

12th Yam User Manual

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1 Introduction

Yam is an inventory management system developed specifically for use by the 12th Can, a student run, on campus food pantry at Texas A&M University. This was developed for the Fall 2019 CSCE 431 Software Engineering course. The system allows for updating inventory, viewing statistics about the current stock, managing users, and keeping audit logs.

This document serves as a brief overview and user manual for the system.

2 Add New Items To Keep Track Of

To begin using the system, there must be items to keep track of. This pack allows you to see and search up all non-deleted items in the database. This should help you not to add duplicate items.

If the item you want to add doesn't exist, you will hit the **Add Item** button. This will bring up a modal where you can put in the item name, capacity, low threshold, whether it is a food item and whether or not it needs to be refrigerated as seen in Figure 1. You can add multiple items to the table.

Once you have determined that you've added the items you need, click the **submit** button. This will then bring up a summary modal of all the changes you want to make to confirm they are correct as seen in Figure 2.

Once you've clicked submit, the table should be cleared and you should see a banner display at the top of the page showing the number of new items that were just added to the system. You can now add and remove inventory for these items!

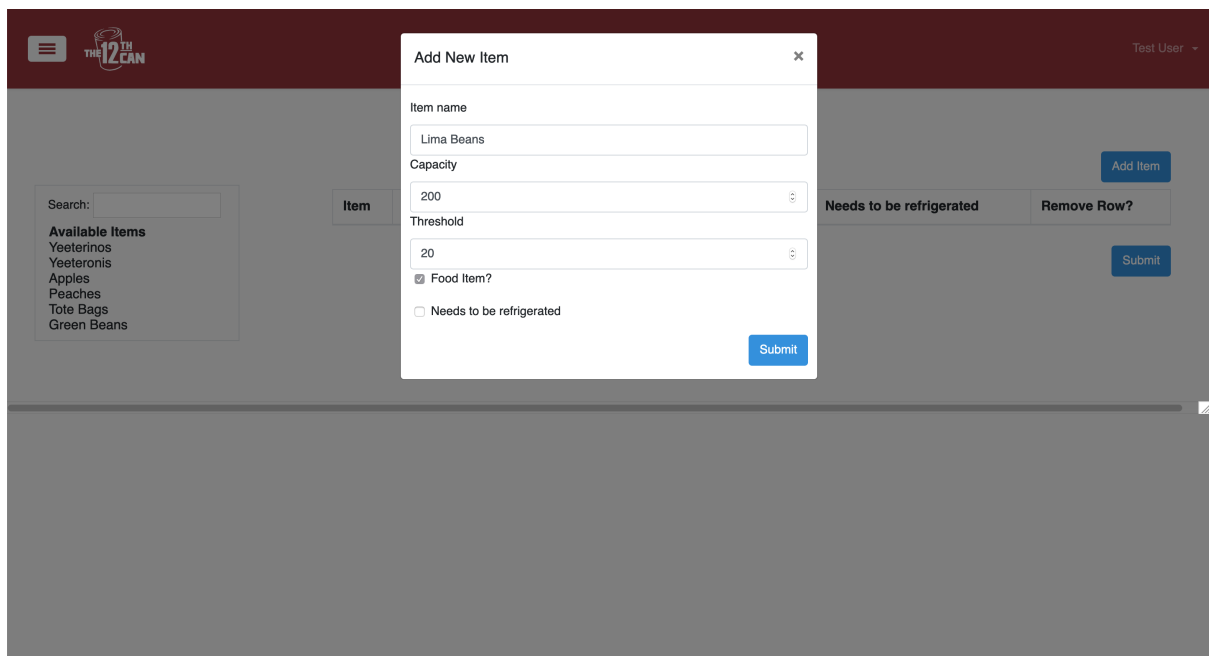
The image shows a web application interface for 'THE 12TH CAN'. A modal titled 'Add New Item' is open in the center. The modal contains the following fields and controls: 'Item name' with a text input containing 'Lima Beans'; 'Capacity' with a numeric input containing '200'; 'Threshold' with a numeric input containing '20'; a checked checkbox for 'Food Item?'; and an unchecked checkbox for 'Needs to be refrigerated'. A blue 'Submit' button is at the bottom right of the modal. In the background, a sidebar on the left lists 'Available Items' including Yeeterinos, Apples, Peaches, Tote Bags, and Green Beans. A table on the right is partially visible with columns 'Item', 'Needs to be refrigerated', and 'Remove Row?'. The 'Add Item' button is visible above the table, and a 'Submit' button is visible below the table.

