

# Keogh's Port: Software Instruction Manual



Welcome to [Keogh's Port Move Generator](#), a specialized web application designed to streamline and optimize the operations of loading and unloading at ports. This user manual serves as your guide to understanding and navigating the Move Generator with ease.

### Purpose of the Move Generator Website

The Move Generator is developed with the aim of enhancing the efficiency of cargo handling processes at Keogh's port. It utilizes a sophisticated algorithm to suggest the best order of operations for loading and unloading containers, or balancing, thereby minimizing time and maximizing productivity at the port.

### Overview of Main Features

- **Operator Log in:** Operators can digitally login into their shifts
- **Load and Unload:** This feature allows operators to input specific cargo details and receive a calculated sequence for loading and unloading containers. It helps reduce the turnaround time of ships at the dock and ensures a smooth workflow.
- **Weight Balancing:** The weight balancing tool assists operators in evenly distributing the weight of cargo across the ship. This is crucial for maintaining ship stability and preventing accidents due to uneven load distribution.
- **Help Section:** This comprehensive instructional guide to help familiarize operators with usage of the software, along with some tips and contact information for support.
- **Note Taking and Logging:** A universal note-taking feature is embedded on every page, enabling users to record observations and append them to a log file for documentation and review.

This manual will detail each of the features above, providing you with step-by-step instructions on how to utilize the Move Generator to its full potential.

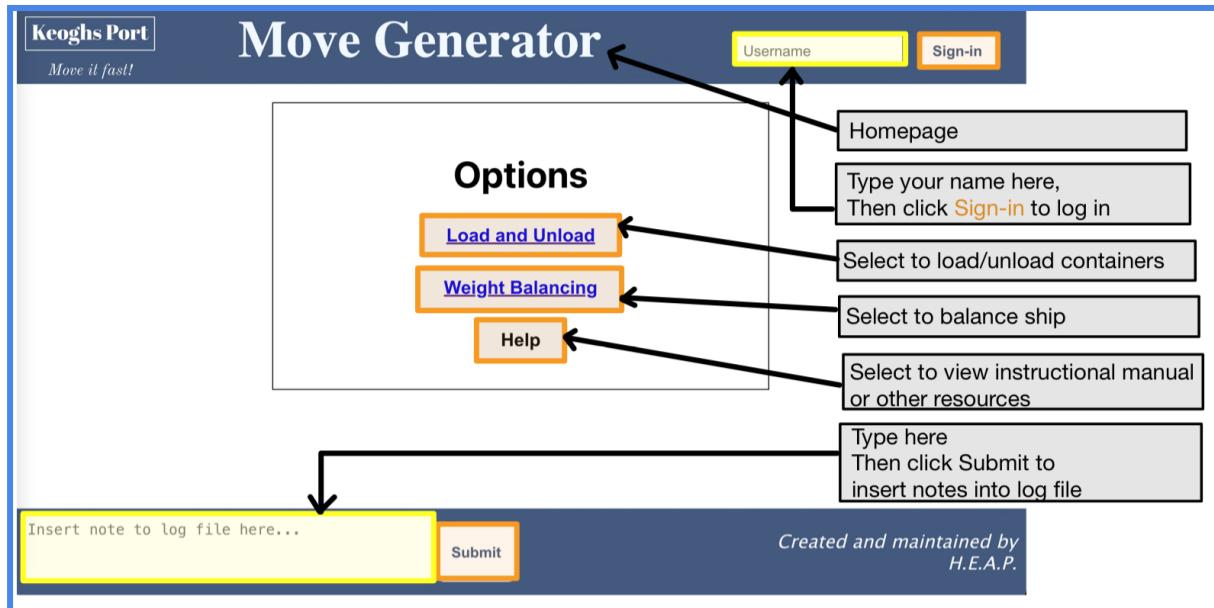
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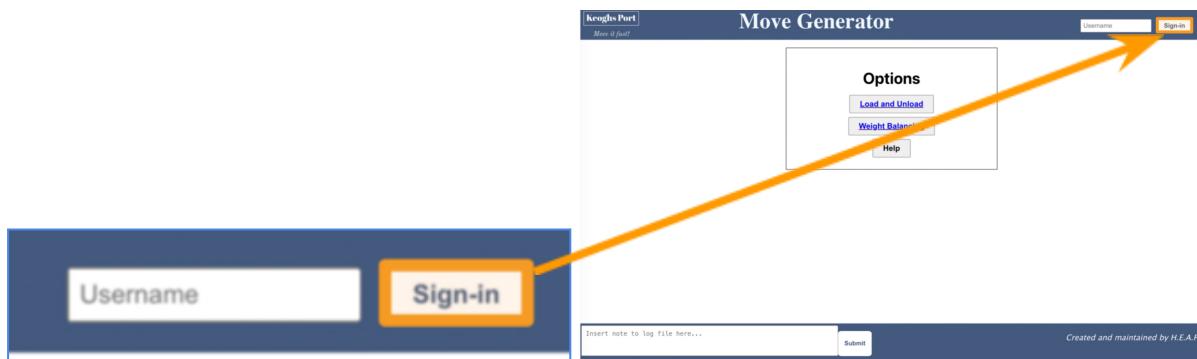
## Getting Started:

