

THE SU INTERNAL MANAGEMENT SYSTEM

A GUIDE AND INSTRUCTIONS FOR HOW TO NAVIGATE AND SET UP THE
SYSTEM.

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1.0.0	Initial description of all of the sections except regarding events.
1.0.1	Added description of events functionality.
1.0.2	Updated formatting.
2.0.0	Added information about v2.0.0 and v2.0.1 as well as technical details about the software.
2.1.0	Added setup information.

The software and this document are available at the GitHub repo: <https://github.com/chungchunwang/Student-Union-System>. Refer there for the latest version.

Please report any errors or inconsistencies in this document wangchongjun@havos-kent.com

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ABOUT

This document covers the SU Internal Management System, a system used to manage tasks, events, questions, project proposals, users and other vital data in everyday student union management. Besides data management, it also facilitates the concept of “points”, allowing users to earn credit for taking part in tasks, events, and project proposals.

For those looking for instructions on how to use the system, you can refer to the [system guide](#) section.

For those looking to understand the software, you can refer to the [about the software](#) section.

For those looking for instructions on how to setup the system, you can refer to the [setup guide](#) section.

SYSTEM GUIDE

This is the one stop shop for tasks, events, and much more! Read this short guide to be able to use it effectively.

Before we dive into an explanation of each page, lets understand the different account types within the system. The SU Dashboard is a closed internal system. This means that it is meant for only members. Outsiders will not be able to see its content.

For members, there are 3 different account types, in descending order of permission level:

1. Admin
2. Power
3. Basic

Per design, Basic accounts should be assigned to regular members, Power accounts should be assigned to group leaders and subleaders, and Admin accounts should be given to SU leaders.

Some features are only available for certain members. In the following documentation such features (or entire sections!) will be marked with **FOR ACCESS LEVEL: _____** to indicate this.

Now, let's take a look at what is in each page.

SETUP

Welcome!

wangchongjun@hanvos-kent.com

Next

What is your name?

English First Name

E.g. Tom

English Last Name

E.g. Hanks

Chinese Last Name

E.g. 王

Chinese First Name

e.g. 小明

Back

Next

When you first login into the system, you will be met with a setup page, where you will have to fill in details about yourself (name, class, etc.). Enter this information accurately and honestly as they will affect how you are represented within the system.

HOME

Hi Jason Wang!

Good day! Here are your stats:

Completed Tasks:

2

Pending Tasks:

1

Points:

79

Quick Start



Groups



Tasks



Profile



Project Proposals



Leaderboard



Report



Awards



Events



Bug Report

This is the page you see when you login. Here, you will see a quick overview of your statistics, as well as a couple of quick access buttons. All of these though, are accessible from the top bar as well!

ADMIN DASHBOARD

FOR ACCESS LEVEL: ADMIN ONLY

The Admin Dashboard is a central hub for managing the SU system. It features a grid of tools categorized into three main sections: Review Tools, Info Tools, and Creation Tools. A sidebar on the right provides additional management tips.

- Review Tools:**
 - Review Project Proposals**: Approve/deny project proposals. (Open)
 - Review Questions**: Respond to questions. (Open)
- Info Tools:**
 - User Reference**: Look up and browse users. (Open)
 - Groups**: View all groups. (Open)
- Creation Tools:**
 - Create Awards**: Give members awards! (Open)
 - Create Tasks**: Add a task into a group. (Open)

Admin Dashboard ⓘ

This is your one stop shop for everything you need for management.

Review: Keep the system up and running!

SU members have questions, project requests etc., that need reviewing. Go to the review section to start verifying requests.

Info: Observe the activity of SU!

As a leader of SU, you will need to be able to observe what is happening in each of the SU subcommunities. Use the info section for tools to view the goings on of groups within the system.

Creation: Add data into the system.

Sometimes you will need to add extra data into the system. Use this section to create tasks, awards etc.

Here you will find a variety of tools to manage the system. Be careful though¹, as you are free to change almost anything. These are a number of subpages for each of the tools.

¹ For example, don't accidentally delete someone's task!

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REVIEW PROJECT PROPOSALS

<- Return to Admin Dashboard

Project Proposals

View Only Pending Proposals

	NAME	DESCRIPTION	QUARTER	STATUS	POINTS
View	test	test	Q2	Completed	34
View	test2	test2	Q2	Completed	

Here, administrators can review project proposals submitted by SU members. Click “View” to approve/disapprove and to make changes.

Project Proposals > test

test Save

Users

Name

Description

Quarter

Files

Response:

Status

0 comments

 Add a comment... Post

Here, submit the status of the proposal (whether you approve or deny it), and add a comment if you like.

REVIEW QUESTIONS

<- Return to Admin Dashboard

Review Questions

View Only Unanswered Questions

USER	NAME	DESCRIPTION	DATE_CREATED
View	wangchongjun@hanvos-kent.com	test	November 21 2022, 20:12

< Page 1 >

All members are able to submit questions. On this page, you can respond to them. To do so, press view on a question.

Questions > test

Question:

test
test

Response:

bo

Respond

Respond the question on this page, and then press Respond.

USER REFERENCE

<- Return to Admin Dashboard

User Reference:

Email	English_First_Name	English_Last_Name	Chinese_First_Name	Chinese_Last_Name	Grade	Class	Group	Position
happyjason0130@gmail.com	Jason	Wang	王	重钧	11	1108	Human Resources (人事) G11	Leader
wangchongjun@hanvos-kent.c...	Jason	Wang	王	重钧	11	1108	Human Resources (人事) G11	Leader
zhanghaozhe@hanvos-kent.com	Mike	Zhang	张	浩哲	11	1108	Chair (主席) G11	Leader

Use this page to search though all users in the system. You can filter by a variety of variables.