Figure 1: Item Addition Modal

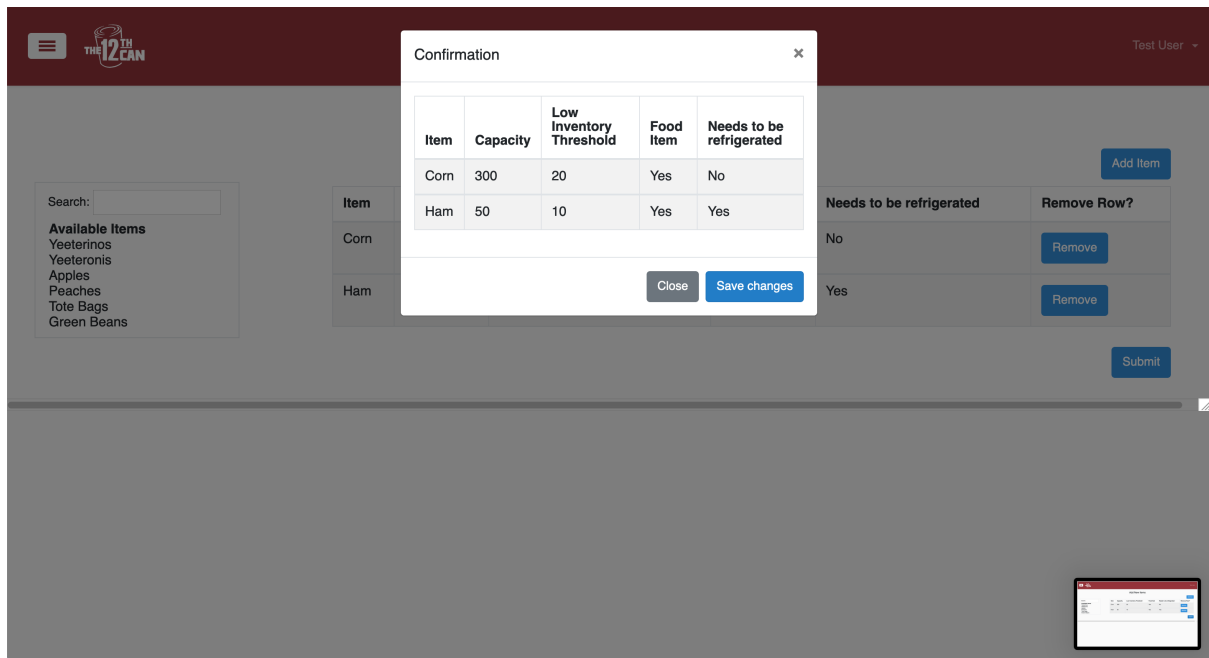


Figure 2: Item Addition Summary Modal

3 Modify the Properties For Items In The System

This page allows you to modify the properties for an item from Section 2. You can change the name, capacity, low threshold, whether it is a food item, whether it needs to be refrigerated and whether the item should be deleted. This can be the next step after you've added an item in case there were mistakes when adding it or allow the inventory to change with the pantry.

When you delete an item, it isn't really deleted, it simply is just flagged as deleted. This means it won't show up in the list of items to add/remove inventory for.

You can modify an item by simply searching it up in the list and clicking it. The item will automatically show up in the table and you can then change that item's properties as seen in Figure 3. Similar to Section 2, once you click submit, you will see a summary modal to confirm the changes are correct as seen in Figure 4.

Once you've clicked to confirm, the table will be cleared and you should see a banner alert at the top of the page showing the number of items that have been modified.

