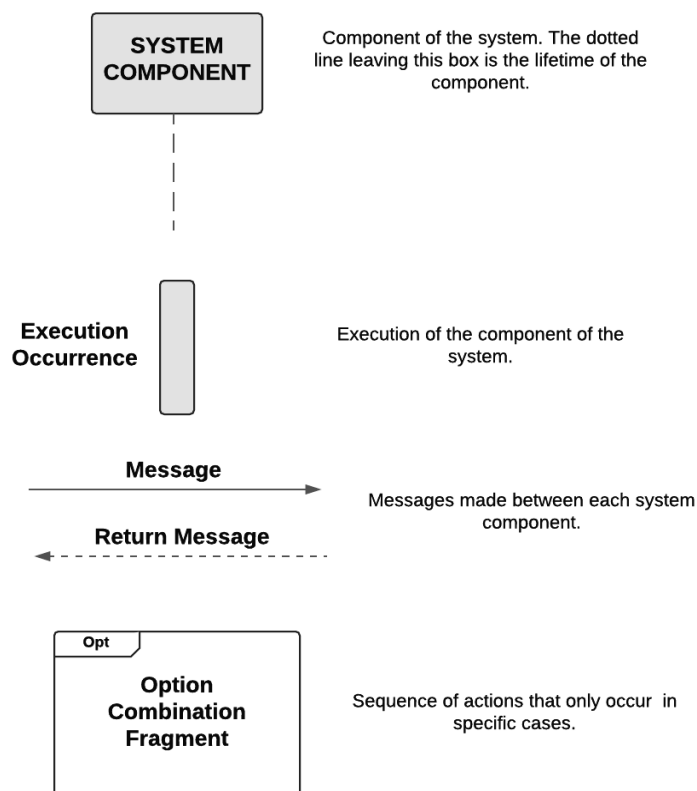
## 5 System Interaction Design

### 5.1 Overview

As outlined in **Section 3**, the system consists of a web based client which communicates via HTTP requests with the application server. This section defines these system interactions using sequence diagrams with descriptions for each message in the sequence. It is separated into the three major applications of the system: registration, scheduling and report generation, and administration.

### 5.2 Key

This key describes all the components for the following sequence diagrams.

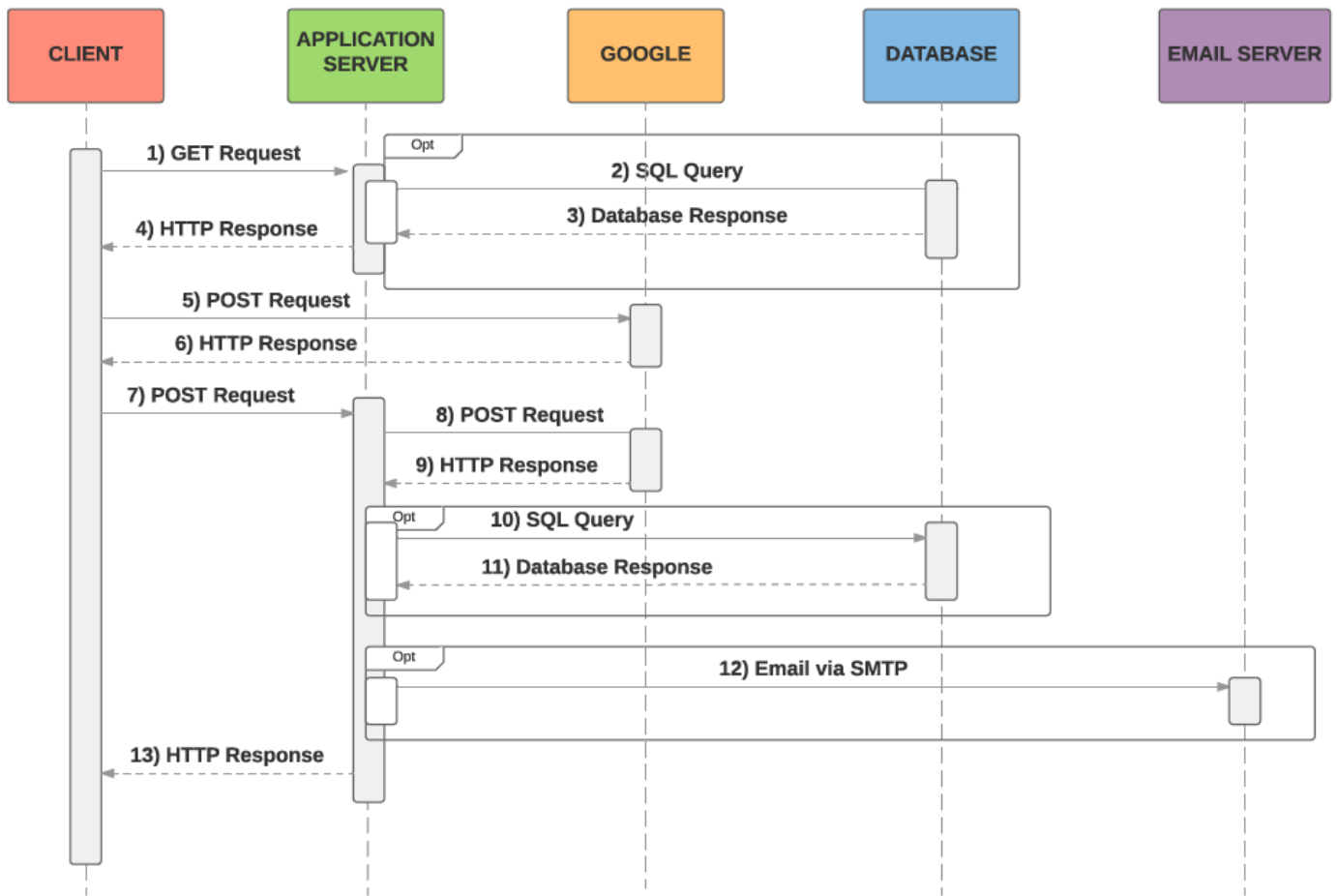


## 5.3 Participant Registration

- 1) Participant registration begins with a GET request from the client to one of the registration form URLs (see **Section 3.3** for a description of the URLs).
- 2) [OPTIONAL] The application server optionally sends an SQL query to the database to get the database objects necessary to render a response to the client.
- 3) [OPTIONAL] The database sends a response to the application server containing either the information required or an error message.
- 4) The application server sends an HTTP response containing the form HTML back to the client.
- 5) While filling out the form the Participant clicks the reCAPTCHA. This causes a POST request to be sent from the client to a Google server. This POST request contains data regarding how the reCAPTCHA was clicked.
- 6) Google returns an HTTP response to the client containing a key, which the client then automatically adds to the form for submission.
- 7) When the Participant clicks the “Submit” button the client sends a POST request to the application server containing the fields of the form along with the key provided by Google.
- 8) The application server makes a POST request to the Google server containing the reCAPTCHA key provided by the client.
- 9) If the reCAPTCHA key is valid, meaning that it was provided to the client by Google, Google verifies the key and returns an HTTP response to the application server acknowledging the request as valid. If the key was not valid it returns an HTTP response to the application server with a field stating the key is not valid.
- 10) If the registration is valid the application server sends an SQL query to the Database to attempt to add the new Participant to the database.
- 11) The database processes the query and returns a response to the application server verifying the Participant was added to the database.
- 12) If the registration was a success, the application server uses SMTP (Simple Mail Transfer Protocol) to send an email to the address provided by the user in their form.
- 13) The application server then sends an HTTP response to the client notifying the user whether the registration was a success or a failure.

### PARTICIPANT REGISTRATION

SYH Team | April 18, 2017



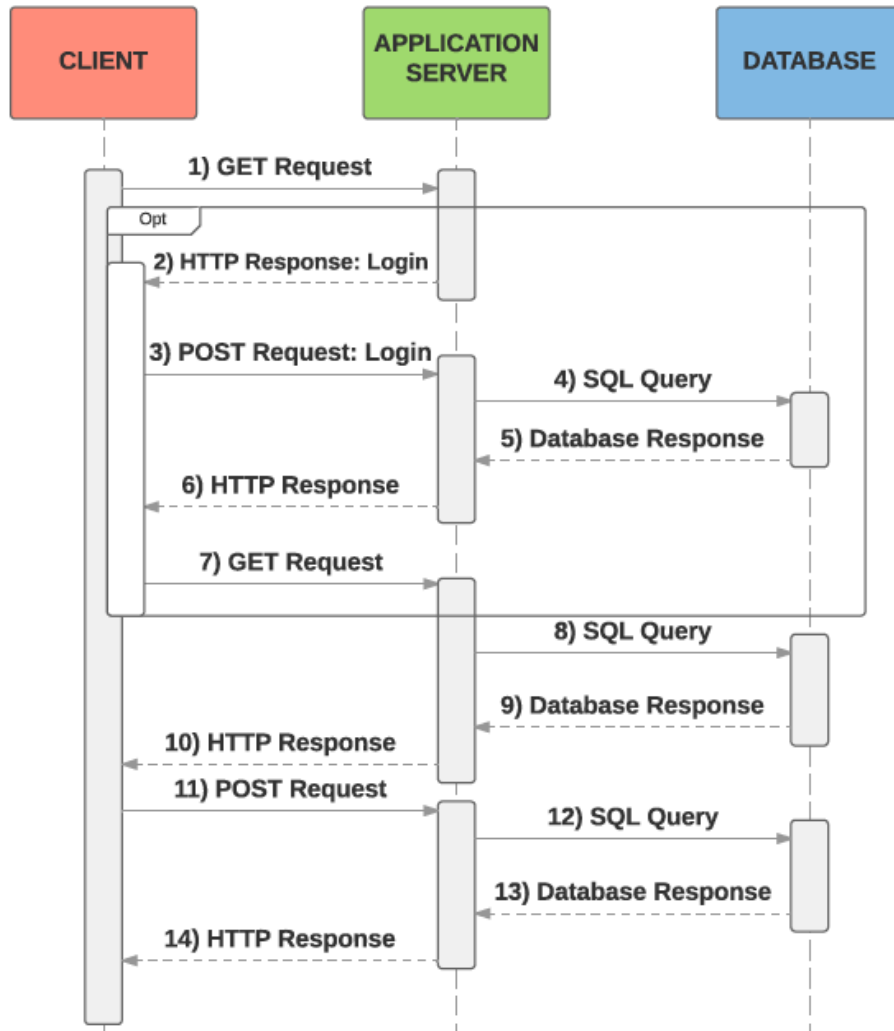


## 5.4 Scheduling and Report Generation

- 1) The client sends a GET request to the application server with a URL corresponding to the scheduling and report generation page (see **Section 3.3** for a description of the URLs).
- 2) [OPTIONAL] The application server checks that the POST request from the client contains the correct authentication token. If it does not, the application server returns an HTTP response to the client containing the HTML of the login page.
- 3) [OPTIONAL] The Organizer fills out their username and password and then clicks the “Sign In” button. This causes the client to send a POST request to the application server containing the authentication details.
- 4) [OPTIONAL] The application server sends an SQL query to the database to get user authentication details.
- 5) [OPTIONAL] The database sends a response with the requested authentication details back to the application server.
- 6) [OPTIONAL] The application server attempts to verify the user. If the user is verified, it responds to the client with an HTTP response containing their session ID.
- 7) [OPTIONAL] The Client makes a second GET request to the application server, this time with a valid session-id, received from the application server.
- 8) The application server makes an SQL query to the Database to retrieve schedule information.
- 9) The database sends a response back to the application server with the objects required to display the schedule.
- 10) The application server generates the HTML content and returns it in an HTTP response to the client.
- 11) The client does some action on the front end (see **Section 6.3.2** for a detailed description of the user’s interaction with this page) and eventually clicks a button that causes the client to send a POST request to the application server with information regarding what the user selected.
- 12) The application server makes SQL queries to the database to process the request.
- 13) The database responds to the application server with the requested objects.
- 14) The application server processes the request and sends an HTTP response to the client with either an HTML page with the updated schedule or with a zip file containing the requested reports.

### SCHEDULING AND REPORT GENERATION

SYH Team | April 18, 2017



## 5.5 Admin System

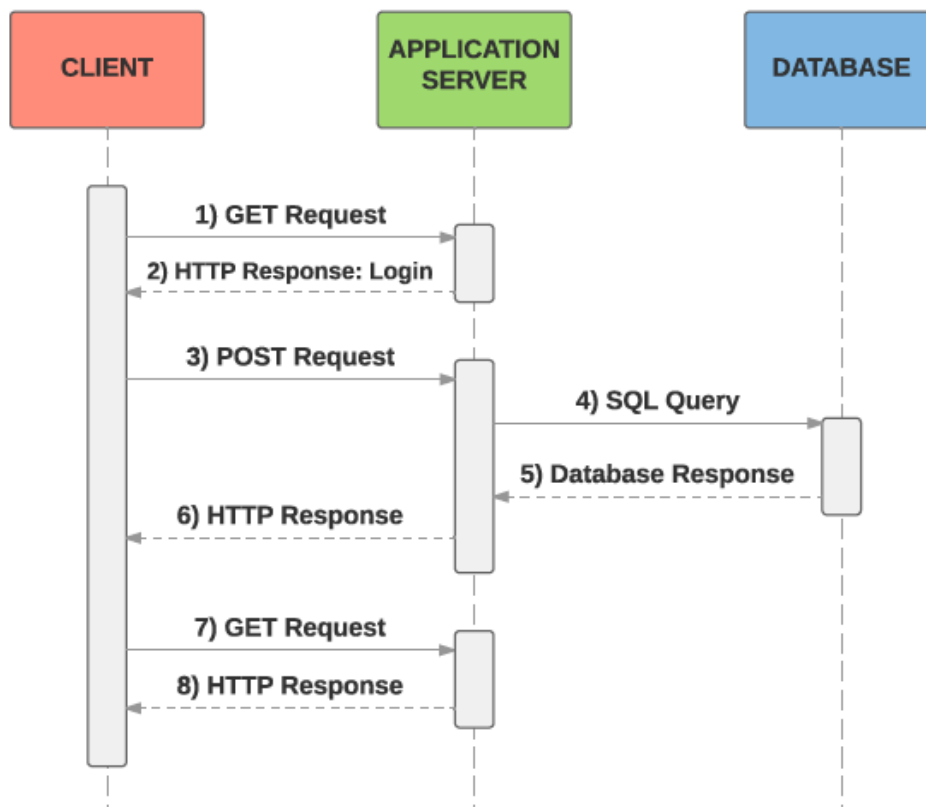
### 5.5.1 Admin Login

Admin login occurs if the user has not logged in using their web browser recently.