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GROUPS

<- Return to Admin Dashboard

All Groups

Sports
LEVEL: G10
Description will go here.
[Enter](#)

Culture
LEVEL: G12
Description will go here.
[Enter](#)

Public Relations
LEVEL: G11
Description will go here.
[Enter](#)

Outreach
LEVEL: G9
Description will go here.
[Enter](#)

Outreach
LEVEL: G12
Description will go here.
[Enter](#)

Public Relations
LEVEL: G9
Description will go here.
[Enter](#)

Sports
LEVEL: G12
Description will go here.
[Enter](#)

Human Resources
LEVEL: G11
Description will go here.
[Enter](#)

Lifestyle
LEVEL: G10
Description will go here.
[Enter](#)

Outreach
LEVEL: G10
Description will go here.
[Enter](#)

This is a powerful admin tool that allows you to access the group page of any of the groups in the system. You can make changes just as if you were a power user within the group. View the [My Group](#) section for more information.

CREATE AWARDS

<- Return to Admin Dashboard

Awards

Create New

NAME	DESCRIPTION	USERS	FILES

No rows found

Page 1

On this page, you can grant awards to users. Press Create New to generate a new award.

Awards > New

New Row

Save

Name	<input type="text" value="Name"/>
Description	<input type="text" value="Description"/> B I H “ ” = = % ☰ ☱ ☲ ☳ ?
User	<input type="text" value="Choose an option"/>
Files	<input type="button" value="Browse..."/>

Here, fill in the relevant information and press Save to create the award. If you have a digital document for the award, add it in the files section. To see what an award in the system looks like, view the [Awards](#) section.

CREATE TASKS

<- Return to Admin Dashboard

Save

New Task

Users

Choose the users this task is for from the list below.

USER INPUT

Filters:

Class

Email

First Name

Last Name

Grade

All

	EMAIL	GROUP	ENGLISH FIRST NAME	ENGLISH LAST NAME	CHINESE LAST NAME	CHINESE FIRST NAME	CLASS	GRADE	ID
<input type="checkbox"/>	zhanghaozhe@hanvos-kent.com	Chair(主席) G11	Mike	Zhang	张	浩哲	1108	11	20
<input type="checkbox"/>	yuyanxi@hanvos-kent.com	Lifestyle(生活) G11	Dennis	Yu	俞	焱曦	1108	11	21
<input type="checkbox"/>	wangchongjun@hanvos-kent.c...	Human Resources(人事) G11	Jason	Wang	王	重钧	1108	11	1
<input type="checkbox"/>	happyjason0130@gmail.com	Human Resources(人事) G11	Jason	Wang	王	重钧	1108	11	17

< Page 1 >

Name

Name

Description

B I H | “ “ ≡ ≡ | % 📸 | ⏷ ⏷

Description

Files

Browse...

Due

Due

Group

Choose an option

Check the box to predefine the point value of this task. NOTE: This means assigned members will not be able to decide on their own points when they complete the task. If you merely want to give a suggestion for points, please add that in the description.

Check the box if this task has already been done, and is only being inputted to log points.

On this page, you can arbitrarily create tasks and drop them into any group. It is recommended, however, that you instead create tasks using the [Groups](#) feature of the Admin Dashboard. View the [Add Task](#) section to see what each of the fields do.

MY GROUPS

My Groups

Human Resources
LEVEL: G11
Description will go here.

[Enter](#)

Here you will be able to access the group you are a part of. Click on the group to enter.

Group: Human Resources (人事)

Users:

Jason Wang | 王重均
WANGCHONGJUN@HANVOS-KENT....

[View Profile](#)

Jason Wang | 王重均
HAPPYJASON0130@GMAIL.COM

[View Profile](#)

Tasks:

	NAME	DESCRIPTION	DUE		
Done	View	Edit	test	test	2022-11-30 04:00:00
Done	View	Edit	test	test	2022-11-30 04:00:00
Done	View	Edit	dropped task	dropped task	2022-12-08 04:00:00
Done	View	Edit	dropped 2	dropped 2	2022-12-14 04:00:00

[Add Task](#)

Completed Tasks:

	NAME	DESCRIPTION	DUE	
View	Edit	test	test	2022-11-28 04:00:00
View	Edit	test	test	2022-11-28 04:00:00

On this page, you will see the members of your group as well as completed and pending tasks.

ADD TASK

FOR ACCESS LEVEL: POWER AND ABOVE

Click the Add Tasks button to create a new task for group members.

New Group Task

Users

Choose the users this task is for from the list below. By default, you can only add people within your group, however if you toggle the group filter you can include other users as well. Note that for these users they will only see the task on their task page, but not in their group page.

USER INPUT

EMAIL	GROUP	ENGLISH FIRST NAME	ENGLISH LAST NAME	CHINESE LAST NAME	CHINESE FIRST NAME	CLASS	GRADE	ID
wangchongjun@hanvos-kent.c...	Human Resources (人事) G11	Jason	Wang	王	重均	1108	11	1
happyjason0130@gmail.com	Human Resources (人事) G11	Jason	Wang	王	重均	1108	11	17

Name

Description B I H | “ ” # # | % % | ☰ ☱ ☲ ☳ | ☷

Files

Due CALENDAR

Group

Check the box to predefine the point value of this task. NOTE: This means assigned members will not be able to decide on their own points when they complete the task. If you merely want to give a suggestion for points, please add that in the description.

Check the box if this task has already been done, and is only being inputted to log points.

Form Field Description:

FIELD	DESCRIPTION
NAME	The name of the task.
DESCRIPTION	The description of the task. Can be written in markdown.
FILE	Files you wish to attach to the task.
DUE	The due date of the task.
GROUP	What group the task is in (You cannot change this).
PREDEFINED POINTS (BLUE CHECKBOX 1)	Used to add preset points for a task. This will prevent users from manually inputting points for themselves when they complete the task.
ALREADY COMPLETED (BLUE CHECKBOX 2)	Select if the task is already completed, and is only being used to log the task for points and future reference. A field will appear for you to input points in.