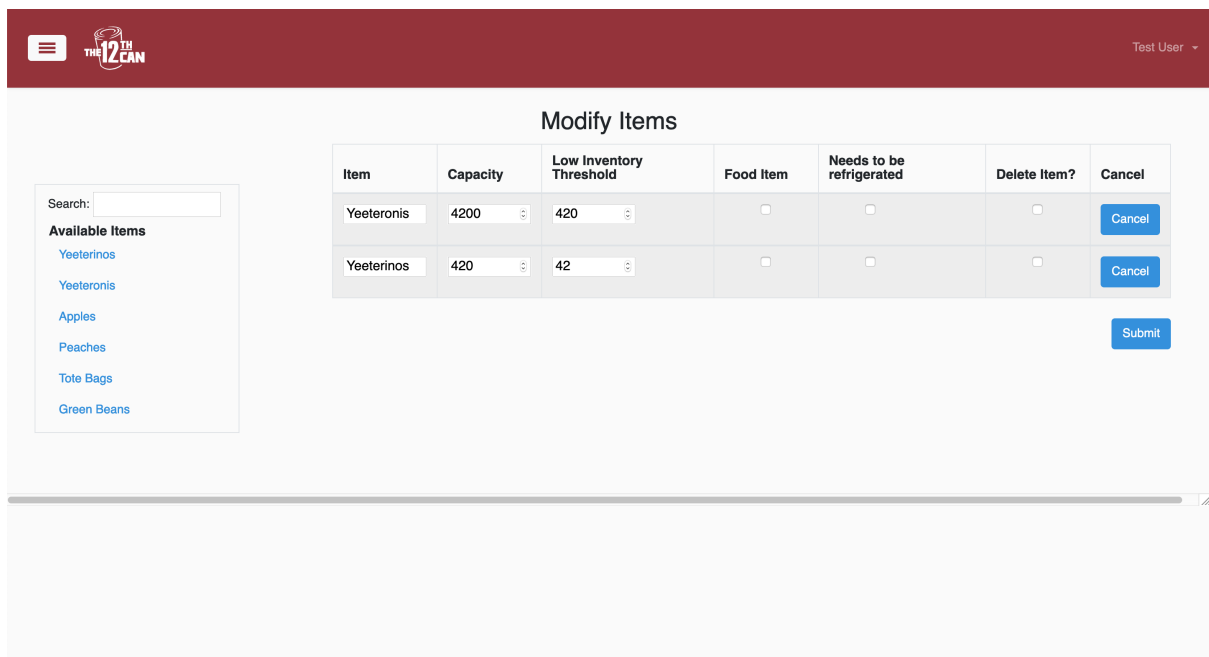


Figure 3: Modify Items Page

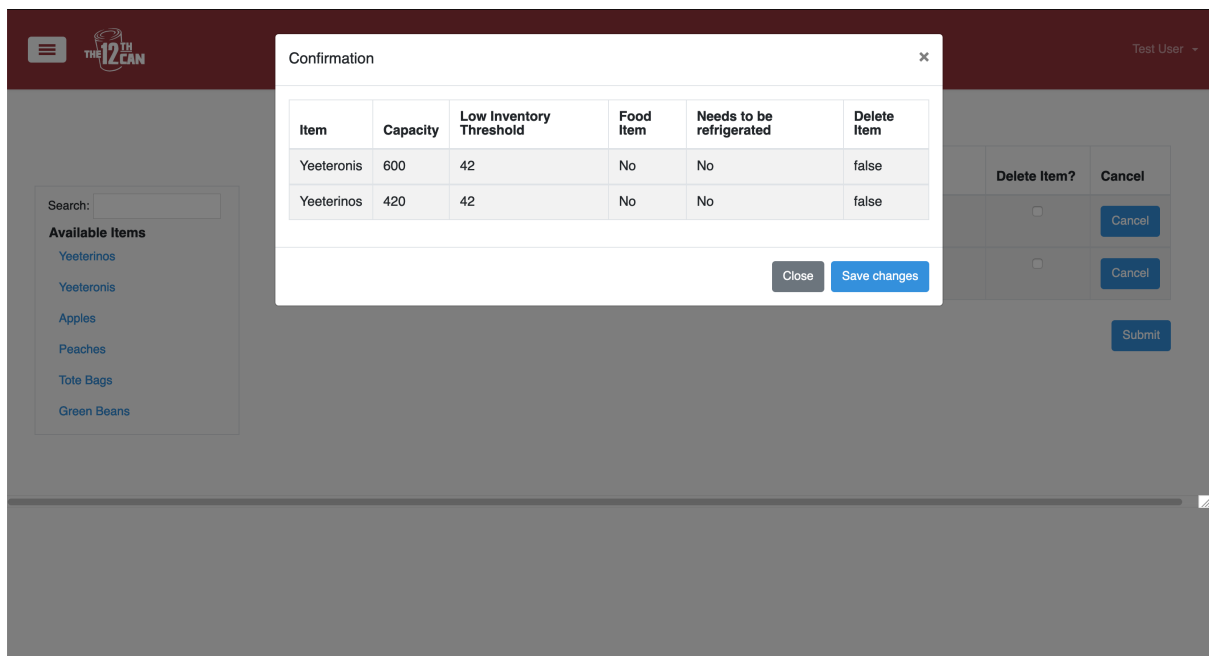


Figure 4: Modify Items Summary Modal

4 Add and Remove Inventory

This is the meat and potatoes of the system. The **Add Inventory** and **Remove Inventory** pages work exactly the same (other than their purpose).

You can search up the item to add/remove inventory for and click the item in the list. This will add the row to the table similar to Section 3 and as seen in Figure 5.

Once you click **Submit**, you will get a summary modal as seen in Figure 6. Once you've clicked to confirm, the table will be cleared and you should see a banner alert at the top of the page showing the number of items that have had inventory added (or removed depending on if you are on the **Add Inventory** or **Remove Inventory** page).

Item	Current Quantity	Quantity Added	Comment	Cancel
Peaches	76	54		Cancel
Green Beans	98	45		Cancel
Apples	54	76		Cancel