- 1) The client sends a GET request to the Application server with the URL corresponding to the administration application (see **Section 3.3** for a description of the URLs).
- 2) The application server returns an HTTP response to the client which redirects the client to the appropriate login page.
- 3) The Administrator fills out the login page with their username and password and then clicks the “Log In” button. This causes the client to send a POST request to the application server containing their username and password encrypted using HTTPS.
- 4) The application server sends an SQL query to the database to retrieve the user authentication details.
- 5) The database returns the requested user authentication details to the application server.
- 6) The application server verifies the login information and returns an HTTP response that contains the current session ID to the client.
- 7) The client makes another GET request to the application server using the main admin URL (see **Section 3.3** for a description of the URLs).
- 8) The application server returns an HTTP response containing the HTML of the main admin panel.

#### ADMINISTRATION LOGIN

SYH Team | April 18, 2017



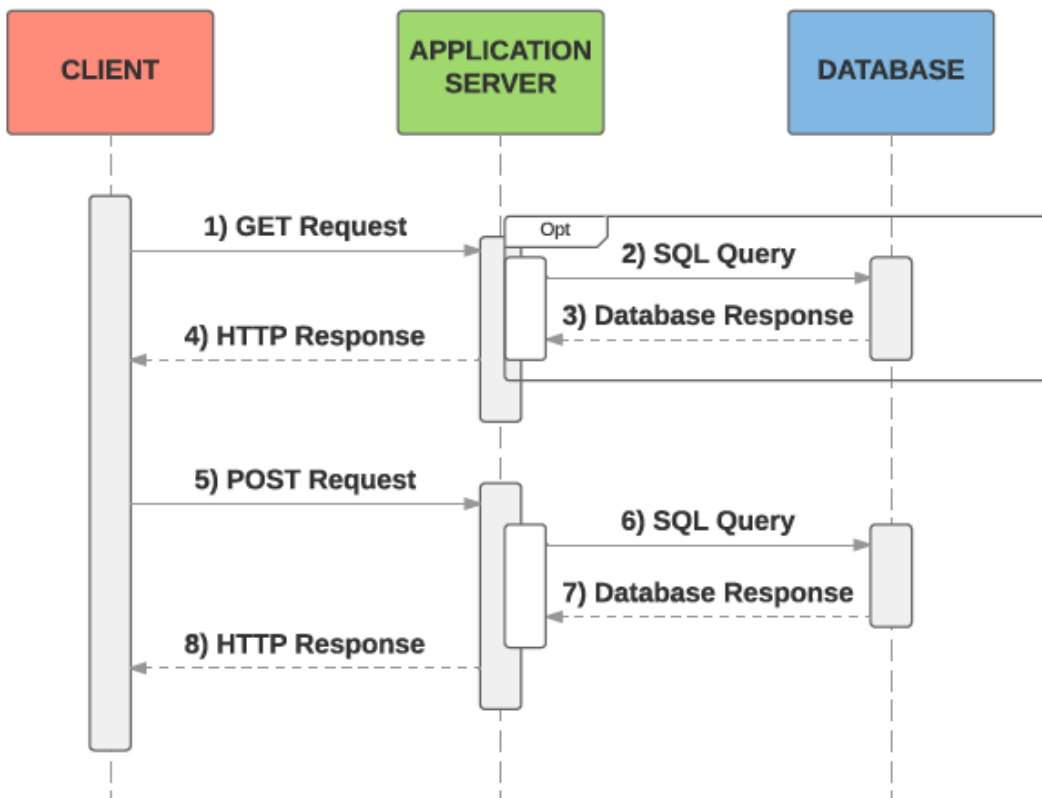
## 5.5.2 Admin Modify, Add, or Delete Database Entries

Once an Administrator is logged in they have access to modify, add, or delete entries from the database.

- 1) The Administrator clicks on a link corresponding to the entity they want to modify/delete or the “Add” button. This causes the client to send a GET request to the application server with a URL corresponding to the page of the desired entry to modify or a form for adding a new entity.
- 2) [OPTIONAL] If the user is modifying an existing entry the application server sends an SQL query to the database for the data corresponding to the entry to modify.
- 3) [OPTIONAL] The database returns a response to the application server with the object to be modified.
- 4) The application server returns an HTTP response corresponding to the Client containing either the add entry form or the entry modification form.
- 5) The Administrator fills out the form and clicks either “Add” or “Save”. The client then sends a POST request to the application server containing information about the modification to make or the entry to add.
- 6) The application server sends an SQL query to the database to modify or add the entry.
- 7) The database returns a response to the application server.
- 8) The application server returns an HTTP response back to the client with either a successful modification or unsuccessful modification message.

### ADMINISTRATION MODIFY, ADD, AND DELETE

SYH Team | April 19, 2017



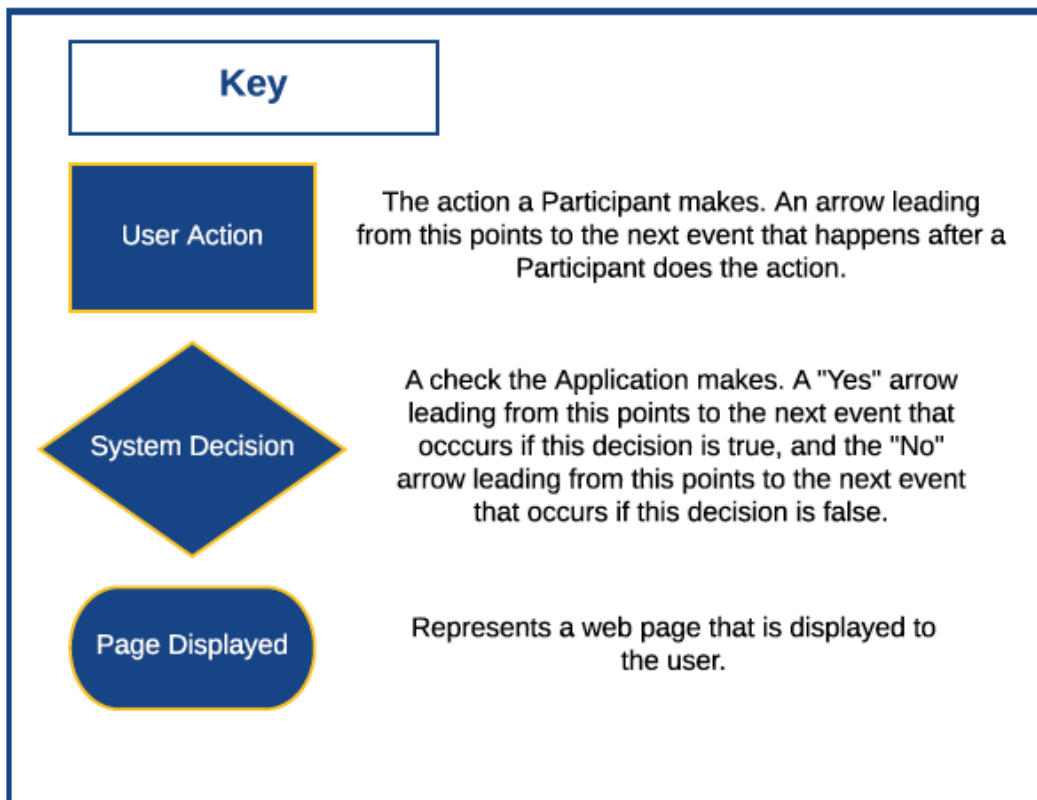
## 6 User Interface Design

### 6.1 Overview

This section outlines in detail the user interface design of the system. It contains one section for each of the three main applications of the program: registration, scheduling and reports, and administration.

### 6.2 Key

The key describes all the components for the following activity diagrams.



## 6.3 Registration

### 6.3.1 Overview

The registration user interface consists of web forms through which Participants can fill out their information and register for the conference. This sub-section contains information and user activity flow through each of the registration forms and the corresponding success pages, failure pages, and email messages.

**Participant Registration Overview** describes the general flow Participants follow when filling out forms in the Registration application.

**Student Registration** describes all the web pages and user flow with regards to registering a Student for the conference.

**Presenter Registration** describes all the web pages and user flow with regards to registering a Presenter and possibly adding a workshop.

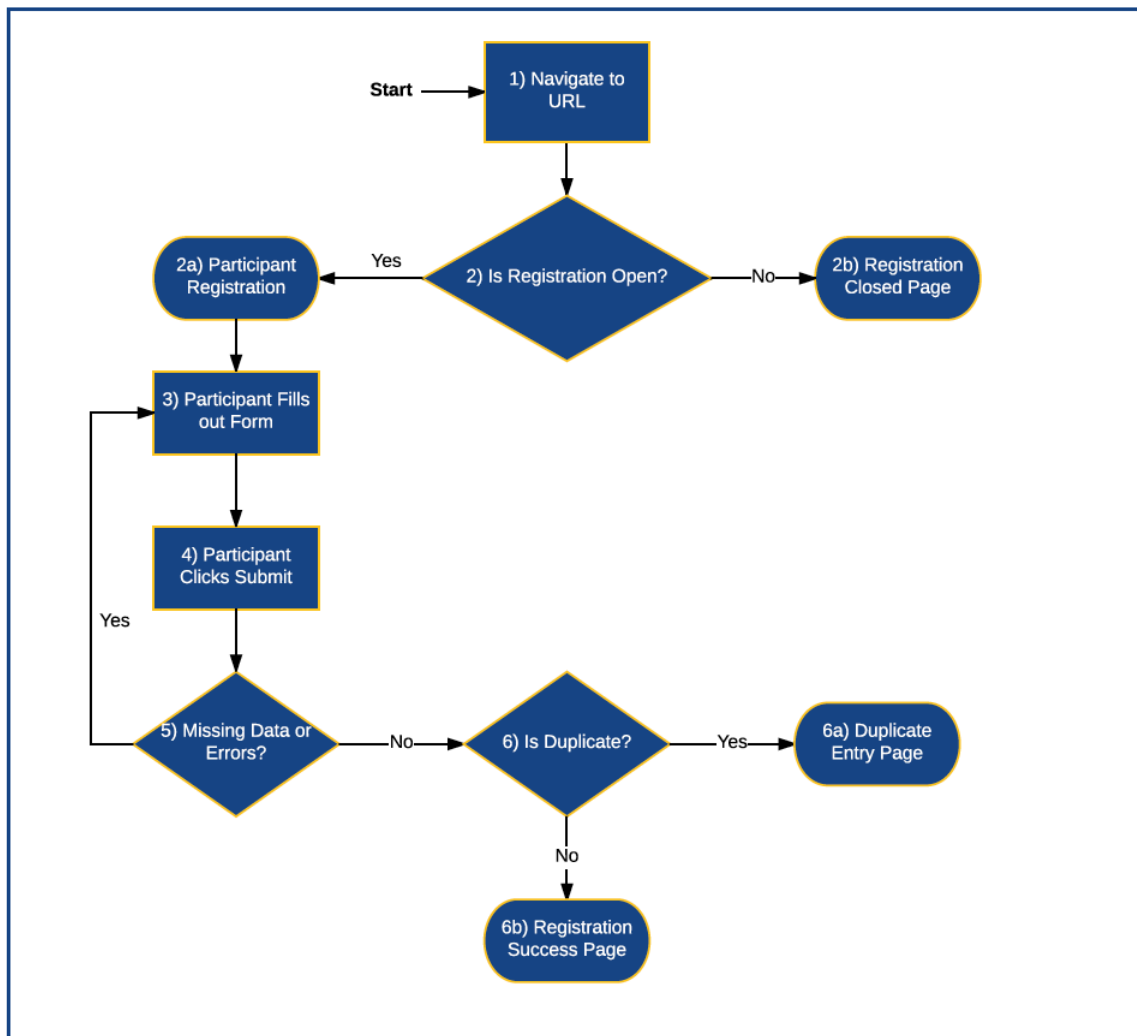
**Adult Volunteer Registration** describes all the web pages and user flow with regards to registering an Adult Volunteer for the conference.

**School Registration** describes all the web pages and user flow with regards to registering a school to the list of schools selectable by a Student registering for the conference.

**Group Leader Registration** describes all the web pages and user flow with regards to registering a school to the list of schools selectable by a Student registering for the conference.

### 6.3.2 Participant Registration Overview



- 1) [Action] Participant visits the web page corresponding to the type they are registering for (/signup/student, /signup/presenter, /signup/adult, /signup/groupleader, /signup/school).
- 2) [Decision] Is registration open for this type of Participant? (see Requirements Document for details on opening and closing registration)
  - a. If Yes: The Participant is directed to the appropriate form.
  - b. If No: The Participant is directed to a “registration closed” page.
- 3) Participant fills out the form with their information.
- 4) The Participant clicks “Submit”.
- 5) Does the page have errors or missing information?
  - a. If yes: If the Participant clicks “Submit” with errors in the page, the page shows them an error and directs them to make the appropriate changes. (Return to 2)
  - b. If No: see number 6
- 6) Is the Participant a duplicate? (see Requirements Document for more information on duplicates)
  - a. If Yes: The Participant is directed to the duplicate entry page.
  - b. If No: The user is directed to a success page and an email is sent to the user.



## 6.3.3 Student Registration

### 6.3.3.1 Student Registration Form

The student registration form is shown below. All fields except address line 2 and girl scout troop number are required to submit the form. By default, the student's first and second choice topics are "No Preference". The Student is required to complete a reCAPTCHA to submit the form. The student registration form is accessible by appending "/signup/student" to the system's base URL. To view the design of missing or incorrectly filled form fields see **Section 6.3.10**.