The homepage serves as the central navigation hub for Keogh's Port Move Generator. This section will guide you through its components and how to utilize them effectively.



### Signing in

1. You should always sign-in before starting your shift.
2. Type in your name/username in the text-box on the top right hand corner of any page where it says "Username".
3. Then click "Sign-in" to login successfully.



### Main Content - Options

1. The "Options" box at the center of the homepage provides you with three main functions of the Move Generator:
  1. Load and Unload: This button leads to the Loading/Unloading tool.
  2. Weight Balancing: This button leads to the Weight Balancing tool.
  3. Help: Access help and support resources for the Move Generator.

## Inserting Notes

1. The bottom text box labeled "Insert note to log file here..." allows you to enter notes or comments relevant to your operations into the port's log file. These notes could be reminders, observations, or other important information you wish to log.
2. After typing your note, click on the "Submit" button to add it to the log file.

## Navigating the Homepage

1. To navigate to any of the options, simply click on the corresponding button.
2. After completing tasks in other sections, you will always be redirected to the homepage.

## Suggestions

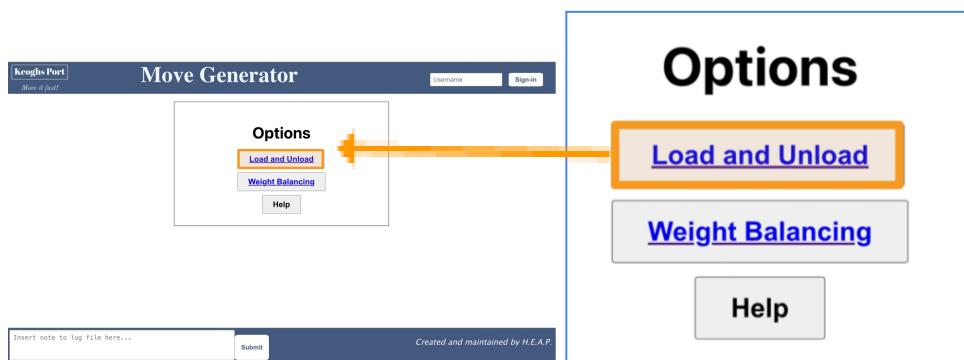
- Before beginning your operations, ensure you are logged in to track your activity.
- Utilize the Help section to get familiar with the Move Generator's features/functions.
- Regularly insert notes to maintain a clear log of your operational tasks.

## Load and Unload Feature

This section of the website is designed to assist with the efficient loading and unloading of containers at Keogh's Port. The process is initiated by uploading a manifest file and then selecting containers to be loaded or unloaded.

### Upload Manifest

1.



Navigate to the "Load and Unload" option (highlighted above) on the homepage.

You'll be directed to an intermediary page, as shown below:

The screenshot shows a web application titled "Loading & Unloading". At the top left is a "Choose File" button with the placeholder "No file chosen". An orange arrow points from this button to a larger, highlighted orange box containing the text "Choose File No file chosen". Below the main interface, there's a note input field labeled "Insert note to log file here..." and a "Submit" button.

- Click the "Choose File" button on the intermediate screen and click "Upload!" to upload the manifest file, which should be in .txt format.