Submit

Figure 5: Add Inventory Page

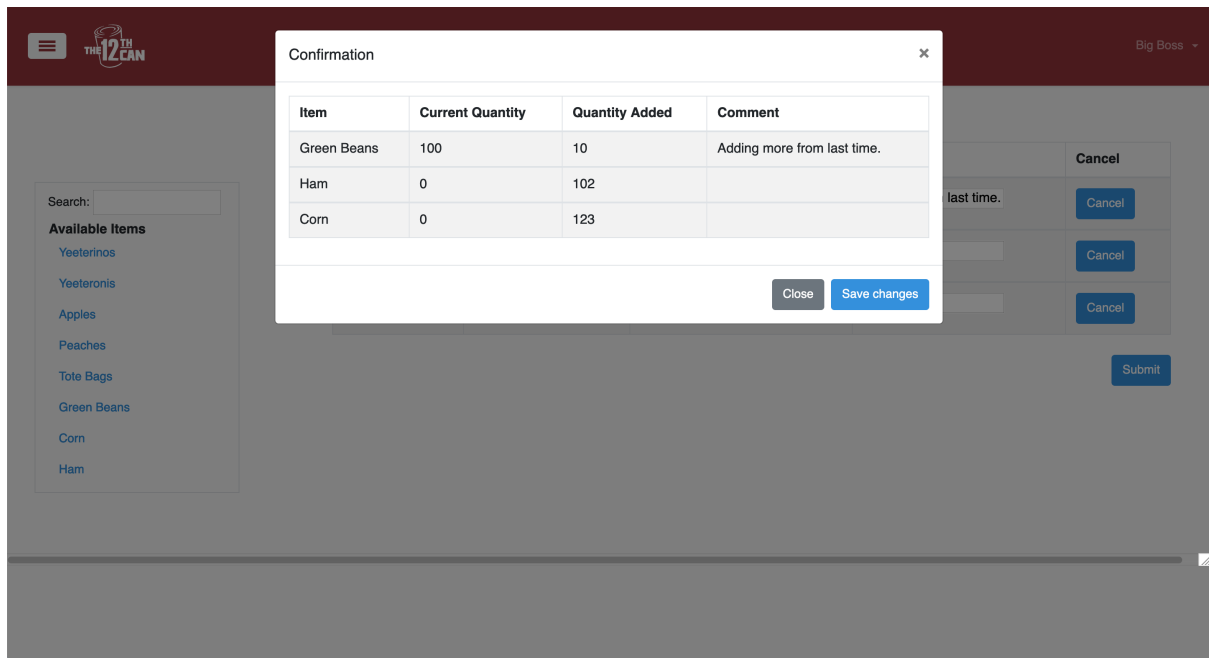


Figure 6: Add Inventory Summary Modal

5 Inventory Dashboard

The dashboard allows the user to get meaningful insight into the state of the inventory at a glance. There are 5 displays on the screen as seen in Figure 7. The first section shows all of the items that are low. This is specified by the low threshold in Section 2. Any item whose quantity is below that threshold will show up.

The next section is the control for the page. The user can simply click the checkbox on the item they want to display information for. For example, if the user checks the box for Apples and Peaches, the rest of the page will reflect that and only show information for those items. The default setting is all items in the system. Once the items you want are checked, click the **Submit** button. This will reload the page displaying information for only the items you chose.

The next section is the bar graph showing the current inventory. This simply shows the current quantity for the items checked in the checkboxes. The user can hover over each bar on the graph to get a read out on the specific number for that item.

The Weekly Inventory section of the page is a line graph that shows the inventory trends for the items chosen in the checkbox sections. This was made to allow the user to see trends in the inventory and see if some items were more popular than others.

The Recent Inventory section simply just show recent transactions that took place in the system. Transactions that removed stock will show up in red while transactions that added stock will show up in green.

The final section of the dashboard is the **Inventory vs. Capacity** section. This is a bar graph that shows the current quantity of an item next to its total capacity. For example, we can see in Figure 7 that the current quantity for Peaches is 100 and its total capacity is 200. This was done to allow the user to quickly see how much stock they have and if they will need to restock soon.



Figure 7: Inventory Dashboard

6 Audit With The History Transaction Log

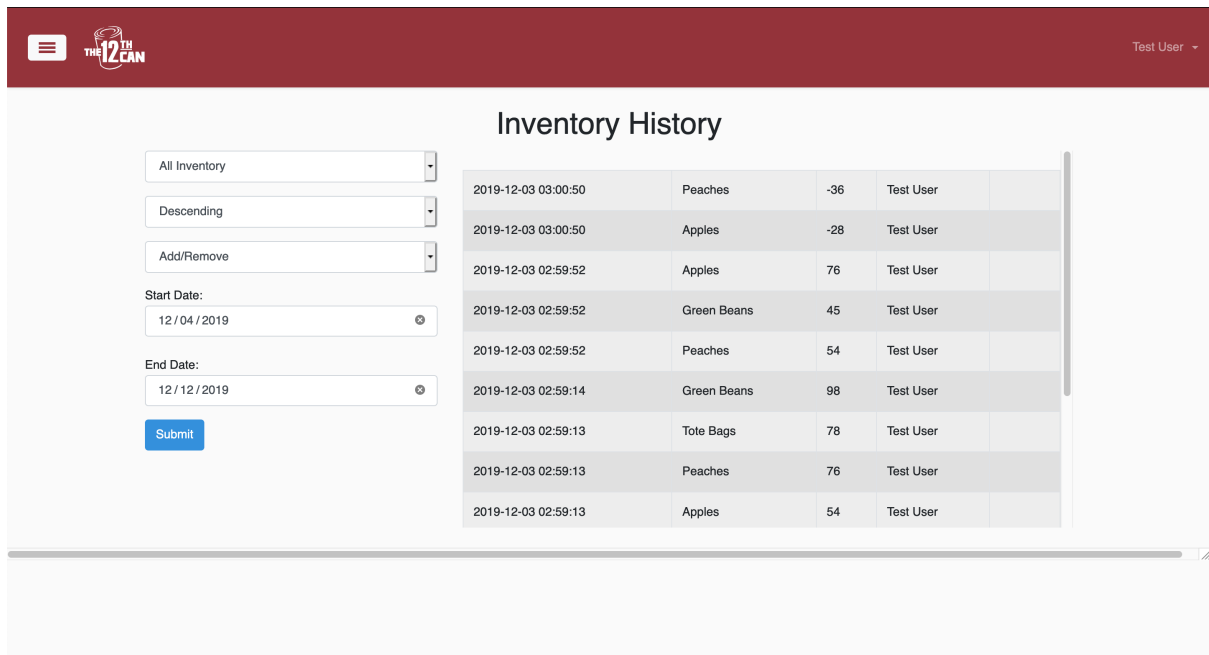
The transaction history page allows you to look through all of the transactions that took place in the system from the very beginning. The purpose of this screen was to assist with auditing purposes and also ease troubleshooting. For example, if it is found that an item doesn't have the correct quantity, you can go through the transaction history to try and find where exactly the mistake was made.