### Student Registration

Space is limited, so register early! Registration confirmation will be emailed to your email address as soon as we've processed your information.  
\* \$5 registration fee mailed to TWU

#### Student Information

First Name:

Last Name:

Street Address:

City:

State:

Zip:

Email Address:   
We don't send spam or sell your contact information to anyone.

Current Grade:  7th Grade  8th Grade

T-Shirt Size:  S  M  L  XL  XXL

Did you attend this conference last year?  Yes  No

Girl Scout Troop Number:   
(if applicable)

#### School Information

School:

Math or Science Teacher:   
(Name)

#### Workshop Preferences


Please select two of the following workshop topics that you find the most interesting in the dropdown menus below. You will be assigned four workshops in a variety of areas. For one of your workshops, we will attempt to honor your choices, but assignments are on a first-come, first-served basis.\*\*

First Choice:   
Cannot be the same as your second choice.

Second Choice:   
Cannot be the same as your first choice.

**\*\*Subject to Availability**

Make checks payable to Expanding Your Horizons.  
Mail check to:  
Expanding Your Horizons  
Texas Wesleyan University  
1201 Wesleyan St.  
Fort Worth, TX 76105

I'm not a robot  


Submit



### 6.3.3.2 Student Registration Success Page

The student registration success page is shown to students after a successful registration and provides contact information for Dr. Moore.



## Registration Successful!

Thank you for registering as a student participant!

Please check your email for your registration confirmation.

We look forward to seeing you at the Expanding Your Horizons event at Texas Wesleyan University on April 1, 2017.

If you have any questions, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

### 6.3.3.3 Student Registration Success Email

The student registration success email is sent to the email address the Student entered in her registration form. The email contains information about the registration fee, the address of TxWes, and a unique cancellation that allows a student to cancel her registration for the event. The email is sent after a student registration form is successfully submitted.

## Thanks For Registering!

You've officially signed up for Texas Wesleyan University's Expanding Your Horizons program! In order to attend you'll need to send in your \$5 registration fee. Make checks payable to **Expanding Your Horizons** and mail them to:

**Expanding Your Horizons  
Texas Wesleyan University  
1201 Wesleyan St.  
Fort Worth, TX 76105**

Please be at the Sid W. Richardson Center by at least 8:45 am on April 1st to check in. For directions visit the TWU's [maps and directions](#).

### Program Schedule:

Time	Event
9:00 - 9:25 a.m.	Registration @ Sid Richardson Center
9:30 a.m.	Opening Session
10:30 a.m.	Workshop 1*
10:40 a.m.	Adult & Teacher Workshop
11:25 a.m.	Workshop 2*
12:10 p.m.	Pizza Lunch/Door Prizes
12:50 p.m.	Workshop 3*
1:00 p.m.	Adult & Teacher Workshop
1:45 p.m.	Workshop 4*
2:30 - 3 p.m.	Finale @ Sid Richardson Center

\*Student Workshops

If you ever need to cancel your registration, click this [cancel link](#).

This is a unique link just for you! If anyone else clicks this link, you will be unregistered, so don't share this link with someone you don't know!

## 6.3.4 Registration Closed

### 6.3.4.1 Registration Closed Page

The registration closed page appears in place of the student registration form if a student attempts to access the Student Registration Form after registration has been closed.



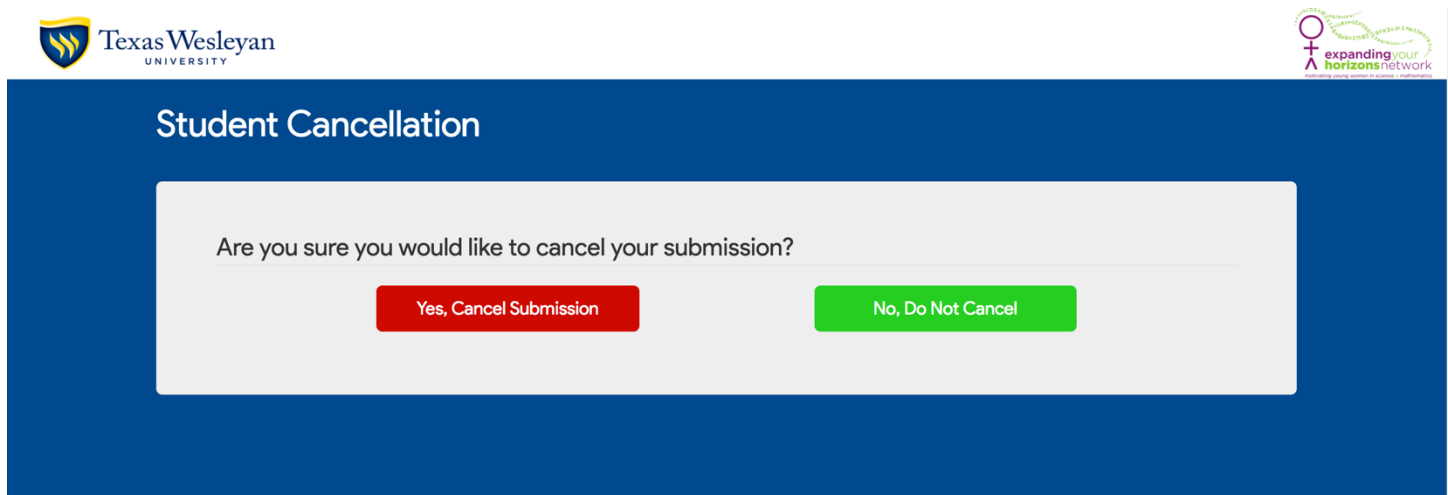
## Registration is Closed

Sorry, online registration is closed. Contact Dr. Jane Moore at (817) 531-4882 for availability of space.

## 6.3.5 Student Cancellation

### 6.3.5.1 Student Cancellation Form

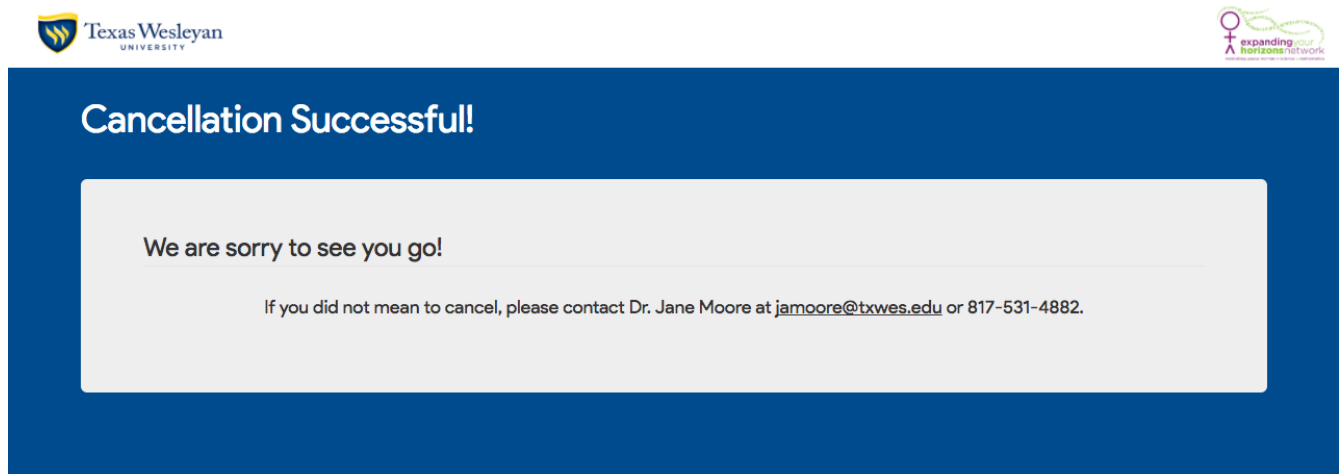
Students can cancel their registration through the student cancellation form. Each Student is given a unique cancellation URL with which they may access this form. Their unique URL allows the system to identify which Student needs to be removed from the schedule.



The screenshot shows a web interface for "Student Cancellation". At the top left is the Texas Wesleyan University logo. At the top right is the "expanding your horizons network" logo. The main heading is "Student Cancellation". Below the heading is a light gray box containing the question "Are you sure you would like to cancel your submission?". There are two buttons: a red button labeled "Yes, Cancel Submission" and a green button labeled "No, Do Not Cancel".

### 6.3.5.2 Student Cancellation Success

The student cancellation success page appears after a Student has successfully cancelled her registration.



The screenshot shows a web interface for "Cancellation Successful!". At the top left is the Texas Wesleyan University logo. At the top right is the "expanding your horizons network" logo. The main heading is "Cancellation Successful!". Below the heading is a light gray box containing the text "We are sorry to see you go!". Below this text is a line of text: "If you did not mean to cancel, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882."

### 6.3.5.3 Student Cancellation Failure

The Student Cancellation Failure page displays if the cancel page is loaded with an invalid cancellation token.



## Error: Invalid Token

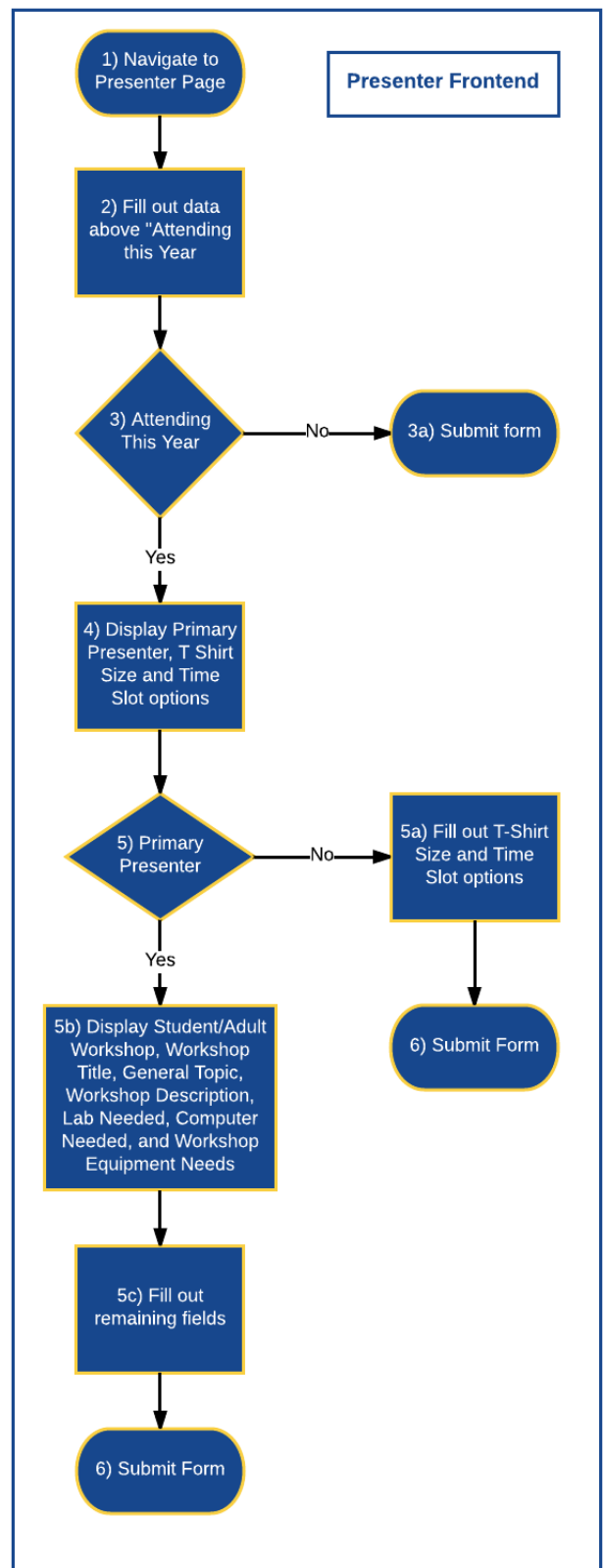
The cancel token you've used is either missing or invalid. Did you click on the link from your confirmation email to get here? If so, please wait 24 hours and try again. If it's not fixed by then, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882 to get your registration canceled.

## 6.3.6 Presenter Registration

### 6.3.6.1 Presenter Registration Interaction

The design of the Presenter Registration form is meant to provide the Presenter with only the fields that are applicable at any point in time. Whenever a Presenter makes a selection on certain form fields, other fields are revealed or hidden to ensure that only fields relevant to that presenter are visible and required. The following flow diagram describes this interaction:

- 1) [Action] Presenter visits the web page for presenter registration (/signup/presenter).
- 2) [Action] Presenter fills out all fields before the “I will be attending this year” check box.
- 3) [Decision] Is the Presenter attending this year?
  - a. If Yes: see number 4.
  - b. If No: The Presenter submits the form.
- 4) [Action] The Presenter checks the box and certain fields (Primary Presenter, T-Shirt Size and Time Slot) will appear. The Participant clicks “Submit”.
- 5) [Decision] Is the Presenter the primary presenter?
  - a. If No: Fill out the T-Shirt Size and Time Slot fields
  - b. If Yes: Display remaining fields
- 6) [Action] Presenter submits form.



### 6.3.6.2 Presenter Form Initial View

The Presenter Registration Form is shown below. All fields except Address Line 2 and Extension are required to submit the form. The Presenter is required to complete a reCAPTCHA to submit the form. The Presenter Registration Form is accessible by appending “/signup/presenter” to the system’s base URL. The logic that determines what widgets are shown is found in **Section 6.3.6.1**.



## Presenter Registration

Parent and teacher participation is important to the success of the conference. Thank you for making the day special for participants!


### Presenter Information

First Name:	<input type="text" value="First Name"/>
Last Name:	<input type="text" value="Last Name"/>
Job Title or Department:	<input type="text" value="Job Title or Department"/>
Employer or University:	<input type="text" value="Employer or University"/>
Mailing Address:	<input type="text" value="Address Line 1"/>
	<input type="text" value="Address Line 2"/>
City:	<input type="text" value="City"/>
State:	<input type="text" value="Texas"/>
Zip:	<input type="text" value="Zip Code"/>
Cell Phone:	<input type="text" value="(xxx) xxx-xxxx"/>
Office Phone:	<input type="text" value="(xxx) xxx-xxxx"/>
Extension:	<input type="text"/>
Email Address:	<input type="text" value="email@sample.com"/>

We don't send spam or sell your contact information to anyone.