The screenshot shows the same "Loading & Unloading" page. The "Choose File" dialog now displays a selected file: "sample\_manifest.txt" by "File Name: sample\_manifest.txt". A blue box highlights the "Upload" button. Below the main interface, there's a note input field labeled "Insert note to log file here..." and a "Submit" button.

- Once the file is selected and uploaded, the system processes the manifest and displays the grid layout of the containers on the ship.

## Understand the Layout

The screenshot shows the "Loading & Unloading" page with several callout boxes explaining its features:

- Add Containers**: A sidebar for adding new containers.
- Select Containers to Unload**: The main area showing an 8x12 grid of shipping bays. A specific cell at row 5, column 5 is highlighted in green and labeled "Cell Data" with details: Location: [1, 5], Name: Hen, Weight: 4.
- Ready to Continue:** A sidebar with a "Compute Steps" button and a list of items:
  - Current task at hand
  - Name of manifest file currently open
  - Button to compute steps for loading/unloading
  - Cell data showing information about a selected container
  - 8 x 12 bay on ship
  - Space to add names of containers to be loaded

- The displayed grid represents the layout of containers on the ship, with rows and columns corresponding to their actual positions.
- Each cell in the grid can be clicked to select or deselect containers for unloading.

- The "Cell Data" section on the right side of the screen displays details about the selected cell, including location, container name, and weight.

## Select Containers to Unload

- Click on the containers in the grid that need to be unloaded.  
Selected containers are highlighted in green.
- As containers are selected, a tally of the total containers to be offloaded updates in real-time.
- If a mistake is made, simply click the container again to deselect it.

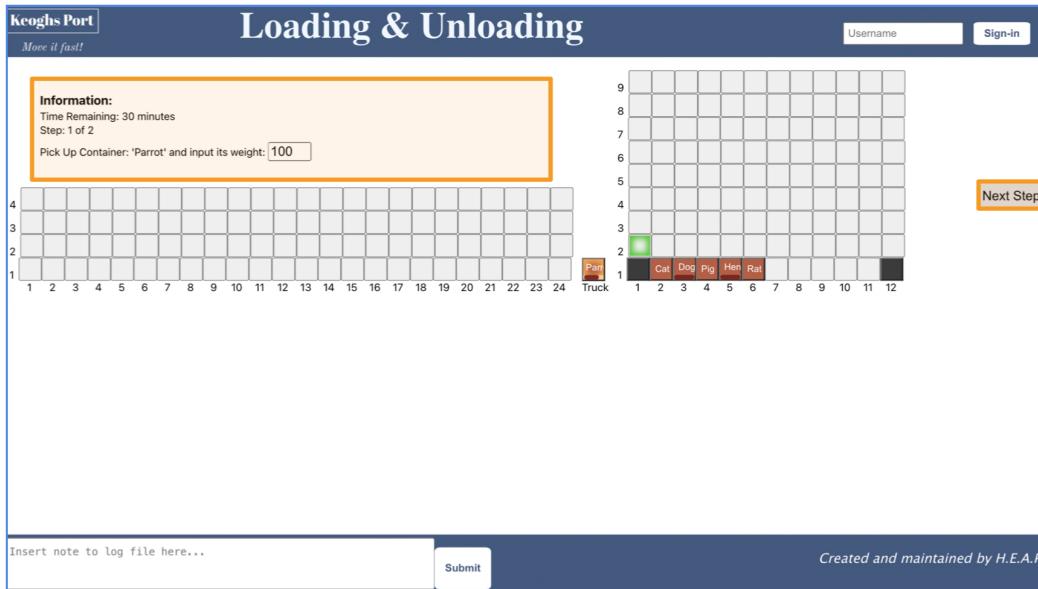
## Select Containers to Load

- Enter the name of each container to be loaded in the "Add containers" section and then click "Submit" (You'll be asked to input their weights later.)

- As containers are added, a list of the total containers to be loaded updates in real-time.
- If a mistake is made, simply click the "X" button to remove it.

## Generate Unloading and Loading Steps

- Once the appropriate containers are selected for unloading and the number of containers for loading is specified, click the "Compute Steps" button.
- The algorithm will process the information and provide a step-by-step guide for the most efficient loading and unloading sequence.