MY TASKS

My Tasks

NAME	DESCRIPTION	FILES	DUUE
Test Task	Test Task		October 18 2022, 00:00

[View Completed Tasks](#)

This is a faster way to access the tasks from your group. Here you can see all list of all these tasks you need to do.

COMPLETED TASKS

Completed Tasks

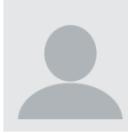
NAME	DESCRIPTION	DUUE
test	test	November 28 2022, 04:00
test	test	November 28 2022, 04:00

[View Pending Tasks](#)

Click View Completed Tasks to see all of the tasks you have completed.

PROFILE

[Edit Info](#) [Edit Photos](#)



Jason Wang | 王重钧
wangchongjun@hanvos-kent.com
Class: 1108



Group:

Human Resources (人事)
DESCRIPTION GOES HERE.

Awards:

test
TEST

Stats:	Global Ranking	Grade Ranking
Completed Tasks: 2	1	1
Pending Tasks: 3		
	Points: 43	

About:

Hello I am Jason sddgdsg

Here users can create custom profile pages that are viewable to all members of the organization. Click Edit Info to change your account information and click edit photo to change your profile and banner image.

AWARDS

Your Awards

NAME	DESCRIPTION	FILES
Demo Award	Demo Description	

View

Student Union Awards 

What is this?

Here at Student Union, we celebrate hard work and dedication towards the student community. These awards acknowledge the effort our members have put into making our school a better place. If you have any awards, they will show up in the table below.

How do I get an award?

If there are any awards that you can sign up for, it will be announced where and how you can enter. Additionally, awards are given out for all round merit, so give your SU role your full effort. Finally, if you have the top 10 most points (in the month) at the end of the month, you will be given a "Top Contributor" award.

Here users can see award given to oneself. You can view the award and download its provided certificate document (if provided).

Certificate Of Achievement

Demo Award

Demo Description

This award is given to:
Jason Wang

Presented by _____ Head of Student Council

Note:
1. This is best viewed on desktop.
2. This is an unofficial digital rendition of the certificate, please consult the head of SU for a physical copy.
3. Check the file attachments of this award, a digital certificate may be included.

This is the page you see when you open an award.

LEADERBOARD

Leaderboard 

Quarter 1 Quarter 2 Quarter 3 Quarter 4 All

Grade List:

Q1 POINTS	PROFILE PICTURE	FIRSTNAME	LASTNAME	EMAIL	CLASS	GRADE	GROUPS	
View Profile	0		Jason	Wang	wangchongjun@hanvos-kent.c...	1008	10	Human Resources

Global List:

Q1 POINTS	PROFILE PICTURE	FIRST NAME	LAST NAME	EMAIL	CLASS	GRADE	GROUPS	
View Profile	0		Jason	Wang	wangchongjun@hanvos-kent.c...	1008	10	Human Resources
View Profile	0			happyjason0130@gmail.com			Human Resources	
View Profile	0		Mike	Zhang	zhanghaozhe@hanvos-kent.com		Outreach	

Here you can see global rankings of members of the organization based on points. You can filter by quarter or all.

MY PROJECT PROPOSALS

My Project Proposals		
Name	Description	Quarter
test	test	Q2
test2	test2	Q2

Here you can manage and create project proposals. Click on Create New to do so.

Project Proposals > New

New Row

Save

Add Other Users:

If there are other members to this project proposal, you can find the join code in the proposal details after you have created the project proposal.

Users

Name

Name

Description

B I H | “ “ ≡ ≡ | % 📸 | ⚡ 🎯 ✖ ?

Files

Fill in the relevant information and then Save.

The screenshot shows a project proposal titled "test2". The "Description" field contains "test2". The "Users" section lists "Jason Wang | 王重钧" with the email "wangchongjun@havvos-kent.com", accompanied by a "View" button. To the right, there are sections for "Quarter" (Q2), "Status" (Completed), "Points:", and a "Join Code" box containing "%5B11%5D". Below the main proposal area, a "Comments" section shows two entries from "wangchongjun@havvos-kent.com" with timestamps of "19 hours ago". The first comment is "test" and the second is "test2". A text input field for adding a new comment is shown, along with a "Post" button.

You can check on your proposal by clicking View. Here you will see a list of all of the information relating to the proposal. If you would like to add other users to the task, provide them with the join code on the right, and they can input it the join box of the My Project Proposal page.

The screenshot shows the "My Project Proposals" page. It displays a table with three rows of data:

NAME	DESCRIPTION	QUARTER
test	test	Q2
test2	test2	Q2

A red arrow points to the "Join" button in the top right corner of the table header, which is part of a larger "Join" box. Other buttons in the box include "Create New".

You can also edit your project proposal info by clicking the edit button.

REPORT

A Guide to Printing this Report

Before printing, make sure to resize your page to roughly the shape of an A4 paper. Then, press the grey button, and make sure to set the orientation to "Portrait" and the size to "Fit to Page".

[Press here to print this report.](#)

[Year Total](#) [Quarter 1](#) [Quarter 2](#) [Quarter 3](#) [Quarter 4](#) [Semester 1](#) [Semester 2](#)

Student Union Member Report | Wang, Jason | October 17, 2022

Basic Information:					
Email:	wangchongjun@hanvos-kent.com				
Status:	active				
Class:	1008				
Group(s):	<table border="1"><thead><tr><th>NAME</th><th>LEVEL</th></tr></thead><tbody><tr><td>Human Resources</td><td>G11</td></tr></tbody></table>	NAME	LEVEL	Human Resources	G11
NAME	LEVEL				
Human Resources	G11				

Completed Tasks:

Points: 0

NAME	GROUP	USERS	DESCRIPTION	DUUE	POINTS
No rows found					

Here you can see a report of all the work you have done in the organization. You can filter this report by different time frames. To print the page, follow the instructions at the top of the page.