I will be attending this year (2017).

T-Shirt Size:  S  M  L  XL  XXL

I'm not a robot 

reCAPTCHA  
Privacy - Terms

Submit

### 6.3.6.3 Presenter Form Attending This Year

If the Presenter checks the “I will be attending this year” box, a few more fields will appear. This is displayed in the image below.



## Presenter Registration

Parent and teacher participation is important to the success of the conference. Thank you for making the day special for participants!

### Presenter Information

First Name:	<input type="text" value="First Name"/>
Last Name:	<input type="text" value="Last Name"/>
Job Title or Department:	<input type="text" value="Job Title or Department"/>
Employer or University:	<input type="text" value="Employer or University"/>
Mailing Address:	<input type="text" value="Address Line 1"/>
	<input type="text" value="Address Line 2"/>
City:	<input type="text" value="City"/>
State:	<input type="text" value="Texas"/>
Zip:	<input type="text" value="Zip Code"/>
Cell Phone:	<input type="text" value="(xxx) xxx-xxxx"/>
Office Phone:	<input type="text" value="(xxx) xxx-xxxx"/>
Extension:	<input type="text"/>
Email Address:	<input type="text" value="email@sample.com"/>

We don't send spam or sell your contact information to anyone.


I will be attending this year (2017).

Primary Presenter:  Yes  No

T-Shirt Size:  S  M  L  XL  XXL

We ask that each presenter give two 45 minute workshops. Please select your workshop time preference below. We will make every effort to honor your request. Confirmation emails will be sent out approximately one month before the conference.

- Two morning workshops (approx. 10:15am - 12:10pm)
- Two afternoon workshops (approx. 12:30pm - 2:30pm)
- Four workshops (morning and afternoon workshops)
- No Preference (available either morning or afternoon)

I'm not a robot   
reCAPTCHA  
Privacy - Terms

Submit



### 6.3.6.4 Presenter Form Primary Presenter

If the Presenter selects “Yes,” the remaining fields of the form will appear. This is displayed in the image below.

**Presenter Registration**  
Parent and teacher participation is important to the success of the conference. Thank you for making the day special for participants!

**Presenter Information**

First Name:

Last Name:

Job Title or Department:

Employer or University:

Mailing Address:

City:

State:

Zip:

Cell Phone:

Office Phone:

Extension:

Email Address:   
We don't send spam or sell your contact information to anyone.

I will be attending this year (2017).

Primary Presenter:  Yes  No

Student or Adult Workshop:  Student Workshop  Adult Workshop

Workshop Title:

General Topic:

Workshop Description:

Lab Needed:  Yes  No


Computer Needed:  Yes  No

Workshop Equipment Needs:

T-Shirt Size:  S  M  L  XL  XXL

We ask that each presenter give two 45 minute workshops. Please select your workshop time preference below. We will make every effort to honor your request. Confirmation emails will be sent out approximately one month before the conference.

Two morning workshops (approx. 10:15am - 12:10pm)  
 Two afternoon workshops (approx. 12:30pm - 2:30pm)  
 Four workshops (morning and afternoon workshops)  
 No Preference (available either morning or afternoon)

I'm not a robot   
reCAPTCHA  
Privacy - Terms

**Submit**

### 6.3.6.5 Presenter Form Secondary Presenter

If the Presenter selects “No” for primary presenter, only the Workshop Title and the T-Shirt Size fields will appear. This is displayed in the image below.



## Presenter Registration

Parent and teacher participation is important to the success of the conference. Thank you for making the day special for participants!

### Presenter Information

**First Name:**   
**Last Name:**   
**Job Title or Department:**   
**Employer or University:**   
**Mailing Address:**   
  
**City:**   
**State:**   
**Zip:**   
**Cell Phone:**   
**Office Phone:**   
**Extension:**   
**Email Address:**   
We don't send spam or sell your contact information to anyone.

I will be attending this year (2017).


**Primary Presenter:**  Yes  No

**Workshop Title:**

**T-Shirt Size:**  S  M  L  XL  XXL

We ask that each presenter give two 45 minute workshops. Please select your workshop time preference below. We will make every effort to honor your request. Confirmation emails will be sent out approximately one month before the conference.

- Two morning workshops (approx. 10:15am - 12:10pm)
- Two afternoon workshops (approx. 12:30pm - 2:30pm)
- Four workshops (morning and afternoon workshops)
- No Preference (available either morning or afternoon)

I'm not a robot
 
  
reCAPTCHA  
Privacy - Terms

Submit

### 6.3.6.6 Presenter Registration Success

The Presenter Registration Success page appears after a Presenter successfully registers for the event.



## Registration Successful!

Thank you for registering as a presenter!

Please check your email for your registration confirmation.

We look forward to seeing you at the Expanding Your Horizons event at Texas Wesleyan University on April 1, 2017.

If you have any questions, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

Thank you for your support!

### 6.3.6.7 Presenter Registration Failure

The Presenter Registration Failure page appears after a Presenter registration fails.



## Error

It looks like something went wrong with your registration process. Try again! If the problem persists, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

## 6.3.7 School Registration

### 6.3.7.1 School Registration Form

The School Registration form allows administrators to add schools to the list of schools that appear in the dropdown for schools to choose from. The user is required to complete a reCAPTCHA to submit the form. The School Registration Form is accessible by appending “/signup/school” to the system’s base URL.



## School Registration

### School Information

School Name:

I'm not a robot



reCAPTCHA  
Privacy - Terms

### 6.3.7.2 School Registration Success

The School Registration Success page is shown after a school has been successfully registered with the System.



## Success!

Thank you for registering!

Your school has been registered in our records.

Thank you!

### 6.3.7.3 School Registration Failure

The School Registration Failure page appears if a school fails to be registered with the System.



## Error: School Not Registered

It looks like something went wrong with registering your school. Try again! If the problem persists, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

### 6.3.8 Adult Registration

#### 6.3.8.1 Adult Registration Form

The Adult Registration form allows parents and teachers to register to become a participant for the conference. The first name, last name, address line 1, city, state, zip, email, and t-shirt size fields are required to submit the form. The user is also required to complete a reCAPTCHA to submit the form. The Adult Registration Form is accessible by appending “/signup/adult” to the system’s base URL.



## Parent/Teacher Registration

Parent and teacher participation is important to the success of the conference. Thank you for making the day special for participants!  
\* \$5 registration fee

### Parent/Teacher Information

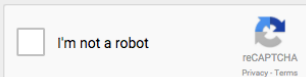
First Name:	<input type="text" value="First Name"/>
Last Name:	<input type="text" value="Last Name"/>
Home Address:	<input type="text" value="Address Line 1"/> <input type="text" value="Address Line 2"/>
City:	<input type="text" value="City"/>
State:	<input type="text" value="Texas"/>
Zip:	<input type="text" value="Zip Code"/>
Email Address	<input type="text" value="email@sample.com"/> <small>We don't send spam or sell your contact information to anyone.</small>
School	<input type="text"/> <small>(if applicable)</small>
T-Shirt Size:	<input type="radio"/> S <input type="radio"/> M <input type="radio"/> L <input type="radio"/> XL <input type="radio"/> XXL
Please select all that apply:	<input type="checkbox"/> Parent of one or more student attendees <input type="checkbox"/> Teacher of one or more student attendees <input type="checkbox"/> Girl Scout Troop Leader

**Adults and teachers DO NOT attend student workshops!**

Parents and teachers attend workshops and assist in general activities (refreshments, T-shirt/certificate distribution, etc.)

Make checks payable to [Expanding Your Horizons](#).

Mail check to:  
Expanding Your Horizons  
Texas Wesleyan University  
1201 Wesleyan St.  
Fort Worth, TX 76105



Submit

### 6.3.8.2 Adult Registration Success Page

The Adult Registration Success Page is displayed after a parent or teacher registers for the event.



## Congratulations!

Thank you for registering as a parent/teacher participant!

Please check your email for your registration confirmation.

We look forward to seeing you at the Expanding Your Horizons event at Texas Wesleyan University on April 1, 2017.

If you have any questions, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

Thank you for your support!

### 6.3.8.3 Adult Registration Success Email

This email is sent to the Adult that successfully register for the event. The email contains information regarding the local, time, and cost of the event.

## Thanks For Registering!

Thank you, Jill Herrington, you've officially signed up for Texas Wesleyan University's Expanding Your Horizons program as an adult participant! Parents and teachers attend workshops and assist in general activities (refreshments, T-shirt/certificate distribution, etc.). The date of the event is April 1st. In order to attend, you'll need to send in your \$5 registration fee. Make checks payable to **Expanding Your Horizons** and mail them to:

**Expanding Your Horizons**  
Texas Wesleyan University  
1201 Wesleyan St.  
Fort Worth, TX 76105

Please be at the Sid W. Richardson Center by at least 9:00 am to sign in and get started. For directions, visit the TWU's [maps and directions page](#).

For more information about the conference visit [TWU's Expanding Your Horizons Homepage](#).

### 6.3.9 Group Leader Registration

#### 6.3.9.1 Group Leader Registration Form

The Group Leader Form allows group leaders to register for the event. Group leaders escort groups of students from class to class and assist the presenters as needed. The first name, last name, address line 1, city, state, zip, email, t-shirt size, available time fields are required to submit the form. The user is also required to complete a reCAPTCHA to submit the form. The Group Leader Registration Form is accessible by appending “/signup/groupleader” to the system’s base URL.



## Group Leader Registration

Group leader participation is important to the success of the conference. Thank you for making the day special for participants!

### Group Leader Information

**First Name:**

**Last Name:**

**Home Address:**

**City:**

**State:**

**Zip:**


**Email Address**   
We don't send spam or sell your contact information to anyone.

**School**   
(if applicable)

**T-Shirt Size:**  S  M  L  XL  XXL

Please select the times you will be able for the event:

- All Day:** On EYH day, be at Sid Richardson Center at 8:15 a.m. Help with EYH registration, take girls to workshops, lunch, and back for the finale in the gym at 2:30.
- 9:00 a.m. - 12 noon:** Be a group leaders or help presenters with equipment and other things as necessary.
- 12 noon - 3:00 p.m.:** Be a group leaders or help presenters with equipment and the finale in the gym.

I'm not a robot   
reCAPTCHA  
Privacy - Terms

Submit



### 6.3.9.2 Group Leader Registration Success

This success page appears after a group leader successfully registers for the event.



## Registration Successful!

Thank you for registering as a group leader!

Please check your email for your registration confirmation.

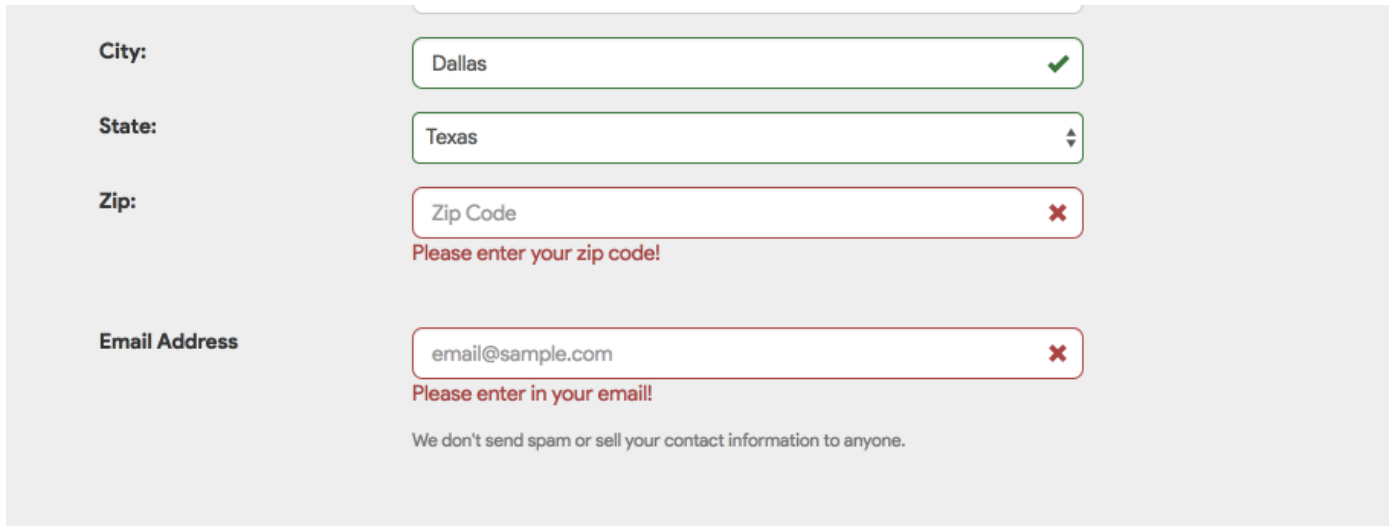
We look forward to seeing you at the Expanding Your Horizons event at Texas Wesleyan University on April 1, 2017.

If you have any questions, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

Thank you for your support!