- Follow the instructions in the information box.
  - When loading a container, enter its weight, as recorded by the crane.
  - The container to be moved or picked up by the crane is highlighted in **blue** and **red**. The target destination for that container is highlighted in **flashing green**.
- The "*Information*" box will display each step one by one, and you can proceed by clicking the "Next Step" button towards the right of the screen.
- Proceed with the physical loading or unloading of containers as per the instructions.
- Follow the instructions in the "*Information*" box to complete the task of loading and unloading containers.
- Once you're done following the steps, you'll receive a reminder to click "Download" to receive the OUTBOUND manifest and send it to the ship captain!

After which, you'll be redirected to the homepage.

## Logging Notes

- Use the text box at the bottom of the screen to insert any notes related to the loading or unloading process.
- Click "Submit" to save the note to the log file for future reference.

Remember to save the outbound manifest file for future use. Always ensure that the data entered matches the physical arrangement on the ship to avoid discrepancies in the loading/unloading process.

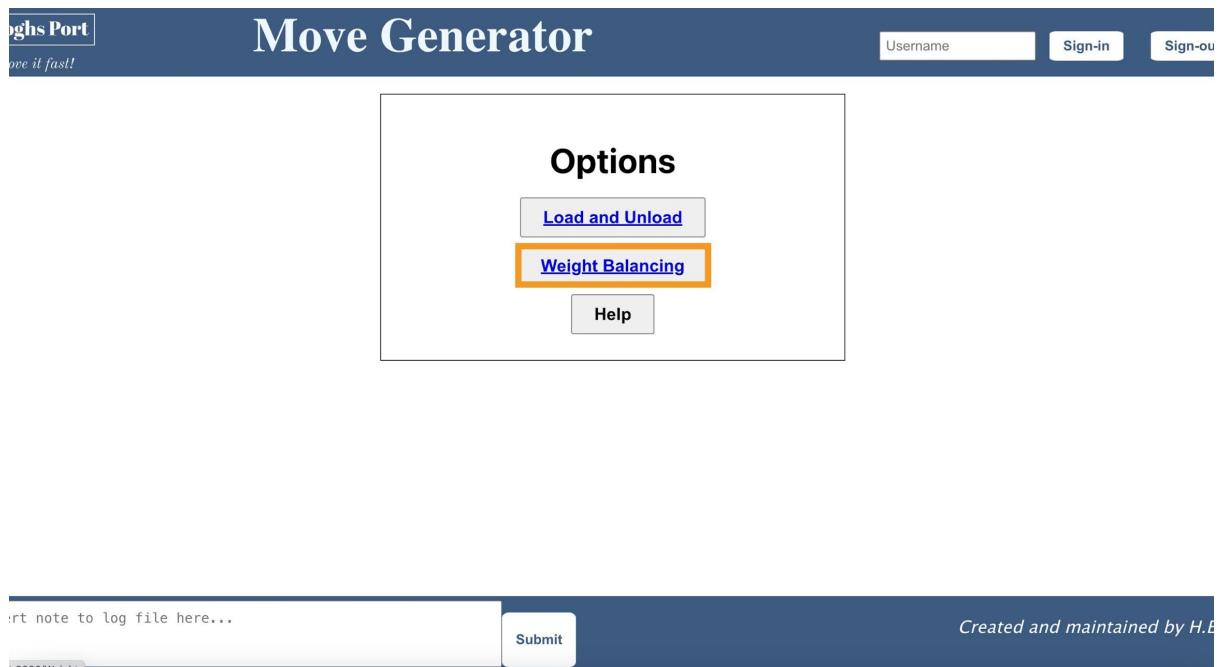
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## Weight Balancing feature

This section of the website is designed to assist with the efficient balancing of containers at Keogh's Port. The process is initiated by uploading a manifest file and then navigating through the steps to be followed to balance the weight distribution of the containers.