MY EVENTS

FOR ACCESS LEVEL: POWER AND ABOVE

Events						Create New	Review Absences
			NAME	DESCRIPTION	LOCATION	COMPLETED	
Edit	View		test	test	test	<input checked="" type="checkbox"/>	
Edit	View	Edit Required Attendance	Log Attendance	End Event	test2	test2 asdg	<input type="checkbox"/>
Edit	View	Edit Required Attendance	Log Attendance	End Event	Test Event	description somewhere	<input type="checkbox"/>

< Page 1 >

This section allows you to host events.

CREATE NEW EVENT (CREATE NEW BUTTON)

The screenshot shows the 'New Event' creation interface. At the top left is a breadcrumb navigation 'My Events > New'. In the top right corner is a 'Save' button. The main title 'New Event' is centered above a section titled 'Add Required Attendees'. A descriptive note below this section states: 'Use this tool to set attendees that are required to come to this event. You can award them points for doing so. You can also edit this after the fact by pressing the "Required Attendees" button on the event.' Below this note is a 'User' dropdown menu with the placeholder 'Choose some options'. To its right is a 'Points' input field. Further down, there are fields for 'Name' (with a placeholder 'Name') and 'Description' (with a rich text editor toolbar containing bold (B), italic (I), heading (H), and other icons). Below these are fields for 'Date' (with a date picker icon) and 'Location' (with a placeholder 'Location'). There is also a 'Image (.png)' file upload field with a 'Browse...' button. Under the 'Public' section, there is a checkbox labeled 'Can everybody see and join this event?' followed by a checked checkbox. Finally, there is a 'Code' field containing the value 'vC7jWG'.

Here you can edit the settings for your event. Give it a name, date, description, location and even banner image. Select required attendee for your event (users who will be automatically signed up for the event and cannot cancel). Also make sure to select whether you want the event to be public or not. Public events are listed in the events section of everyone within the system, and they are free to sign up for the event on their own. Private events will only be visible to users who you add as required attendees to the event. Click save when you are done. Note that when users are added to an event, they will receive an email notification about it.

REVIEW ABSENCES (REVIEW ABSENCE BUTTON)

The screenshot shows a table titled "Absences" with one row. The columns are labeled "USER", "EVENT", "REQUIRED", and "POINTS". The "USER" column contains "Jason Wang (wangchongjun@havos-kent.com)". The "EVENT" column contains "Testing Event". The "REQUIRED" column has a checked checkbox. The "POINTS" column contains the number "6". Below the table, there is a navigation bar with links: "Home", "Admin Dashboard", "My Groups", "My Tasks", "Profile", "Awards", "Leaderboard", "My Project Proposals", "Report", "My Events", "Events", "Questions", "Bug Report", and "Rules". A link "Absences" is also present. At the bottom right, there is a page navigation with "Page 1" and arrows.

If you have members who are absent to any of your events, you can review them here. Users are able to submit an absence request to explain why they are absent.

EDIT (EDIT BUTTON)

The screenshot shows the "test2" event edit page. At the top, it says "My Events > test2" and has a "Delete" button and a "Save" button. Below that is a section titled "ATTENDANCE" with a table titled "Current Attendees". The table has columns "REQUIRED TO ATTEND", "USER", and "STATUS". It shows one entry with a checked checkbox in the first column, "wangchongjun@havos-kent.com" in the second column, and "N/A" in the third column. Below this is a "Current Attendees" section with a "Page 1" link. Further down are fields for "Name" (containing "test2"), "Description" (containing "test2"), "Date" (set to "December 8 2022, 12:00"), "Image (.png)" (with a "Browse..." button), "Location" (containing "asdg"), "Code" (containing "9tKWzp"), and a "Public" checkbox which is checked. There are also rich text editor icons above the description field.

Here you can edit details about your event.

VIEW (VIEW BUTTON)

The screenshot shows the event details for "test2" on Thursday, December 8, 2022, hosted by Jason Wang. It includes sections for About, Time and Date, Location, Host, and Contact. Below this is an Attendance section showing one user entry (View Profile, wangchongjun@hanvos-kent.com) and links for Sign In and Absent.

About:
test2

Time and Date
Thursday, December 8, 2022 at 12:00 PM

Location
asdg

Host
Jason Wang | 王重钧

Contact
wangchongjun@hanvos-kent.com

Attendance:

USER
View Profile wangchongjun@hanvos-kent.com

Sign In
ARE YOU AT THE EVENT?
Log your attendance!
[Log Attendance](#)

Absent
WILL YOU NOT BE ABLE TO COME?
Submit a notice!
[Log Absence](#)

Here you can see the event page for your event. This is what is seen by attendees.

EDIT REQUIRED ATTENDANCE (EDIT REQUIRED ATTENDANCE BUTTON)

The screenshot shows the required attendance for the event "test2". It lists one user entry (View, wangchongjun@hanvos-kent.com) with 2.5 points. A "Create New" button is available at the top right.

Required Attendance For Event: test2

USER	POINTS
View wangchongjun@hanvos-kent.com	2.5

Create New

< Page 1 >

Here you can edit who is required to come to your event. Either add new people with “Create New” or remove people by clicking on an attendance with the “View” button and clicking delete on the info page.

LOG ATTENDANCE (LOG ATTENDANCE BUTTON)

Sign In With Code:

rp17BF

Or QR Code:

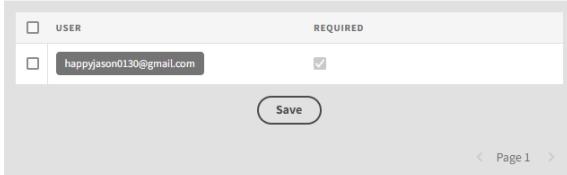


Sign in by clicking "Log Attendance" on the event page. Input the code above.