## 6.3.10 Form Field Errors

### 6.3.10.1 Missing Form Fields

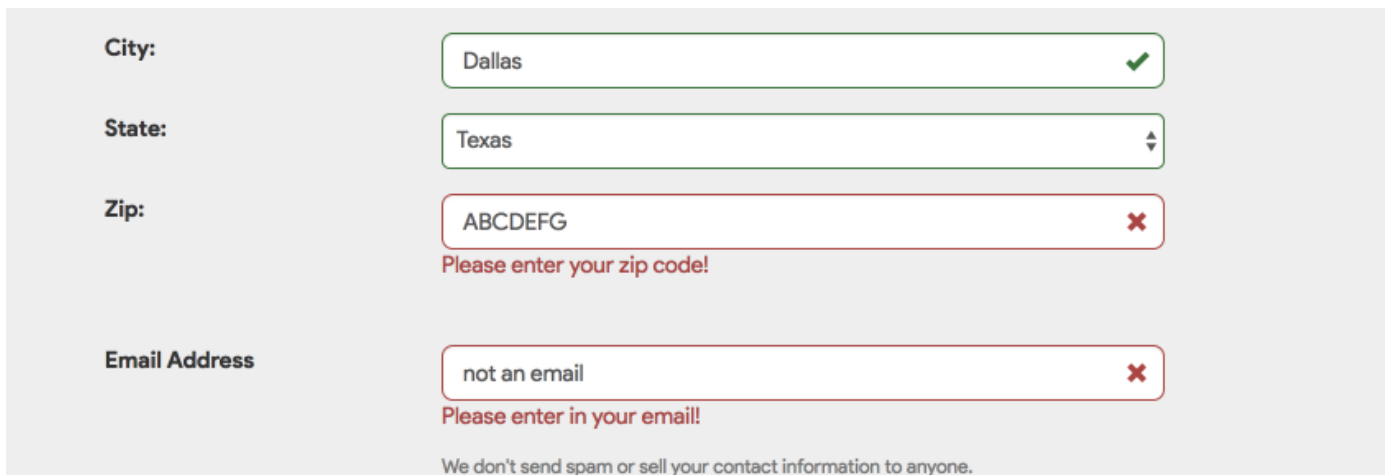


A screenshot of a form with four fields: City, State, Zip, and Email Address. The City field contains 'Dallas' and has a green checkmark. The State field contains 'Texas' and has a dropdown arrow. The Zip field is empty and has a red 'X' and the error message 'Please enter your zip code!'. The Email Address field contains 'email@sample.com' and has a red 'X' and the error message 'Please enter in your email!'. Below the fields is a disclaimer: 'We don't send spam or sell your contact information to anyone.'

City:	<input type="text" value="Dallas"/>	✓
State:	<input type="text" value="Texas"/>	▾
Zip:	<input type="text" value=""/>	✗ Please enter your zip code!
Email Address	<input type="text" value="email@sample.com"/>	✗ Please enter in your email!

We don't send spam or sell your contact information to anyone.

### 6.3.10.2 Error Form Fields



A screenshot of a form with four fields: City, State, Zip, and Email Address. The City field contains 'Dallas' and has a green checkmark. The State field contains 'Texas' and has a dropdown arrow. The Zip field contains 'ABCDEFG' and has a red 'X' and the error message 'Please enter your zip code!'. The Email Address field contains 'not an email' and has a red 'X' and the error message 'Please enter in your email!'. Below the fields is a disclaimer: 'We don't send spam or sell your contact information to anyone.'

City:	<input type="text" value="Dallas"/>	✓
State:	<input type="text" value="Texas"/>	▾
Zip:	<input type="text" value="ABCDEFG"/>	✗ Please enter your zip code!
Email Address	<input type="text" value="not an email"/>	✗ Please enter in your email!

We don't send spam or sell your contact information to anyone.

## 6.3.11 Duplicate Participant Entry

The Duplicate Participant Entry page appears if the System receives two or more Participants with identical information



### Error!

#### Duplicate Entry

It looks like you've already registered for Expanding Your Horizons. If you think that you're receiving this page by mistake, please contact Dr. Jane Moore at [jamoore@txwes.edu](mailto:jamoore@txwes.edu) or 817-531-4882.

## 6.4 Schedule and Report Generation

### 6.4.1 Overview

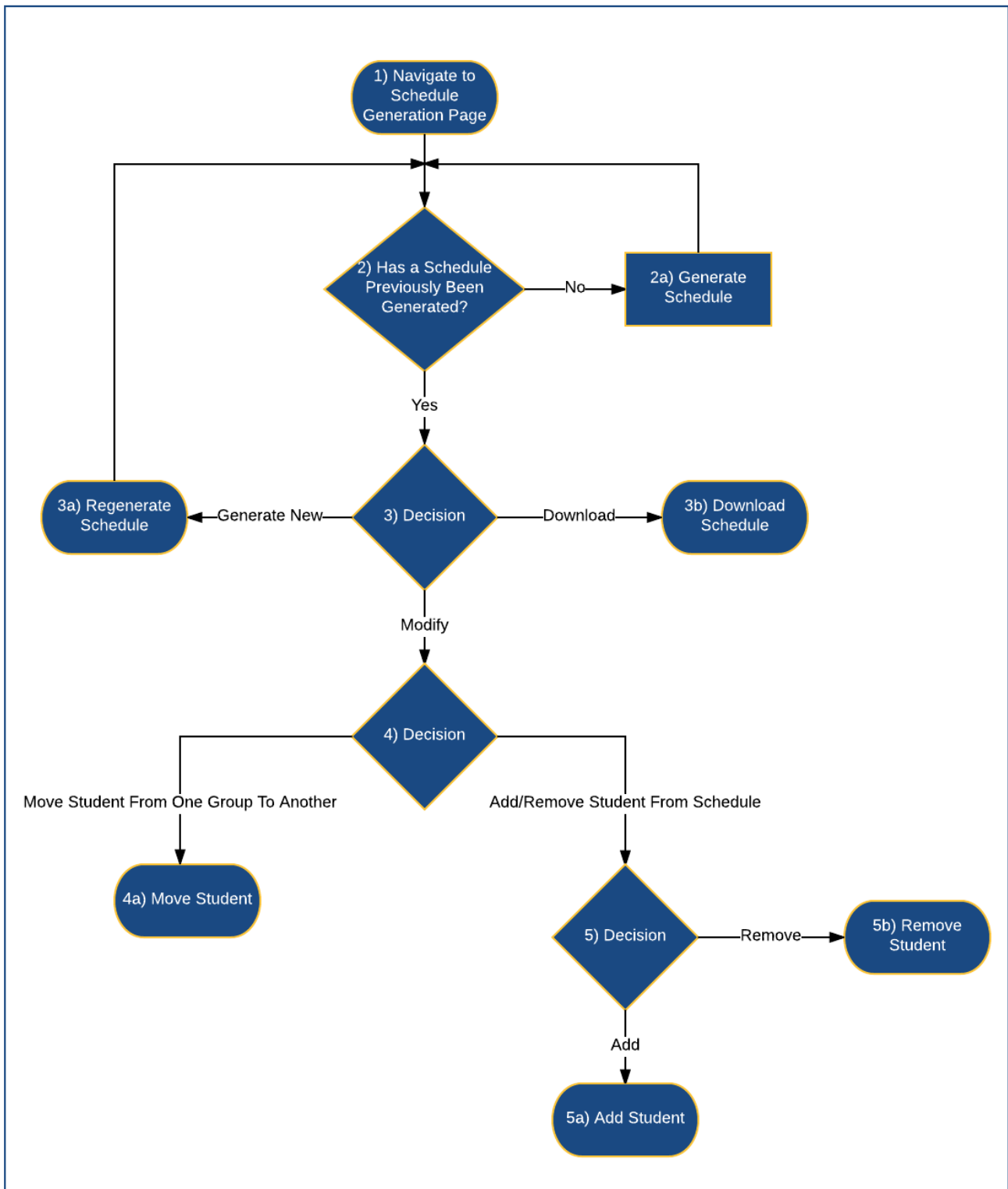
The Schedule/Report Generation interface allows the user to generate a new schedule, view the most recently generated schedule, modify the most recently generated schedule, and generate the reports listed in **Appendix C** of this document. The page contains two tabs: the Scheduler Tab and the Reports Tab. The Scheduler Tab allows the user to create, modify, download, and view schedules. The Reports Tab allows the user to generate and download reports. The Schedule/Report Generation Interface is accessible by appending “/schedule” to the system’s base URL.

### 6.4.2 Scheduling Tab

#### 6.4.2.1 Schedule Generation User Interaction

The following are the descriptions of each step of the activity diagram.

- 1) [Action] The Organizer visits the web page for schedule and report generation (/schedule).
- 2) [Decision] Has the schedule been generated?
  - a. If Yes: See Number 3.
  - b. If No: Schedule is generated. Return to Number 2.
- 3) [Decision] The Organizer chooses to either “Generate New,” “Modify,” and “Download.”
  - a. If Generate New: Schedule is regenerated. Return to Number 2.
  - b. If Modify: See Number 4.
  - c. If Download: Schedule is downloaded to the Organizer’s computer.
- 4) [Decision] The Organizer chooses to “Move Student From One Group To Another” or “Add/Remove Student From Schedule.”
  - a. If Move Student From One Group To Another: The Organizer selects a student to move and a group to move the student to/
  - b. If Add/Remove Student From Schedule: See Number 5.
- 5) [Action] The Organizer chooses to Add or Remove a Student.
  - a. If Add: The Organizer types the Student’s name and selects a group to add the student to.
  - b. If Remove: The Organizer selects a Student and removes them.



### 6.4.2.2 Schedule Generation

From the Scheduler Tab, the user is able to view the most recently generated schedule in a scrolling table. A new schedule can be created by clicking the “Generate New” button. The interface for modifying the schedule can be displayed by clicking the “Modify” button, and a printable schedule can be downloaded by clicking the “Download” button.



Scheduler
Reports
Other

#### Schedule Generation

Schedule Last Generated: 04 23, 2017: 02:31 PM

Percentage of Students in Their First Choice:

Percentage of Students in Their First or Second Choice:

Group: 1	Group: 2	Group: 3	Group: 4	Gr
<b>Workshops:</b> Dentistry : Shandra Workshop Astronomy : Kristel Workshop Aviation : Lettie Workshop Meteorology : Mirta Workshop	<b>Workshops:</b> Dentistry : Arline Workshop Meteorology : Olive Workshop Physics : Lewis Workshop Chemistry : Chris Workshop	<b>Workshops:</b> Meteorology : Olive Workshop Psychology/Sociology : Annalisa Workshop Dentistry : Shandra Workshop Earth Science : Sharyl Workshop	<b>Workshops:</b> Psychology/Sociology : Anya Workshop Meteorology : Shena Workshop Firefighting/EMT : Maud Workshop Physics : Lewis Workshop	W
<b>Students:</b> Albero, Andra Almasi, Camellia Amburgy, Winnifred Attridge, Leilani Bacchi, Logan Badal, Catherine Brutlag, Azzie Budd, Alyce Caple, Glynda Fortes, Brianne Haulbrook, Nancy Jackel, Jennine	<b>Students:</b> Annan, Lakenya Arguijo, Mui Augsburg, Lachelle Bergamine, Inger Billard, Jacque Burdess, Naida Cutts, Marquita Delagol, Donita Deschamps, Clair Feyler, Lucille Galli, Fermina Gruz, Elke	<b>Students:</b> Bastedo, Idalia Bendolph, Delores Dimarino, Paulina Eggen, Ema Elter, Rickie Gourlay, Jean Gwirtz, Camilla Habbyslaw, Francisca Halcomb, Marianela Lafoy, Classie Laningham, Michiko Lomu, Lou	<b>Students:</b> Anglemyer, Jolie Azua, Jonell Bazarte, Dione Block, Meta Cappas, Lennie Cosenza, Leisha Defrank, Joni Ellenbogen, Deandrea Halifax, Hildegarde Herera, Cecille Jacob, Alyssa Kleier, Lashanda	St

Generate New

Modify

Download

### 6.4.2.3 Schedule Modification

After clicking the “Modify” button on the Scheduler tab, the Schedule Modification interface appears, giving the user the option to move a student from one group to another group or add/remove a student from the schedule. Clicking a button displays the proper interface for the selected action.



Scheduler
Reports
Other

#### Schedule Generation

Schedule Last Generated: 04 23, 2017: 02:31 PM

Percentage of Students in Their First Choice:

Percentage of Students in Their First or Second Choice:

Group: 1	Group: 2	Group: 3	Group: 4	
<b>Workshops:</b> Dentistry : Shandra Workshop Astronomy : Kristel Workshop Aviation : Lettie Workshop Meteorology : Mirta Workshop	<b>Workshops:</b> Dentistry : Arline Workshop Meteorology : Olive Workshop Physics : Lewis Workshop Chemistry : Chris Workshop	<b>Workshops:</b> Meteorology : Olive Workshop Psychology/Sociology : Annalisa Workshop Dentistry : Shandra Workshop Earth Science : Sharyl Workshop	<b>Workshops:</b> Psychology/Sociology : Anya Workshop Meteorology : Shena Workshop Firefighting/EMT : Maud Workshop Physics : Lewis Workshop	Wi
<b>Students:</b> Albero, Andra Almasi, Camellia Amburgy, Winnifred Attridge, Leilani Bacchi, Logan Badal, Catherine Brutlag, Azzie Budd, Alyce Caple, Glynda Fortes, Brianne Haulbrook, Nancy Jackel, Jennine	<b>Students:</b> Annan, Lakenya Arguijo, Mui Augsburg, Lachelle Bergamine, Inger Billard, Jacque Burdess, Naida Cutts, Marquita Delagol, Donita Deschamps, Clair Feyler, Lucille Galli, Fermina Gruz, Elke	<b>Students:</b> Bastedo, Idalia Bendolph, Delores Dimarino, Paulina Eggen, Ema Elter, Rickie Gourlay, Jean Gwirtz, Camilla Habbyslaw, Francisca Halcomb, Marianela Lafoy, Classie Laningham, Michiko Lomu, Lou	<b>Students:</b> Anglemyer, Jolie Azua, Jonell Bazarte, Dione Block, Meta Cappas, Lennie Cosenza, Leisha Defrank, Joni Ellenbogen, Deandrea Halifax, Hildegarde Herera, Cecille Jacob, Alyssa Kleier, Lashanda	St

Generate New

Modify

Download

#### Schedule Modification

Move Student From One Group to Another

Add/Remove Student From Schedule

### 6.4.2.4 Schedule Student Moving

After clicking the “Move Student From One Group to Another” button, this interface appears, allowing the user to select a student to move to another group.