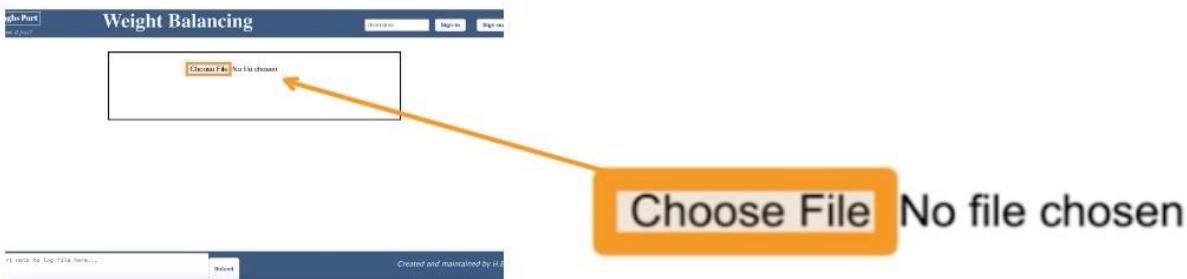
### Uploading a Manifest

1.

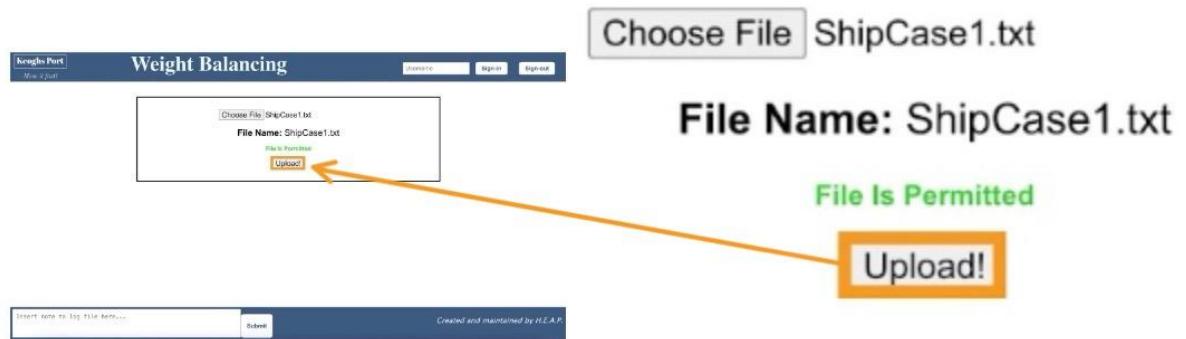


Navigate to the "Weight Balancing" option (highlighted above) on the homepage.

You'll be directed to an intermediary page, as shown below:



2. Click the "Choose File" button on the intermediate screen and click "Upload!" to upload the manifest file, which should be in .txt format.



3. Once the file is selected and uploaded, the system processes the manifest and displays the grid layout of the containers on the ship.

## Understanding the Layout

1. The displayed grid represents the layout of containers on the ship, with rows and columns corresponding to their actual positions.
2. The cell with the container to be moved will be **flashing blue** and **red** and the cell it is to be moved to will be **flashing green**.

## Generating Balance Steps

1. The "*Information*" box will display each step one by one, and you can proceed by clicking the "Next Step" button towards the right of the screen.

## Finalizing the Task

1. Review the generated steps carefully.
2. Proceed with the physical movement of containers as per the instructions.

3. Follow the instructions in the “Information” box to complete the task of balancing the containers on the ship according to weight.
4. Once you’re done following the steps, you’ll receive a reminder to **Download** the OUTBOUND manifest and send it to the ship captain!

**Task Completed:**  
Remember to download the OutBound Manifest and email it to the ship captain: [Download File](#)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

9  
8  
7  
6  
5  
4  
3  
2  
1

Truck

Cat

Dog

Created and maintained by H.E.A.P.

## Logging and Notes

- Use the text box at the bottom of the screen to insert any notes related to the loading/unloading process.
- Click "**Submit**" to save the note to the log file for future reference.

Remember to save the outbound manifest file for future use. Always ensure that the data entered matches the physical arrangement on the ship to avoid discrepancies in the weight balancing process.

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## Making Notes and Logging Information

The website includes a universal note-taking and logging feature, accessible from the bottom of every page within the system. It is located persistently at the bottom of every page. The note-taking box is immediately visible, no matter where you are within the Move Generator.