[Update Code](#)

⌚ Updating code every 15 seconds

Manual Input:



This is the page you show during your event to allow people to log their attendance.

END ATTENDANCE

Are you sure you want to end the event: test?

Note: By ending the event, no further users can either attend or sign in for this event. All users who have not sign in will be set as absent.

[Yes, I want to end the event and know the consequences.](#)

On this page, you can end your event. This has a couple of effects. Firstly, no further people can sign up or sign in for your event after you end it. Secondly, all users who have not signed in will be marked as absent.

EVENTS

Home Admin Dashboard My Groups My Tasks Profile Awards Leaderboard My Project Proposals Report My Events Events Questions Bug Report Rules

Your Events

EVENT	ATTENDED	REQUIRED	ABSENCE STATUS (IF EMPTY, THERE IS NO ABSENCE)
View Testing Event	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pending

About Events
Events are public Student Union activities. You can sign up for events on their page.

Mandatory Events
THEY ARE MARKED BY "REQUIRED".
You may be signed up for certain mandatory events. You must attend these.

Sick/Absence
If you cannot attend an event, you can submit an absence on its page.

Global Events

NAME	DESCRIPTION
View Testing Event	This is a testing event.

[<>](#) Page 1 [<<](#)

Global Events
These are events that everyone can sign up for.

Under Your Events, you can see all of the events you have signed up for. If you are required to join an event, it will show up here. Global Events are events that are open to everybody. You are free to join these events.

EVENT PAGE (VIEW BUTTON)

Home Admin Dashboard [My Groups](#) My Tasks Profile Awards Leaderboard My Project Proposals Report My Events Events Questions Bug Report Rules

Sorry, this event does not have a banner image

 Sunday, October 23, 2022 Testing Event Hosted By: Jason Wang (wangchongjun@havos-kent.com) [Cancel](#)

About:
This is a testing event.

Discussion Notes:

 Time and Date
Sunday, October 23, 2022 at 12:00 PM

 Location
A Place

 Host
Jason Wang

 Contact
wangchongjun@havos-kent.com

Each event has its own page. Here you can see all the important information about the event. You are also able to sign up for events on this page.

Sign In

ARE YOU AT THE EVENT?



Log your attendance!

Log Attendance

Absent

WILL YOU NOT BE ABLE TO COME?



Submit a notice!

Log Absence

If you have signed up for an event, you will see a button to either sign in or to request an absence. To sign in, you will need to scan the QR code provided by the event organizer.

QUESTIONS

All Answered Questions

USER	NAME	DESCRIPTION	DATE CREATED
wangchongjun@hanvost-kent.com	test	test	November 21 2022, 20:12

< Page 1 >

SU Questions

What is this?
The Question section is an open place where you can submit public questions about SU and the system itself. Before you submit a question, make sure to search to see if it has already been asked before.

Content Guidelines
Make sure that the content you post is relevant to SU, civil, and polite. If you see any offending material, please report it.

My Questions
Manage and submit questions.
[Enter](#)

Here you view questions and answers about SU and the system. You can search the questions using the search bar at the top.

Pending Questions

NAME	DESCRIPTION
 No rows found	

Create New

< Page 1 >

My Questions

What is this?
Here you can manage your questions in the SU Questions section.

Content Guidelines
Make sure that the content you post is relevant to SU, civil, and polite. If you see any offending material, please report it.

Answered Questions

NAME	DESCRIPTION	RESPONSE
Go To Public Page	test	bodgd

< Page 1 >

You can also ask your own questions by going the My Questions page. Note that all questions you ask are publicly viewable. Before you ask a question, make sure that it has not been asked already. Click Create New to ask a new question. Your questions that have not been responded to will be seen in the pending questions table. Responded questions will be displayed in answered questions table. Click on a question there to see the response.

FILES

Files

NAME	DESCRIPTION
test	test

Create new

This is a system to upload and manage files. The purpose of this is to allow users to reference and share files in chatboxes. Users can upload files on this page, which will generate a unique file link for them to send as text. Any existing files you have uploaded will show up in the table. Click on them to either edit them or to copy their link. Click create new to upload new files.

Note: Do not use this for any non-SU related files. Furthermore, do not use this for large files such as videos. There is a file upload size limit.

BUG REPORTS

Submit bug reports here! We would greatly appreciate if everyone submits a bug report if they encounter one. Please make sure that your submission is as descriptive as possible. Note that this is no longer part of the system and links to an external questionnaire site.

DOCUMENTS

Documents

Here you will find all of the important documents and references to navigate SU.

NAME	DESCRIPTION	FILES
		 No rows found

< Page 1 >

Here you will find files and important documents.

SOFTWARE VERSION LOG	
Version:	Changes:
1.0.0 (Demo)	Demonstrated functionality using Appsmith platform.
1.0.1 (Rewrite)	<p>Recreate system to allow for extendibility on Budibase.</p> <p>Functionality:</p> <ol style="list-style-type: none"> 1. Groups 2. Users 3. Tasks 4. Project Proposals 5. Report 6. Bug Report
1.0.2 (Bug Fixes)	Fixed minor issues pertaining to all categories.
1.1.0 (Big Features Update)	<p>Added new functionality:</p> <ol style="list-style-type: none"> 1. Admin Dashboard (which includes 7 subpages) 2. Profile Page 3. Awards 4. Leaderboard 5. My Events/Events 6. Questions 7. Rules
1.1.1 (Bug Fixes)	Fixed minor issues pertaining to all categories.
1.1.2 (Event Update)	<p>Fixed bug issues pertaining to Events, and added new functionality:</p> <ol style="list-style-type: none"> 1. Bug Fix: Resolved “Document Update Conflict” when reloading code in event attendance page. 2. Bug Fix: Resolved links in breadcrumbs pointing to undefined URLs. 3. Bug Fix: Resolved 4. Functionality: Added Review Absences page to allow event owners to review absences on their own events. 5. Functionality: Added QR Scanning as an option to verify attendance. 6. Functionality: Added Required Attendance page to allow event owners to set and delete required attendees an event. 7. Compatibility Breaking Changes: The URL paths of some of the event related pages has been changed. 8. Other minor changes.
1.1.3 (Tasks Update)	<p>Added new functionality:</p> <ol style="list-style-type: none"> 1. Updated UI on view tasks to be more user friendly. 2. Added view button for those with edit permissions. Previously edit and view was either or.