Scheduler
Reports
Other

#### Schedule Generation

Schedule Last Generated: 04 23, 2017: 02:31 PM

Percentage of Students in Their First Choice:

Percentage of Students in Their First or Second Choice:

Group: 1	Group: 2	Group: 3	Group: 4	Gr
<b>Workshops:</b> Dentistry : Shandra Workshop Astronomy : Kristel Workshop Aviation : Lettie Workshop Meteorology : Mirta Workshop	<b>Workshops:</b> Dentistry : Arline Workshop Meteorology : Olive Workshop Physics : Lewis Workshop Chemistry : Chris Workshop	<b>Workshops:</b> Meteorology : Olive Workshop Psychology/Sociology : Annalisa Workshop Dentistry : Shandra Workshop Earth Science : Sharyl Workshop	<b>Workshops:</b> Psychology/Sociology : Anya Workshop Meteorology : Shena Workshop Firefighting/EMT : Maud Workshop Physics : Lewis Workshop	Wi
<b>Students:</b> Albero, Andra Almasi, Camellia Amburgy, Winnifred Attridge, Leilani Bacchi, Logan Badal, Catherine Brutlag, Azzie Budd, Alyce Caple, Glynda Fortes, Brianne Haulbrook, Nancy Jackel, Jennine	<b>Students:</b> Annan, Lakenya Arguijo, Mui Augsburg, Lachelle Bergamine, Inger Billard, Jacque Burdess, Naida Cutts, Marquita Delagol, Donita Deschamps, Clair Feyler, Lucille Galli, Fermina Gruz, Elke	<b>Students:</b> Bastedo, Idalia Bendolph, Delores Dimarino, Paulina Eggen, Ema Elter, Rickie Gourlay, Jean Gwirtz, Camilla Habbysaw, Francisca Halcomb, Marianela Lafoy, Classie Laningham, Michiko Lomu, Lou	<b>Students:</b> Anglemyer, Jolie Azua, Jonell Bazarte, Dione Block, Meta Cappas, Lennie Cosenza, Leisha Defrank, Joni Ellenbogen, Deandrea Halifax, Hildegarde Herera, Cecille Jacob, Alyssa Kleier, Lashanda	Sti

Generate New
Modify
Download

#### Schedule Modification

Move Student From One Group to Another
Add/Remove Student From Schedule

#### Move Student

Move student  to group

Move Student



### 6.4.2.5 Schedule Adding Student

After clicking the “Add/Remove Student From Schedule” button, only the “Add” and “Remove” radio buttons on the far left appear. If the user selects “Add”, this interface will appear to allow the user to add a student to a group.



Scheduler
Reports
Other

### Schedule Generation

Schedule Last Generated: 04 23, 2017: 02:31 PM

Percentage of Students in Their First Choice:

Percentage of Students in Their First or Second Choice:

Group: 1	Group: 2	Group: 3	Group: 4	
<b>Workshops:</b> Dentistry : Shandra Workshop Astronomy : Kristel Workshop Aviation : Lettie Workshop Meteorology : Mirta Workshop	<b>Workshops:</b> Dentistry : Arline Workshop Meteorology : Olive Workshop Physics : Lewis Workshop Chemistry : Chris Workshop	<b>Workshops:</b> Meteorology : Olive Workshop Psychology/Sociology : Annalisa Workshop Dentistry : Shandra Workshop Earth Science : Sharyl Workshop	<b>Workshops:</b> Psychology/Sociology : Anya Workshop Meteorology : Shena Workshop Firefighting/EMT : Maud Workshop Physics : Lewis Workshop	Wi
<b>Students:</b> Albero, Andra Almasi, Camellia Amburgy, Winnifred Attridge, Leilani Bacchi, Logan Badal, Catherine Brutlag, Azzie Budd, Alyce Caple, Glynda Fortes, Brianne Haulbrook, Nancy Jackel, Jennine	<b>Students:</b> Annan, Lakenya Arguijo, Mui Augsburg, Lachelle Bergamine, Inger Billard, Jacque Burdess, Naida Cutts, Marquita Delagol, Donita Deschamps, Clair Feyler, Lucille Galli, Fermina Gruz, Elke	<b>Students:</b> Bastedo, Idalia Bendolph, Delores Dimarino, Paulina Eggen, Ema Elter, Rickie Gourlay, Jean Gwirtz, Camilla Habbyslaw, Francisca Halcomb, Mariana Lafoy, Classie Laningham, Michiko Lomu, Lou	<b>Students:</b> Anglemyer, Jolie Azua, Jonell Bazarte, Dione Block, Meta Cappas, Lennie Cosenza, Leisha Defrank, Joni Ellenbogen, Deandrea Halifax, Hildegarde Herera, Cecille Jacob, Alyssa Kleier, Lashanda	St

Generate New
Modify
Download

### Schedule Modification

Move Student From One Group to Another
Add/Remove Student From Schedule

### Add/Remove Student From Schedule

Add
  Remove

Student

to group

Add Student

### 6.4.2.6 Schedule Removing Student

After selecting the “Remove” radio button, the above interface appears to allow the user to select a student to remove from the conference. Students are sorted alphabetically by last name.



Scheduler
Reports
Other

#### Schedule Generation

Schedule Last Generated: 04 23, 2017: 02:31 PM

Percentage of Students in Their First Choice:

Percentage of Students in Their First or Second Choice:

Group: 1	Group: 2	Group: 3	Group: 4	Gr
Workshops: Dentistry : Shandra Workshop Astronomy : Kristel Workshop Aviation : Lettie Workshop Meteorology : Mirta Workshop	Workshops: Dentistry : Arline Workshop Meteorology : Olive Workshop Physics : Lewis Workshop Chemistry : Chris Workshop	Workshops: Meteorology : Olive Workshop Psychology/Sociology : Annalisa Workshop Dentistry : Shandra Workshop Earth Science : Sharyl Workshop	Workshops: Psychology/Sociology : Anya Workshop Meteorology : Shena Workshop Firefighting/EMT : Maud Workshop Physics : Lewis Workshop	Wi
Students: Albero, Andra Almasi, Camellia Amburgy, Winnifred Attridge, Leilani Bacchi, Logan Badal, Catherine Brutlag, Azzie Budd, Alyce Caple, Glynda Fortes, Brianne Haulbrook, Nancy Jackel, Jennine	Students: Annan, Lakenya Arguijo, Mui Augsburg, Lachelle Bergamine, Inger Billard, Jacque Burdess, Naida Cutts, Marquita Delagol, Donita Deschamps, Clair Feyler, Lucille Galli, Fermina Gruz, Elke	Students: Bastedo, Idalia Bendolph, Delores Dimarino, Paulina Eggen, Ema Elter, Rickie Gourlay, Jean Gwirtz, Camilla Habbysaw, Francisca Halcomb, Marianela Lafoy, Classie Laningham, Michiko Lomu, Lou	Students: Anglemyer, Jolie Azua, Jonell Bazarte, Dione Block, Meta Cappas, Lennie Cosenza, Leisha Defrank, Joni Ellenbogen, Deandrea Halifax, Hildegarda Herera, Cecille Jacob, Alyssa Kleier, Lashanda	Sti

Generate New

Modify

Download

#### Schedule Modification

Move Student From One Group to Another

Add/Remove Student From Schedule

#### Add/Remove Student From Schedule

Add
  Remove
 

Student:

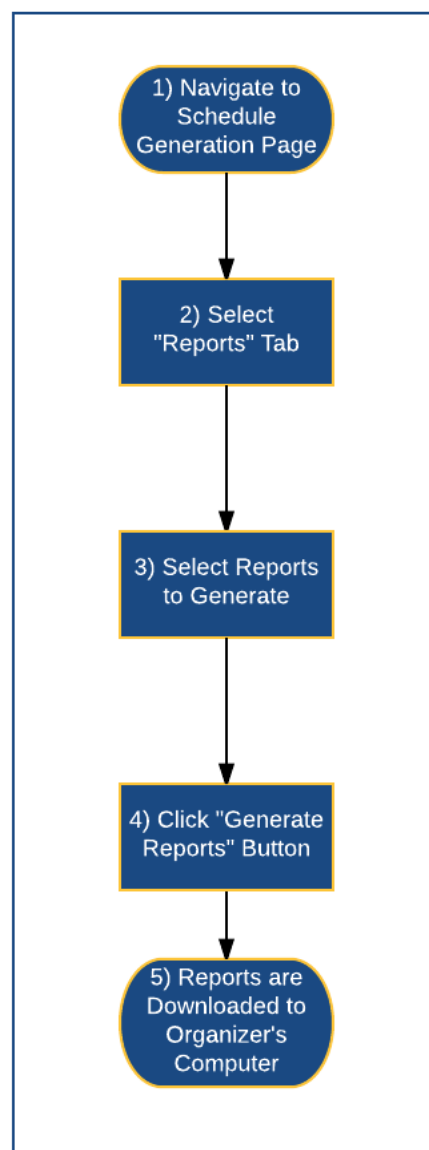
Remove Student

## 6.4.3 Report Generation Tab

### 6.4.3.1 Report Generation User Interaction

The following are the descriptions of each step of the activity diagram.

- 1) [Action] The Organizer visits the web page for schedule and report generation (/schedule).
- 2) [Action] The Organizer selects the “Reports” tab.
- 3) [Action] The Organizer checks all reports they would like to generate.
- 4) [Action] The Organizer clicks the “Generate Reports” button.
- 5) [Action] The reports are downloaded to the Organizer’s computer.



### 6.4.3.2 Report Generation

Upon selecting the “Reports” tab, the below interface is displayed and lets the Organizer select which reports he or she would like to generate. Once the reports have been selected, the “Generate Reports” button generates the requested reports and downloads them to the Organizer’s computer in a compressed ZIP file.



The screenshot shows a web interface with a dark blue background. At the top left, there are three tabs: "Scheduler", "Reports" (which is active), and "Other". Below the tabs, the heading "Generate Reports" is displayed. Underneath, the text "Select reports to generate:" is followed by two columns of checkboxes. The first column contains: Schedule, Students by Name, Students by Group, Students by School, Workshop Equipment Needs, Presenters, and Group Schedules. The second column contains: Adult Participants, Group Leaders, Parents, Teachers, Name Tags, and T-Shirt Orders. A yellow button labeled "Generate Reports" is positioned in the bottom right corner of the form area.

## 6.4.4 Other Tab

This tab allows the Organizer to reset the system for new registration. Resetting the system removes all information about Participants, workshops, and any other data contained in the system.



A screenshot of a web application interface. At the top, there are three tabs: "Scheduler", "Reports", and "Other", with "Other" being the active tab. Below the tabs, the heading "System Reset" is displayed. Underneath the heading, a message states: "Resetting the system will remove all information related to Students, Group Leaders, Presenters, Workshops, and Adult Participants." At the bottom of this message area, there is a prominent red button with the text "Yes, reset system!" in white.

## 6.5 Multi-Device Compatibility

All users of the SYH system will be able to view the web pages from a common browser, which includes mobile browsers such as the mobile versions of Safari and Chrome. The screenshots below showcase the adaptability of our forms and were taken on an iPhone 6 in the Chrome browser.

AT&T 5:26 PM 67%

Texas Wesleyan UNIVERSITY

expanding your horizons network  
nurturing young women in science + mathematics

# Student Registration

Space is limited, so register early! Registration confirmation will be emailed to your email address as soon as we've processed your information.  
\* \$5 registration fee mailed to TWU

## Student Information

**First Name:**

**Last Name:**

**Street Address:**

AT&T 5:26 PM 67%

Texas Wesleyan UNIVERSITY

expanding your horizons network  
nurturing young women in science + mathematics

# Presenter Registration

Parent and teacher participation is important to the success of the conference. Thank you for making the day special for participants!

## Presenter Information

**First Name:**

**Last Name:**

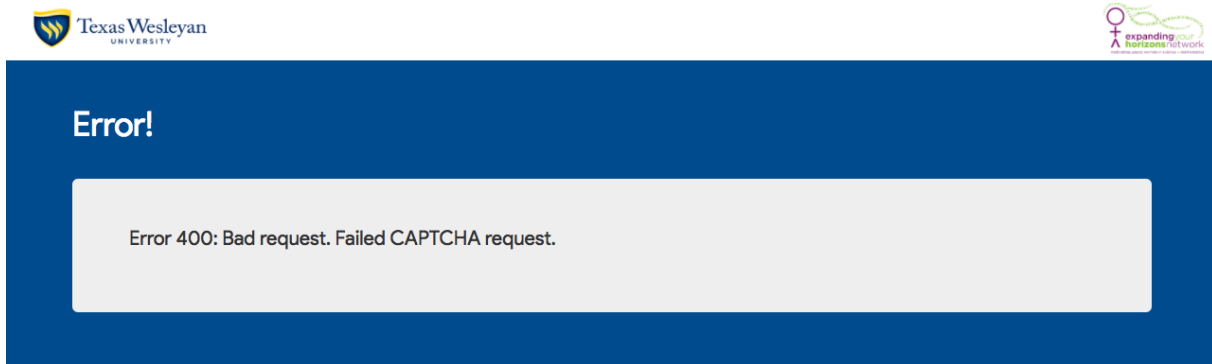
**Job Title or Department:**

**Employer or University:**

## 6.6 Error Pages

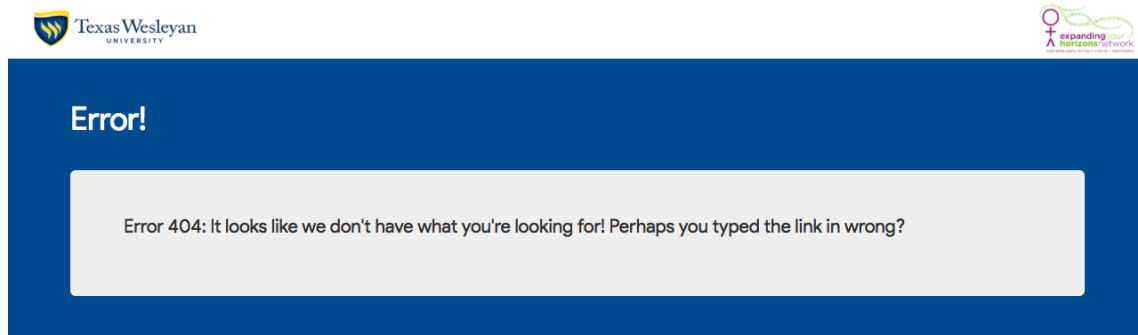
### 6.6.1 Error 400: Bad Request

This page appears for HTML 400 errors. In our system, it primarily appears is the user fails her reCAPTCHA test.