This screen has 4 filters that can be used to filter out transactions as seen in Figure 8. The first option is to filter on item. This will only return transaction for the item specified. The second option is what order (based on date) the transactions will be displayed in (oldest to newest or vice versa). The third option filters on whether the transaction was an add or remove transaction or both. Finally, you can filter for transactions during a specific window of time. All of these filters should make it fairly easy to find specific transactions.

Everything that is displayed on the table corresponds to the information input when adding or removing inventory. These fields are:

- The date the transaction took place
- The item whose stock was added or removed
- How much of the stock was removed or added
- The user who performed the transaction
- The comment that accompanied the transaction (if any)

The comments for the transaction are for if the user is making memos that accompany the transaction. An example for why this is needed is for the case where a transaction was used to correct another transaction.



Date	Item	Quantity	User	
2019-12-03 03:00:50	Peaches	-36	Test User	
2019-12-03 03:00:50	Apples	-28	Test User	
2019-12-03 02:59:52	Apples	76	Test User	
2019-12-03 02:59:52	Green Beans	45	Test User	
2019-12-03 02:59:52	Peaches	54	Test User	
2019-12-03 02:59:14	Green Beans	98	Test User	
2019-12-03 02:59:13	Tote Bags	78	Test User	
2019-12-03 02:59:13	Peaches	76	Test User	
2019-12-03 02:59:13	Apples	54	Test User	

Figure 8: Transaction History Log

7 Manage Users In The Admin Panel

The admin panel is how the administrator can administer users and determine who can access the system and what they can do on it. There are 4 distinct sections of the page as seen in Figure 9. These sections in order of use are:

- Pending Accounts
- Current Positions
- Current Accounts
- Past Accounts

Test User

Admin Panel

Current Accounts

Name	Phone Number	Email Address	Position	Modify?
Test User	1234567890	12thcanNoReply@gmail.com	Executive Director	<button>Modify</button>

Past Accounts

Name	Phone Number	Email Address	Modify?
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Pending Accounts

Name	Email	Accept?	Reject?
Big Boss	bigboss@metalgear.com	<button>Accept</button>	<button>Reject</button>
Abdul Campos	abdul@gay.com	<button>Accept</button>	<button>Reject</button>

Current Positions

Add Position

Position	Email	Privilege	Notify on Low?	Modify?	Remove?
Big Boss	jgwesterfield@gmail.com	3	No	<button>Modify</button>	<button>Remove</button>
Development Director	12thcan.development@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>
Public Relations Director	12thcan.publicrelations@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>
Finance Director	12thcan.finance@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>
Donations Director	12thcan.donation@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>

Figure 9: Admin Panel

7.1 Current Positions

The section deals with the different positions that a user can be. Each position has a different privilege level attached to it that determines how much the user can interact with the site. These privileges are explained in section 8.

As the pantry grows, new positions may need to be added to encompass newer responsibilities. You can easily create new positions by clicking the **Add Position** button. When this button is clicked, a modal will pop up allowing you to enter the position name, email address, description, whether or not to send that position email notifications for low inventory, and the privilege attached to that position. This can be seen in Figure 10. Once you hit submit, that position will be added to the table and a banner should display at the top of the page confirming that.

You can also modify existing positions as seen in Figure 11. The information is the same, you can just change it now.

Finally, you can also delete positions if they are not being used or are no longer valid in the organization. See section 9.3 for issues related to deleting positions.