A screenshot of a web interface showing a blue-bordered box at the bottom of the page. Inside the box is a white text input field containing the placeholder text "Insert note to log file here...". To the right of the input field is a white "Submit" button with a thin black border.

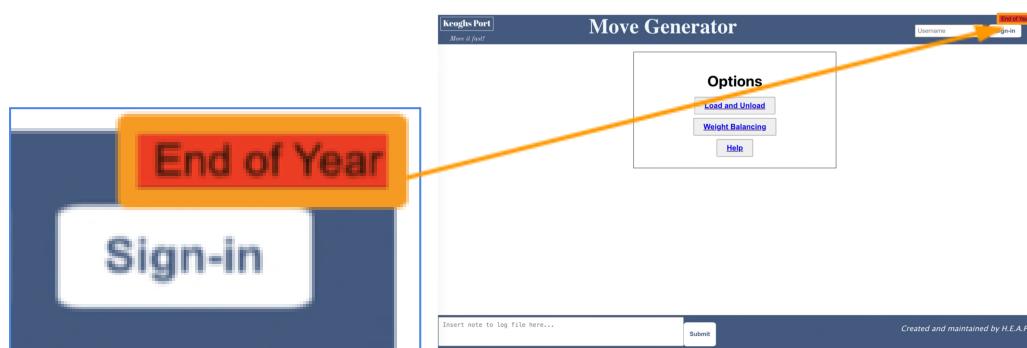
### How to Use the Note-Taking Feature

1. Simply click inside the text box where it says "Insert note to log file here..." and begin typing your note.
2. After typing your note, click the "Submit" button located directly next to the text box to save your entry.
3. Reviewing Notes: All notes are appended to a hidden log file that can be accessed or reviewed by authorized personnel. Instructions for accessing this log should be provided separately or can be requested from the system administrator.

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## End Of Year Sign Out Feature

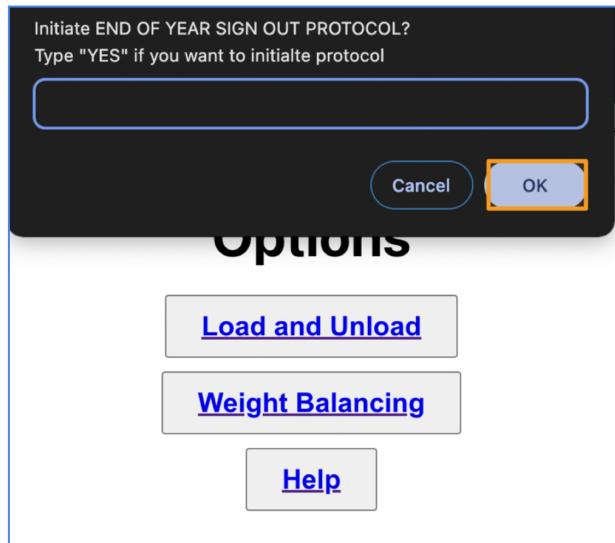
This section of the website is designed for signing out at the end of the year for the holidays at Keogh's Port. The process is initiated by pressing the **End of Year** button as highlighted in the figure below and then following the procedures as instructed.



### Signing Out

1. You need to be at the homepage to be able to sign out at the end of the year.
2. When the **End of Year** button is pressed, a pop-up window appears, asking you to
  - a. type "YES" if you wish to proceed with signing off.

- b. Click "Cancel" if you made a mistake and do not want to proceed.



3. After pressing "Ok" the web application will be closed until it is opened again by the administrator.

Downloading the log file.

1. You can click on the "Download" button to download the logfile for that year.

Remember to save the logfile for future use.

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### Contact Information:

If there are any issues with using the software or concerns with the features/functionality, please contact the team members via email. H.E.A.P. Company contacts are:

- Harsh Sharma ([hshar021@ucr.edu](mailto:hshar021@ucr.edu))
- Edgar Melendrez ([emele012@ucr.edu](mailto:emele012@ucr.edu))
- Adolfo Bugarin ([abuga006@ucr.edu](mailto:abuga006@ucr.edu))
- Pranoy Giri Kallikadavil ([pgiri001@ucr.edu](mailto:pgiri001@ucr.edu))

Surveys and bug reports are to be communicated via one of these four accounts.

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