### 6.6.2 Error 404: Not Found

This error page appears for HTML 404 errors. This typically occurs when a user attempts to access a page that does not exist on the system.



### 6.6.3 Error 500: Server Side Error

This error page appears when any type of error occurs within the system.



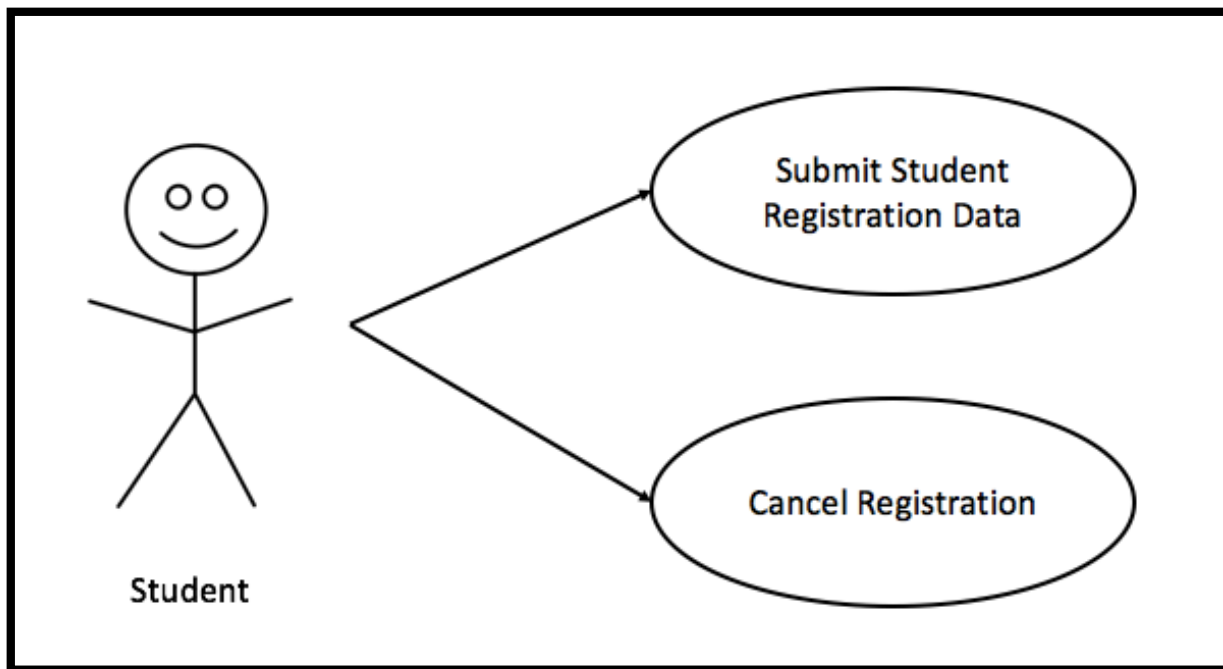
## 7 Glossary of Terms

Term	Phrase / Definition
EYH	Expanding Your Horizons
SQL	Structured Query Language
STEM	Science Technology Engineering and Math
SYH	Scheduling Your Horizons
TCU	Texas Christian University
TxWes	Texas Wesleyan University
WSGI	Web Server Gateway Interface
reCAPTCHA	User validation tool provided by Google



## 8 Appendix A: Use Case Models

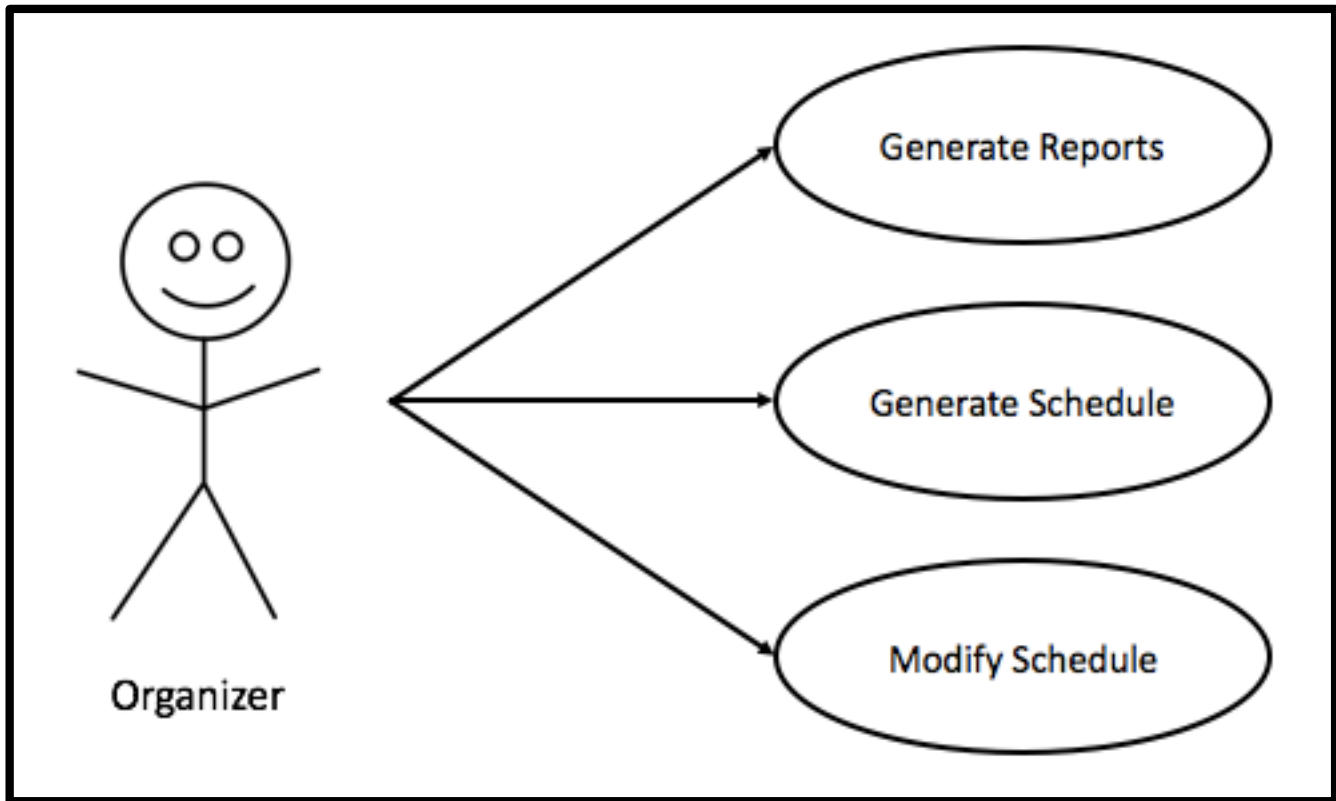
### 8.1 Use Case Model 1: Student



Submit Student Registration Data	
Actor	Student
Description	Student fills out the student submission online form and submits it
Data	Found in <b>Appendix B</b> .
Preconditions	Student must have gained access to the student submission page
Triggers	Student selects the "Submit" button
Course of Events	<ul style="list-style-type: none"> <li>• Navigate to the student submission page.</li> <li>• Fill out the student submission form and click the submit button.</li> <li>• The data entered will be transferred to the database</li> <li>• Email confirming the submission will be sent to the student.</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• If student is already registered, the student will be redirected to a page indicating this and will not be entered into the database.</li> <li>• If registration is closed, the student will be redirected to a page indicating this and will not be entered into the database.</li> </ul>
Post Conditions	Student information will be loaded into the database along with workshop topic preferences.

Cancel Registration	
<b>Actor</b>	Student
<b>Description</b>	Student cancels their registration for the EYH event.
<b>Data</b>	“Cancel my Registration” or “No, Do Not Cancel”, indicating whether the Student wishes to cancel or not.
<b>Preconditions</b>	Student receives an email with the confirmation of their registration.
<b>Triggers</b>	Student clicks “Cancel my Registration” button.
<b>Course of Events</b>	<ul style="list-style-type: none"> <li>• Students clicks on the cancel my registration link provided in the confirmation email.</li> <li>• They are navigated to a unique cancellation link.</li> <li>• The student will click the “Cancel my Registration” button.</li> <li>• Cancellation column in the database will indicate that the student has cancelled their registration.</li> <li>• Student receives cancelled confirmation email.</li> </ul>
<b>Exceptions</b>	Students who have not registered during the current year cannot cancel.
<b>Post Conditions</b>	Cancellation column in the student table of the database will indicate that the Student has cancelled their registration.

## 8.2 Use Case Model 2: Organizer

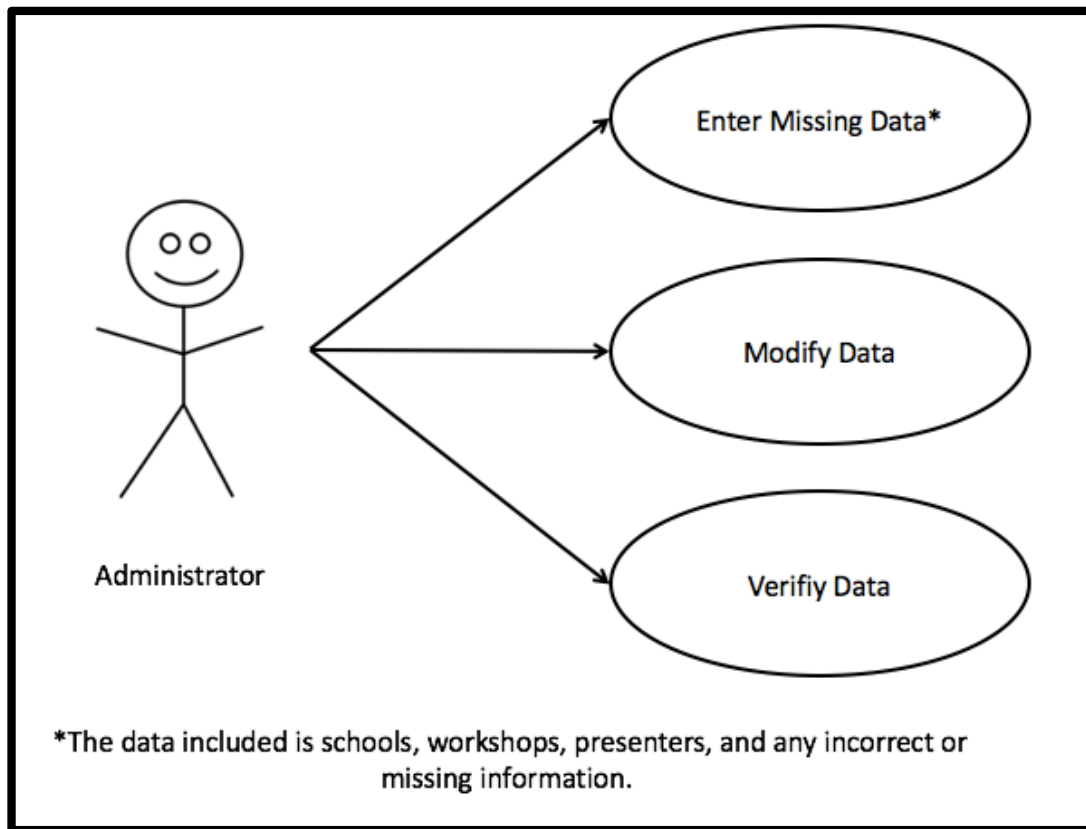


Generate Reports	
Actor	Organizer
Description	The selected reports are created in a CSV format and downloaded to the Organizer’s computer.
Data	Reports described in <b>Appendix C</b>
Preconditions	Organizer must log in to the site and navigate to the schedule generation page.
Triggers	Organizer selects the “Generate Reports” button in “Reports” tab and “Print” in the “Scheduler” tab.
Course of Events	<ul style="list-style-type: none"> <li>• Organizer selects the “Reports” tab.</li> <li>• Organizer selects the reports they would like to create</li> <li>• Organizer clicks the “Generate Reports” button.</li> <li>• The reports will be created in the CSV format and downloaded to the Organizer’s computer.</li> </ul>
Exceptions	Organizer does not have a login and must create one.
Post Conditions	Reports will be created in a CSV or DOCX format.

Generate Schedule	
Actor	Organizer
Description	The scheduling algorithm is run and displayed on the schedule generation page.
Data	Schedule described in <b>Appendix C</b>
Preconditions	Organizer must log in to the site and navigate to the schedule generation page.
Triggers	Organizer selects the “Generate New” button in the “Scheduler” tab.
Course of Events	<ul style="list-style-type: none"> <li>• Organizer selects the “Scheduler” tab.</li> <li>• Organizer selects “Generate New” button.</li> <li>• Schedule is generated and displayed above the “Generate New” button.</li> </ul>
Exceptions	Organizer does not have a login and must create one.
Post Conditions	Reports will be created in a CSV or DOCX format.

Modify Schedule	
Actor	Organizer
Description	The Organizer adds custom modification to the static schedule to move, add, or remove a student to the schedule.
Data	Schedule described in <b>Appendix C</b>
Preconditions	Organizer must log in to the site and navigate to the schedule generation page.
Triggers	Organizer selects the “Modify” button in the “Scheduler” tab.
Course of Events	<ul style="list-style-type: none"> <li>• Organizer selects the “Scheduler” tab.</li> <li>• Organizer selects “Modify” button.</li> <li>• Organizer selects the “Move Student From One Group To Another” button or the “Add/Remove Student From Schedule” button.</li> <li>• If the “Move Student From One Group To Another” button is selected, the Organizer will select a student to move and a group to move the student to then selects the “Move Student” button.</li> <li>• If the “Add/Remove Student From Schedule” button is selected, the Organizer selects either “Add” or “Remove.” <ul style="list-style-type: none"> <li>○ If “Add” is selected, the Organizer will type the first and last name of the student to add and the group to add the student to. The Organizer will select the “Add Student” button.</li> <li>○ If “Remove” is selected, the Organizer will select the student to remove and select the “Remove Student” button.</li> </ul> </li> </ul>
Exceptions	Organizer does not have a login and must create one.
Post Conditions	Reports will be created in a CSV or DOCX format.