	<p>3. Added a chat box to the bottom of the View page on a task. This will facilitate conversation about a task.</p>
2.0.0	<p>Major system rework, changing backend DB from CouchDB to MySQL and reworking a bunch of pages. Pages now load significantly faster.</p> <p>Features:</p> <ol style="list-style-type: none"> 1. Reworked all pages to support the new SQL backend. 2. Redesigned DB to be more efficient. 3. New SQL views and queries to reduce redundant information from slowing down load times. 4. Files are now stored in row in DB instead of being hosted on a separate MinIO server. (While this may not sustainable for large system, for an internal system with relatively low milage this maintains the SQL DB as the single source of truth for all the data). 5. Significant updates to the Events system and related pages. <ul style="list-style-type: none"> a. Reworked to support the concept of an event ending, marking all unattended as absent. b. Email notifications for new event attendees. c. Cleaned up UI. d. Various bug fixes. e. Updated sign-in feature. QR code feature hidden for the moment due to http restrictions, and code now automatically updates itself every 15 seconds to curb non-attendees from signing in. Additionally, bugs regarding this feature were fixed. 6. Updates to user data and information. <ul style="list-style-type: none"> a. User information is now stored in a SQL table and is related to the internal DB user list via email. b. Views have been created that allow user ranks and statistics to be easily accessible. 7. Onboarding Experience <ul style="list-style-type: none"> a. An all-new one-time setup onboarding experience that allows users to input essential user information. 8. File Upload <ul style="list-style-type: none"> a. A system for users to upload files and receive a shareable link (usable only for system users). This enables

	<p>files to be shared in comment conversations.</p> <p>9. Questions:</p> <ul style="list-style-type: none">a. Overhaul of UX and the setup of the Question page so that it is more useful. Instead of individual private questions it is now a forum, where questions about the student union and the system are viewable and searchable by all users. This saves admin time answering repeat questions. Additionally, there is a new question management section for users to keep up with the questions they have asked. <p>10. Project Proposal:</p> <ul style="list-style-type: none">a. Adopts a comment system to replaces various tedious hardcoded phases of back and forth between admin and user.b. New join code allows users to “share” a project proposal with others and allow them to join in. This replaces a trust-based system of allowing users to select partners from anyone within the system.c. New status system – not all that important, just how the status is represented in the DB. <p>11. New Plugins:</p> <ul style="list-style-type: none">a. Implemented 2 new open-source custom plugins, a file uploader and a file repeater. This has allowed for in-DB file storage, which was previously not possible in Budibase. <p>12. Miscellaneous:</p> <ul style="list-style-type: none">a. Reworked the selection of Users on many pages. Previously the used of Advanced User Input allows users to inject selections from a more complicated user selection form. Such an injection is unintuitive, so it has been replaced, with the Advanced User Input form being the default on most pages.b. Bug report is now in Microsoft Forms. Detaching it from the system makes it more accessible when it is most useful (when the system is down or has errors).c. Rules has been renamed Documents.
--	--

	<ul style="list-style-type: none">d. Most tables and cards that include users now clearly link to their profile page.e. Reworked the design of the task pages to be prettier. <p>Other minor details have been omitted for brevity.</p>
2.0.1	Minor bug fixes, as well as enabling QR Code scanning for events, which will can only be used under https.

KNOWN BUGS AND ISSUES

- None at the moment. Please report any bugs to wangchongjun@havos-kent.com.

ABOUT THE SOFTWARE & ITS DESIGN

The system is built atop the open-source low-code platform [Budibase](#), with certain custom components created to fill in for missing functionality. These are written in Svelte. The data stored using MySQL.

WHY LOW CODE?

While I initially planned to build the system using React, Tailwind CSS, and other component libraries, I ended up opting for a low-code platform because this project is designed to be maintained into the future. I haven't found any proficient front-end developers in our student body, so I felt that I would be creating a black box that would be difficult to fix or extend. Low-code platforms make maintenance easy through its drag and drop interface. The problem with a low-code platform, however, is its restrictions on functionality, due to the limitations of drag and drop as well as the relative newness of the software. I have tried to solve these issues by creating custom plugins and submitting bug reports to Budibase.

Update: In hindsight, I now think the system would have been easier to construct with a web framework and code². These low code platforms, despite their seemingly infinite capability, can really just build CRUD applications, so this was like fitting a peg in a square hole. Things like logging in with a QR code for attendance was especially hard. However, hopefully now, with the annotated drag and drop components and the custom plugins, future members will have an easier time patching and extending the system.

WHY MYSQL?

The data for this system is relational, so using a relational database improves performance dramatically. The initial version of the system used the Budibase internal DB (which used CouchDB, see update 2.0.0) and the shift to MySQL improved performance drastically (While I did not do official tests, it cut down load times by a factor of 2, if not more. The main concern raised when the initial system was beta-tested was its slow loading times.).

HOW IS IT HOSTED?