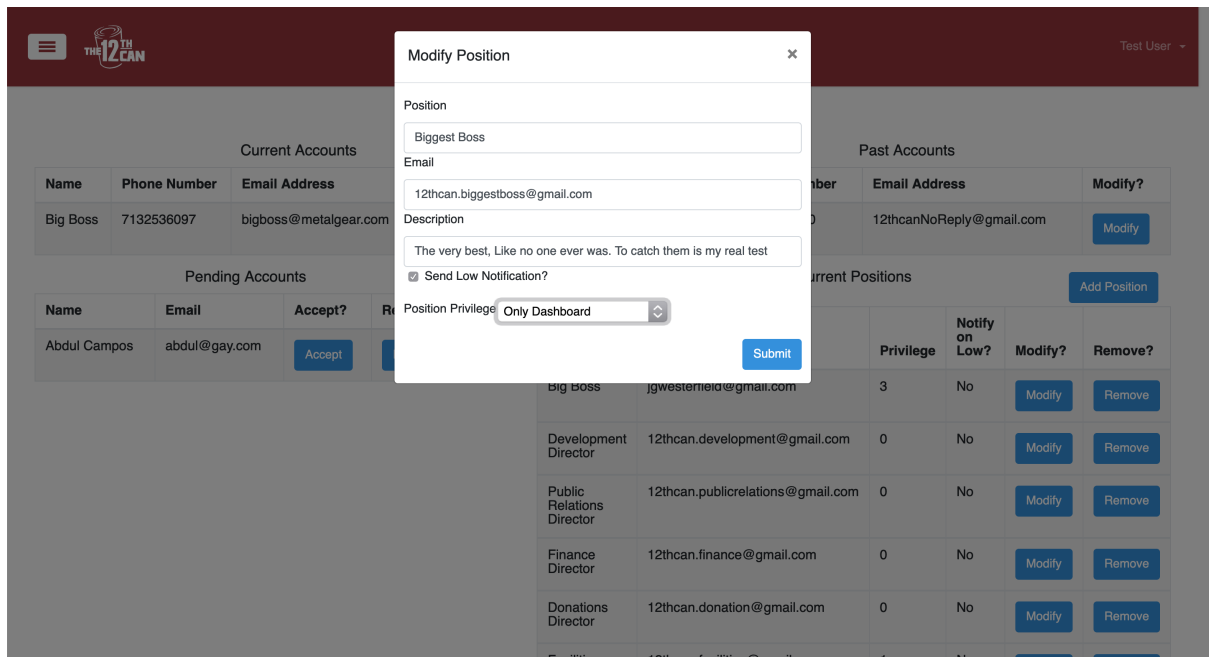


Figure 10: Admin Panel Create New Position

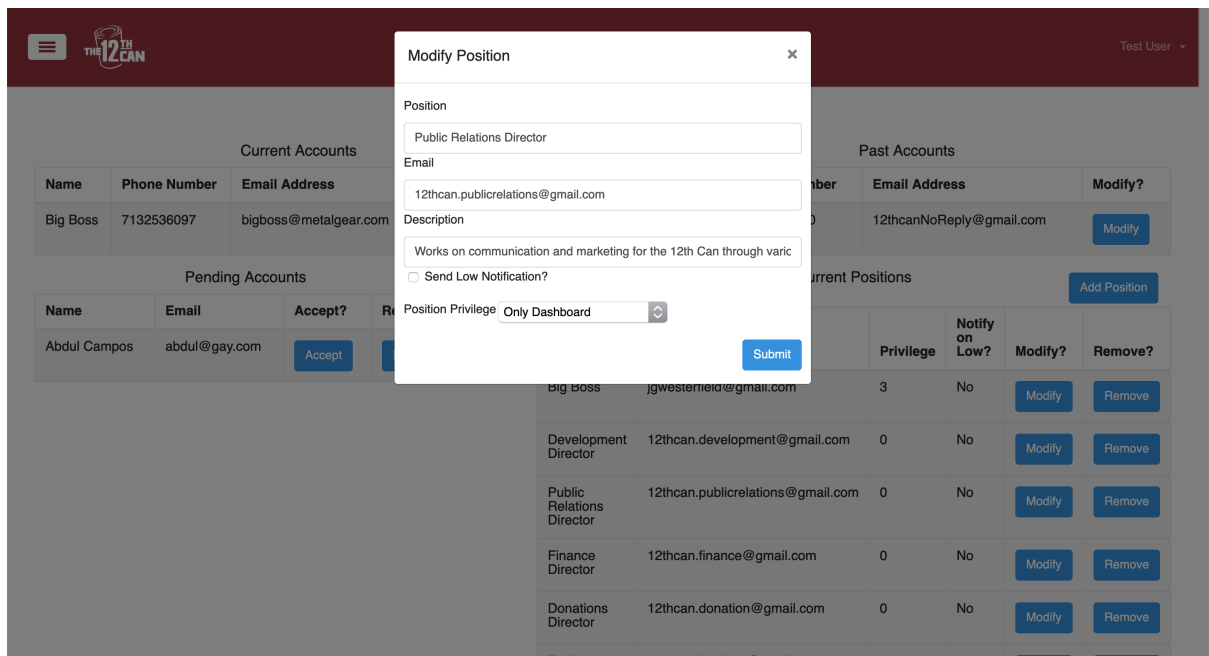


Figure 11: Admin Panel Modify Position

7.2 Pending Accounts

When a user registers for the site, their account is then sent in the **Pending Accounts** section of the page. This means that an administrator must approve this account before the user can access the system.

The admin can either accept or reject the account by pressing the respective buttons. Regardless of whether they hit accept or reject a modal will pop up asking if they are sure about their decision as seen in Figures 12 and 13.

If the user is accepted, their account will be moved into the **Current Accounts** section of the page as seen in section 7.3. If the user is rejected, that user will have an email sent to them notifying them of the rejection. After the email is sent, that user's account information will automatically be deleted from the system. The user can then try again or discuss further action with a director of the pantry.