### 8.3 Use Case Model 3: Administrator

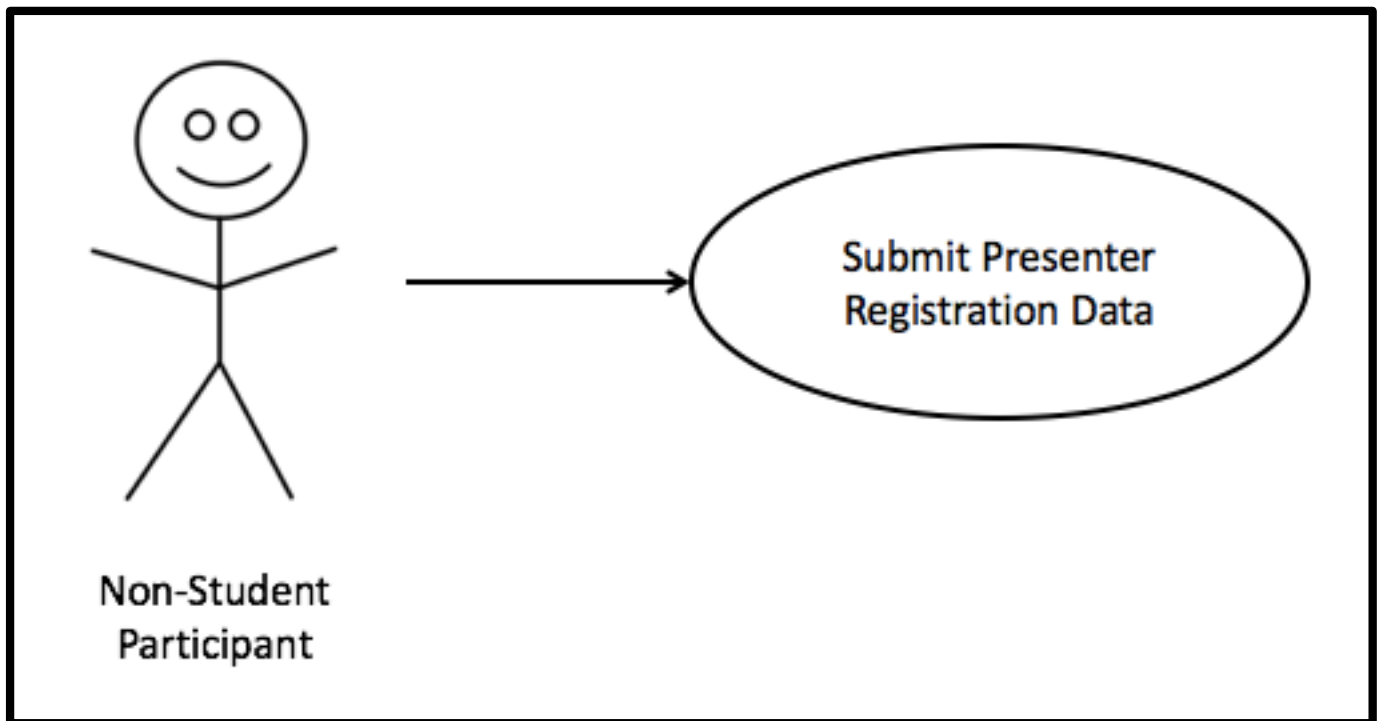


Enter Missing Data	
Actor	Administrator
Description	Administrator enters any missing information from online submissions.
Data	All data in database
Preconditions	Administrator has logged into the site and navigated to the page with the missing data.
Triggers	Administrator logs in to view and edit missing data.
Course of Events	<ul style="list-style-type: none"> <li>Administrator logs in.</li> <li>Administrator views reports and database to find missing data.</li> <li>Administrator can edit any data in any table.</li> <li>Administrator logs off.</li> </ul>
Exceptions	The administrator does not have a login and must create one.
Post Conditions	Data is updated and saved in the database.

Modify Data	
Actor	Administrator
Description	Administrator modifies any information from online submissions.
Data	All data in database
Preconditions	Administrator has logged into the site and navigated to the page with the data.
Triggers	Administrator logs in.
Course of Events	<ul style="list-style-type: none"> <li>• Administrator logs in.</li> <li>• Administrator views reports and database to find incorrect data.</li> <li>• Administrator can edit any data in any table.</li> <li>• Administrator logs off.</li> </ul>
Exceptions	The administrator does not have a login and must create one.
Post Conditions	Data is updated and saved in the database.

Verify Data	
Actor	Administrator
Description	Administrator verifies any information from online submissions.
Data	All data in database
Preconditions	Administrator has logged into the site and navigated to the page with the data.
Triggers	Administrator logs in.
Course of Events	<ul style="list-style-type: none"> <li>• Administrator logs in.</li> <li>• Administrator views reports and database to find data.</li> <li>• Administrator can edit any data in any table.</li> <li>• Administrator logs off.</li> </ul>
Exceptions	The administrator does not have a login and must create one.
Post Conditions	Data is updated and saved in the database.

## 8.4 Use Case Model 4: Non-Student Participant



## Submit Non-Student Participant Registration Data

Actor	Non-Student Participant
Description	Non-Student Participant fills out the group leader submission online form and submits it.
Data	Found in <b>Appendix B</b> .
Preconditions	Non-Student Participant must have gained access to the presenter submission page.
Triggers	Non-Student Participant selects the "Submit" button.
Course of Events	<ul style="list-style-type: none"> <li>• Navigate to the specific Non-Student Participant submission page.</li> <li>• Fill out the group leader submission form and click the submit button.</li> <li>• The data entered will be transferred to the database</li> <li>• Email confirming the submission will be sent to the group leader.</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• If the Non-Student Participant is already registered, they will receive a triggered message indicating this and will not be entered into the database.</li> <li>• If registration is closed, the Non-Student Participant will be redirected to a page indicating this and will not be entered into the database.</li> </ul>
Post Conditions	Non-Student Participant information will be loaded into the database in the group leader table.



## 9 Appendix B: Additional Use Case Data

**Appendix B** describes in more detail the data for Student and Presenter use cases found in **Appendix A**.

### 9.1 Student Registration Data

The following are the fields contained in the Student submission. All fields are required unless otherwise specified.

- First Name
- Last Name
- Street Address
- City
- State
- Zip Code
- Email Address
- Current Grade
- T-Shirt Size
- Attended Conference Last Year
- Girl Scout Troop
  - Not Required
- School
- Math or Science Teacher
- Workshop Preferences
  - The Student shall select both a first and second preference of topic from two dropdown lists.
  - The Student shall not be able to select the same topic for both first and second choice, unless both choices are “No Preference”.
  - The topic dropdowns shall be populated from the database.

## 9.2 Presenter Registration Data

The following are the fields contained in the Presenter submission. All fields are required unless otherwise specified.

- First Name
- Last Name
- Job Title or Department
- Employer or University
- Mailing Address
  - Line 2 – Not required
- City
- State
- Zip
- Cell Phone
- Office Phone
- Extension
  - Not required
- Email Address
- Attending This Year
- Primary Presenter
- Student or Adult workshop
- Workshop Title
- General Topic
- Workshop Description
- Lab Needed
- Computer Needed
- Workshop Equipment Needs
- T-Shirt Size
- Timeslot Selection

### 9.2.1 Signup Adult Participant

The following are the fields contained in the Adult submission. All fields are required unless otherwise specified.

- First Name
- Last Name
- Home Address
  - Line 2 – Not required
- City
- State
- Zip
- Email Address
- School
  - Not required
- T-Shirt Size
- Parent
  - Not required
- Teacher
  - Not required
- Girl Scout Troop Leader
  - Not required

### 9.2.2 Signup Group Leader

The following are the fields contained in the Group Leader submission. All fields are required unless otherwise specified.

- First Name
- Last Name
- Home Address
- City
- State
- Zip
- Email Address
- School
  - Not required
- T-Shirt Size
- Available Times
  - All Day
  - 9:00 am – 12 noon
  - 12 noon – 3:00 pm

## 10 Appendix C: Report Prototypes

This section contains samples of each report generated by the system. All reports are stored in .csv (comma separated value) files, which can be opened in Microsoft Excel, except for the name tags. Name tags are stored in a .docx file, which can be opened in Microsoft Word.

### 10.1 Student Reports

#### 10.1.1 Students By Group Report

The students by group report sorts all students by their group number in ascending order. It contains the students' group numbers, last names, and first names.

Group	Last Name	First Name
1	Tucker	Sophia
1	Bachman	Melanie
1	Brown	Aaron
1	Richard	Grace

### 10.1.2 Students By Name Report

The students by name report sorts the students by last name in ascending order. It contains the students' last names, first names, group numbers, and t-shirt sizes.

Last Name	First Name	Group	T-Shirt Size
Adams	Sophia	3	Small
Bachman	Melanie	4	Large
Brown	Aaron	1	Medium
Richard	Morgan	9	Small

### 10.1.3 Students By School Report

The students by school report sorts students by their school in ascending alphabetical order. It contains the students' last names, first names, and schools.

Last Name	First Name	School
Tucker	Sophia	ALA
Bachman	Melanie	ALA
Brown	Aaron	Grand Prairie
Richard	Brooklynn	XYZ School

## 10.2 Adult Participants Reports

The adult participants report displays the list of parents and teachers that are attending, sorted in ascending alphabetical order by their last name. It contains their last names, first names, and t-shirt sizes. The system is also capable of creating the list of parents report and the list of teachers report. These are two separate reports that are subsets of the adult participants report. Like the adult participants report, these reports list the adults' last names, first names, and t-shirt sizes. All three reports are demonstrated by the table below.

Last Name	First Name	T-Shirt Size
Aloha	Mary	Large
Beatrice	Melanie	Medium
Sherman	Aaron	Small

## 10.3 Group Leaders Report

The group leaders report displays the list of all group leaders, sorted in ascending alphabetical order by last name. It contains their last names, first names, t-shirt sizes, and available time slots.

Last Name	First Name	T-Shirt Size	Time Slot
Aloha	Abby	Large	all-times-select
Beatrice	Melanie	Medium	all-times-select
Sherman	Aaron	Small	mornings-select
Taylor	Brooklynn	X-Large	all-times-select

## 10.4 Schedule Report

The schedule report contains a list of all groups, detailing which workshops the groups will be attending throughout the EYHN event. The groups are sorted in ascending numerical order. The report breaks down information for each workshop. It also breaks down the information for each group, including the order of workshops provided. Details on the workshop topic, name, name of presenter, room numbers, computers, or labs are given below. The ellipses indicate that the table continues with information pertaining to the remaining three workshops of the format displayed by all fields except group number.

Group Number	First Workshop	First Workshop Topic	First Presenter	Needs Computers	Needs Lab	First Room Number	...
1	Box City	Architecture	Marie Smith	Yes	Yes		...
2	Slime, The Polymer	Chemistry	Loraine Gates	Yes	Yes		...
3	Blast Off!	Engineering	Sue James	No	Yes		...
4	Prehistoric Tales	Earth Science	Rebecca Payne	No	No		...

## 10.5 T-Shirt Orders Report

The T-shirt orders report displays the different t-shirt sizes and the quantity of each size needed.

Tshirt Size	Tshirts Needed
Small	180
Medium	300
Large	175
X-Large	90
XX-Large	30

## 10.6 Workshop Needs Report

The workshop needs report lists all workshops for the event, the presenter for the workshop, whether the workshop needs a lab or computer, and any special equipment requests. The workshops are sorted in ascending alphabetical order.

Workshop Title	Presenter	Requires Lab	Requires Computers	Special Equipment Requests
Blast Off!	Jill Berry	Yes	No	Large floor area with tables, overhead projector with computer usage
Dentistry With a Smile	Lisa Taylor	No	No	None
In the Line of Duty	Susan Payne	No	Yes	Projector screen
Renewable Energy	Marie Washburn	No	Yes	None

## 10.7 Presenter Report

The presenter report shows the first and last names of each presenter along with the name of their workshop, their requested time slot, whether they are the primary presenter, and their t-shirt size. The presenters are sorted in ascending alphabetical order by last name.

Last Name	First Name	Workshop Name	Time Slot	Primary Presenter	T-Shirt Size
Alexander	Susan	We Love Our Animals	Morning and Afternoon	Yes	Large
James	Megan	Lego Robots	Morning	Yes	Medium
Timberlake	Julia	Designing Paper Planes	Afternoon	No	Small



## 10.8 Name Tags

Name tags are generated for each participant in the EYH event. Name tags include the EYH logo, the participant's name, and their role in the conference. If the participant is a student, then the name tag will list the student's group number. Name tags are sorted first by participant type, then by last name. Nametags are split by participant type into separate Microsoft Word files.



Julie Smith

Teacher



Rebecca Green

Group 10



Vivian Taylor

Presenter



Megan Gates

Parent



Angela Turner

Group Leader



Jane Tucker

Adult

## 10.9 Group Schedule Report

The Group Schedule Report contains the times, events, and places where each group will be. The report also contains the group number assigned with the schedule. All schedules are encompassed within one Microsoft Word file.



# Expanding Your Horizons in Science & Mathematics

April 1, 2017

## Group: 2

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### *Program Schedule*

9:00 <u>am</u>	Registration	Sid Richardson Center
9:30	Welcome Chemistry Magic Show	Sid Richardson Gym
10:30	<b>Arline Workshop</b> Arline Mesiona	Unassigned
11:25	<b>Olive Workshop</b> Olive Begum	Unassigned
<u>12:10</u>	Pizza Lunch	Sid Richardson Gym
<u>12:50</u>	<b>Lewis Workshop</b> Lewis Parter	Unassigned
1:45	<b>Chris Workshop</b> Chris Pullis	Unassigned
2:30 pm	Finale	Sid Richardson Gym