Everything is run through Docker on an Ubuntu instance running in the cloud. There are just 2 Docker images that need to be loaded to setup a clean system. Nginx is also needed as a reverse proxy and an HTTPS certificate needs to be acquired. However, all this complexity is automated in a script. Instructions will be in the setup section below. The idea is that a new Budibase app + MySQL schema is created for each year, with past years frozen in a read-only mode for reference purposes.

² If anybody decides to rework the system in the future, I think you can use a server-side rendered site (possibly NextJS), which makes querying the DB for data simpler and reduces complications due to security concerns. Given we already have a cloud server to host Budibase, this would not incur additional costs.

SYSTEM SETUP

Note: This following document is a copy of this version [available online](#) on GitHub. I have tried my best to format it correctly, however please refer to the online version if you encounter any issues.

Prerequisite: The following document assumes a basic understanding of how to operate a bash terminal.

Welcome to the guide for setting up the Student Union Internal Management System!

This comprehensive guide aims to assist Student Union leaders, administrators, and IT professionals in hosting a robust and user-friendly Internal Management System tailored to their specific requirements. By following the steps outlined here, you'll be able to streamline administrative processes, enhance communication and collaboration, and empower your Student Union to thrive.

So, let's dive in and embark on the journey of setting up an efficient and effective Student Union Internal Management System.

CONNECTING TO A CLOUD SERVER

The Student Union Internal Management System runs on a Linux (Ubuntu) server hosted on a cloud service, eliminating maintenance and hardware costs. Cloud hosting provides a scalable and secure environment, allowing easy access and ensuring data integrity.

There are a variety of different services that offer cloud hosting services, so it does not make sense to identify a particular one here. Choose one that has servers close to your region and is affordable.

You will also need to have purchased a domain that points to the IP address of your server.



Tip - Here are some general instructions for how to configure a domain for your server.

Choose a domain registrar: There are many domain registrars available, such as GoDaddy, Namecheap, and Google Domains. Choose one that suits your needs and budget.

Search for available domains: Use the registrar's search tool to find an available domain that you like. You can search for domains by keyword, or by entering a specific domain name.

Purchase the domain: Once you have found an available domain that you like, follow the registrar's instructions to purchase it. You will need to provide your contact information and payment details.

Access your domain registrar's DNS settings: Once you have purchased your domain, you will need to access your domain registrar's DNS settings to point your domain towards the IP address of your server. The exact steps for doing this will depend on your registrar, but you should be able to find instructions in their documentation.

Add an "A" record: In your DNS settings, add an "A" record that points your domain towards the IP address of your server. The exact steps for doing this will depend on your registrar, but you will typically need to enter the IP address of your server in the "Value" field of the "A" record.

Wait for DNS propagation: Once you have added the "A" record, it may take some time for the changes to propagate across the internet. This can take anywhere from a few minutes to a few hours.

Once you have purchased a cloud server and a domain, you will need to access its terminal to host the system on it. I recommend the PuTTY SSH tool to do this.

**Tip - To SSH into a cloud Linux server using PuTTY, follow these simple instructions:**

Download and install PuTTY: Visit the PuTTY website (<https://www.putty.org/>) and download the appropriate version of PuTTY for your operating system. Install PuTTY by following the on-screen instructions.

Obtain server credentials: The cloud service should provide the IP address and the username and password for your server.

Launch PuTTY: Open PuTTY from your computer's programs or applications menu.

Configure the connection: In the PuTTY configuration window, enter the server IP address in the "Host Name" field. Make sure the "SSH" option is selected, and the port is set to 22 (the default SSH port).

Save the session: Optionally, you can enter a name for your session in the "Saved Sessions" field and click the "Save" button to save these settings for future use.

Connect to the server: Click the "Open" button to initiate the SSH connection.

Provide login credentials: A new terminal window will open. Enter the username provided by your cloud service provider and press "Enter." If you are using a password for authentication, enter it when prompted. If you are using an SSH key, refer to the next step.

Configure SSH key authentication (if applicable): If you are using an SSH key instead of a password, follow these additional steps: a. Click "Connection" in the left panel of the PuTTY configuration window. b. Expand the "SSH" section and select "Auth." c. Click the "Browse" button and locate your private key file on your local machine. d. Click "Open" to return to the main configuration window.

Complete the login process: After providing the appropriate credentials (either password or SSH key), press "Enter" to log in to the cloud Linux server via SSH using PuTTY. Once connected, you can execute commands and perform administrative tasks on the cloud Linux server through the PuTTY terminal window.

SETTING UP THE PROGRAM

Download the setup script using the following line.

```
curl -o setup.sh https://raw.githubusercontent.com/chungchunwang/Student-Union-System/main/app/scripts/setup.sh
```

Execute the setup script using the following. Make sure to follow the on-screen instructions.

```
bash setup.sh
```

CONFIGURING THE SYSTEMS

MYSQL

First, install MySQL Workbench at <https://dev.mysql.com/downloads/workbench/>. Connect to your server.

**Tip - Here are the steps to connect to a MySQL server via MySQL Workbench:**

Open MySQL Workbench.

Click on the "+" icon in the "MySQL Connections" section of the home screen.

Enter a name for the connection in the "Connection Name" field.

Enter the domain of your sever in the "Hostname" field.

Click on the "Store in Vault" button to securely store the password for the root user.

Click on the "Test Connection" button to test the connection to the MySQL server. If the connection is successful, click on the "OK" button to save the connection.

Once you have saved the connection, you can double-click on it in the "MySQL Connections" section to connect to the MySQL server.

Download the base MySQL setup for Budibase [here](#).

Click Server->Data Import, and select Import from Self-Contained File. Next to Default Target Schema, select New and input the name of the schema (database) you wish to create. It is recommended convention that you name the schema after the particular school year this system is for. Thus, you can have multiple copies of the database for different years. Select the setup file you downloaded. To begin the import, click the Start button at the bottom of the page.