The screenshot shows the Admin Panel interface. At the top, there is a dark red header with a logo on the left and a user profile 'Test User' on the right. A white modal titled 'Accept Account' is open in the center, asking 'Are you sure you wanna accept ma man: Big Boss' with a 'Submit' button. Below the modal, the page is divided into four sections: 'Current Accounts', 'Past Accounts', 'Pending Accounts', and 'Current Positions'. The 'Pending Accounts' section contains a table with two rows of pending users, each with 'Accept' and 'Reject' buttons.

Name	Phone Number	Email Address	Position	Modify?
Test User	1234567890	12thcanNoReply@gmail.com	Executive Director	<button>Modify</button>

Name	Phone Number	Email Address	Modify?
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Name	Email	Accept?	Reject?
Big Boss	bigboss@metalgear.com	<button>Accept</button>	<button>Reject</button>
Abdul Campos	abdul@gay.com	<button>Accept</button>	<button>Reject</button>

Position	Email	Privilege	Notify on Low?	Modify?	Remove?
Big Boss	jgwesterfield@gmail.com	3	No	<button>Modify</button>	<button>Remove</button>
Development Director	12thcan.development@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>
Public Relations Director	12thcan.publicrelations@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>
Finance Director	12thcan.finance@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>
Donations Director	12thcan.donation@gmail.com	0	No	<button>Modify</button>	<button>Remove</button>

Figure 12: Admin Panel Accept User

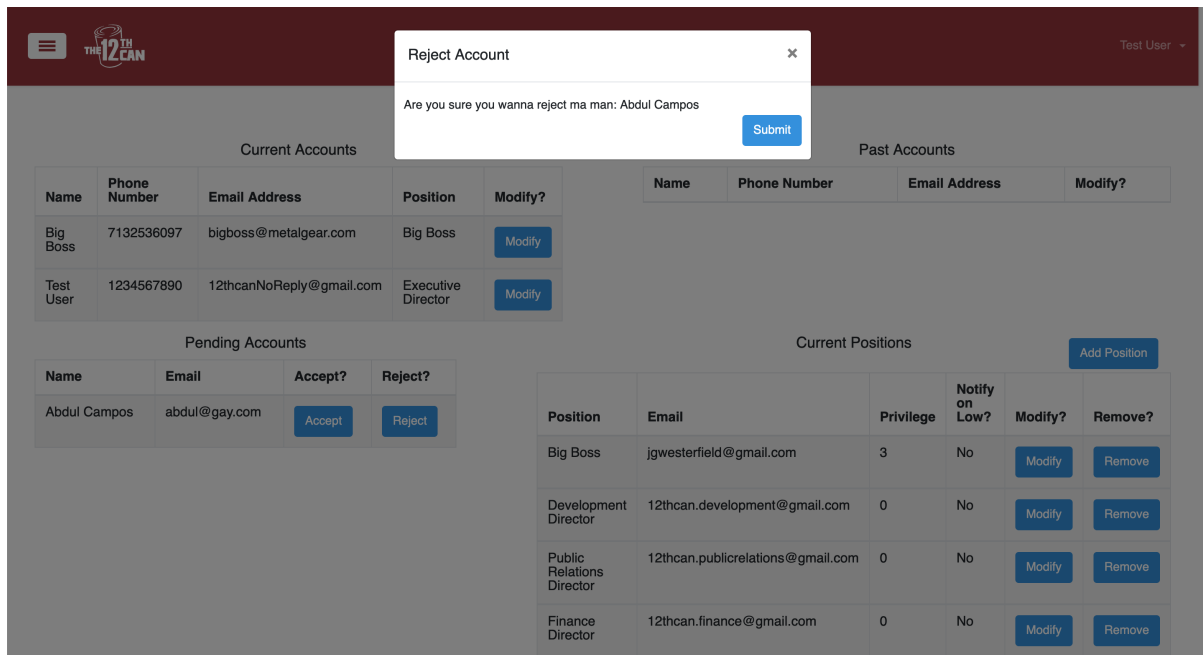


Figure 13: Admin Panel Reject User

7.3 Current Accounts

Once the user has been accepted, their account information must be modified to give them an appropriate member position. The default position given to a user is the *Big Boss* position which no user should have.

When you click on the **Modify** button for that position, a modal will pop up as seen in Figure 14. The information that can be changed is the user's email address, phone number, the position the user is, and whether or not the user is a current member of the 12th Can. The only field that can't be changed is the user's name.

If the **Archive Account** checkbox is clicked, that user will be sent to the **Past Accounts** described in Section 7.4.