Navigate to the Global_Variables table, and click the rightmost button to view its contents. Notice that there is a row entitled Quarter. This is used by the system to determine the current quarter of the school year. Its possible values are Q1, Q2, Q3, and Q4. Make sure to update this variable as necessary.

	id	Name	Value
▶	1	Quarter	Q1
*	NULL	NULL	NULL

BUDIBASE

If you access your domain at the port you provided during the setup process, you should see a running, blank Budibase instance. Follow the onscreen instructions to setup an admin account. We will not need to build an app from scratch, we just have to load in the saved app file.

CONFIGURE BUDIBASE

Go to the dashboard. We will now configure the global Budibase settings.

Email

Go to Email, and configure the SMTP settings for an email address for the system to send automated emails with. You may have to create a free online email for this step, or contact your school administrator to obtain another school email.

Below you can set email templates. You can use the defaults there. Slightly modified versions of the defaults that are recommended can be found [here](#).

Organization

Go to Organization, and input the name of your student union. Also upload its logo. Add the URL of your site to Platform URL. Make sure to include the port if necessary (eg. example.com:100). Save your changes.

Plugins

Go to Plugins, and click add plugin. Choose URL as the source, and add the following urls:

<https://github.com/chungchunwang/Budibase-File-Upload/releases/download/v1.1.8/Budibase-File-Upload-1.1.8.tar.gz>

<https://github.com/chungchunwang/Budibase-File-Repeater/releases/download/v1.1.3/Budibase-File-Repeater-1.1.3.tar.gz>

<https://github.com/andz-bb/budibase-component-accordion/releases/download/v1.2.0/accordion-1.2.0.tar.gz>

<https://github.com/MartinPicc/budibase-interval-plugin/releases/download/v1.1.1/Interval-1.1.1.tar.gz>

<https://github.com/rosnerdev/bb-qr-code/releases/download/v1.0.0/bb-qr-code-1.0.0.tar.gz>

<https://github.com/aptkingston/budibase-comment-box/releases/download/v1.0.2/comment-box-1.0.2.tar.gz>

<https://github.com/chungchunwang/Budibase-QR-Code-Scanner/releases/download/v1.0.2/QR-Code-Scanner-1.0.2.tar.gz>

Install App

Go to <https://github.com/chungchunwang/Student-Union-System/tree/main/app/budibase/exports> and download the latest version of the app. On the dashboard, click Create new app, and then Import app. Here, give the app a name and then import the file. It is recommended that you give the app the same name as the database.

After you have logged in, change the configuration for MySQL to have Host be your domain name and Password be the password you set for MySQL during the setup process. Set Database to be the name of your schema. Save your configuration.

Import Users

On the dashboard, click on the Users tab, and import the emails of the people you wish to invite to the system. You can make use of a CSV file. Make sure to set regular users as App User, not Dev or Admin.

Then, click Manage on your app, and select the Access tab. Add the users you imported into your app. You will have to specify their level of access between either Admin, Power, and Basic. Consult the user documentation for the Student Union System for more information about what each of these categories entails.

This can be rather tedious if you have a lot of users, however you will only have to do it once a year! Unfortunately an easier method is a paid feature of Budibase. Alternately you can try to setup an automatic script to do this with the Budibase API, though you will have to figure that one out for yourself.

CONFIGURE APP

Groups

Go to the Groups section of the MySQL database inside the Data tab of the Budibase app. Here, add all of the different groups that are present in your school. You can save this to a csv and upload it for successive years. [A recommended system of groups used here at Hanvos-Kent can be found here.](#)

Bug Report

Go to the Design tab, and view the page for the Bug Report. Click on the Bug Report button component, and change action it triggers to go to a particular page you want bug reports to your system to be reported. If you think this is unnecessary, just delete this page.

QUICK FIX FOR BUDIBASE BUGS

For some reason, the accordion plugin does not work properly when imported. To fix this, go to /tasks/new/:group in the design tab of the app, select the accordion component (inside the Users section), and toggle the default states to closed and then back to on. This seems to "wake the plugin up".

MANAGING THE SYSTEM OVER MANY YEARS

The app is designed to work over a particular school year. Over multiple school years, you will need to maintain a new version of the app as detailed in the instructions above (though you will not need to reset up Budibase and MySQL, just add a new app and schema respectively - thus, you DO NOT need to rerun the install script). For archival purposes, it is recommended that you maintain the Budibase app and MySQL schema for past school years, but set the MySQL schema to read only. To do so, use the SQL command:

ALTER Schema `SCHEMA NAME HERE` READ ONLY = 1;

MIGRATING SERVERS

If there is any reason that necessitates the movement of servers, you will need to migrate your MySQL schemas and Budibase apps over to the new server.

Firstly, on the new server, run the setup script above to install Budibase and MySQL. Follow the later steps below that if you also need to setup a blank app for a new school year.

MIGRATING MYSQL SCHEMAS

Just like we loaded a blank MySQL setup to install a blank app, we can also save our schemas to files that can be loaded onto a new server.

In MySQL Workbench, connect to your original MySQL server, and go to Server -> Data Export. Select the schemas you wish to migrate, then select Export to Self-Contained File. At the bottom, check the Include Create Schema checkmark. This means that you will not need to rename each of the schemas as we did for the base schema above - it will import later with the name you have set. Click Start Export to begin the file export.

On the new server, go to Server -> Data Import. Select Import from Self-Contained File, and select the file you just generated in the step above. Then, click Start Import.

Now, your MySQL schemas should be moved to the new server.

MIGRATING BUDIBASE APPS

Migrating Budibase apps is quite straightforward. For each of the apps you wish to migrate, click on Manage, then the ... button, then Export Published. This should download to your device a file that represents the app. On the new Budibase server, click Create New App, then Import app. Drag your exported file into the File to import section, and type in the name of your file.