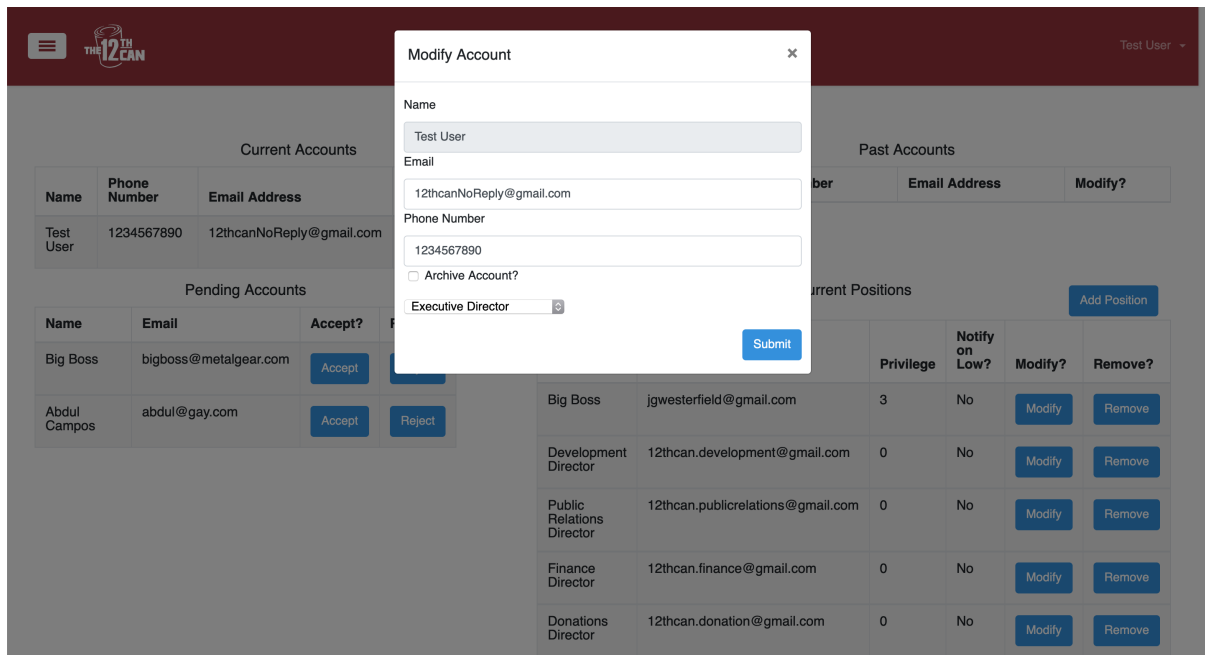


Figure 14: Admin Panel Modify User Modal

7.4 Past Accounts

This section of the page is solely to view accounts for people that are no longer a part of the 12th Can. This is important for seeing their contact info in case they need to be contacted after they leave. In addition this section is also for people that leave the 12th Can for a period of time and come back to the organization. This section makes it easy to add them back.

This section allows you to add a user back by modifying their account info. This modal looks exactly the same as when the user account information is modified in the **Current Accounts** section as seen in Figure 14. Once the **Archive Account** checkbox is unchecked and the modal is submitted, that user will be moved back to the **Current Accounts** section and a banner will display showing that the action was successful.

8 Positions and Privileges

There are 4 different privilege levels that a user can be given. These are described in sections: 8.1, 8.2, 8.3, and 8.4.

8.1 Privilege 0

Privilege level 0 indicates that the user is able to access the site but can make no modification to the inventory. Their only ability is to login and view the dashboard (the current state of the inventory). If the user clicks on any links to the other pages on the sidebar, they will be redirected to the dashboard page.

Positions that have this level of privilege are:

- Development Director
- Public Relations Director
- Finance Director
- Donations Director

8.2 Privilege 1

Privilege level 1 indicates that the user can login, view the dashboard, and make changes to inventory. This includes adding new items, adding stock, removing stock, modifying item properties, and viewing the transaction history log.

Positions that have this level of privilege are:

- Facilities Director
- Assistant Director

8.3 Privilege 2

Privilege level 2 indicates that the user has all of the abilities of privileges 0 and 1 but also has access to the admin panel. This privilege allows the user to manage the other users of the site. Users with this privilege can access the admin panel by clicking their name in the upper right corner of the screen and selected **Admin Panel**.

Positions with this privilege are:

- Executive Director
- Membership Director

8.4 Privilege 3

Privilege level 3 is mostly for IT and developers. It has the exact same privilege as privilege 2 but is higher just to absolutely make sure that developers can manipulate the system they way they need to. **No user should ever have this privilege.**

The only position with this privilege is the Big Boss position.

9 Things To Watch Out For

9.1 Login Is Case Sensitive

The email address field on the login page is case sensitive. This means that if you typed your email address with any capital letters when you registered, you will need to keep that capitalization consistent when you try to login. For example, if the user registered with the email address `12thCanNoReply@gmail.com`, logging in with `12thcannoreply@gmail.com` would **FAIL**.

9.2 Items Cannot Be Deleted

When a user goes onto the **Modify Items** page and click the check box for deleting an item, the item is never actually deleted. The item is flagged as “deleted” and will subsequently not show up on the **Add/Remove** or **Dashboard** pages. However, the item will still show up on the **Modify Items** and **Transaction History** Page.

This was done in case the user wanted to bring an item back after being deleted with the original information. If the user wants to bring an item back but wants to delete the previous inventory, they can simply just remove all of its inventory and put a comment saying that the stock has been reset for that item.

9.3 Deleting Member Positions Is Dangerous

Every single user account has a member position attached to it. This means that if a user deletes a user position from the database (especially their own), there is a chance that people will get locked out of the system.

For example, if a user deletes his own user position, they won’t be able to add or remove items (assuming they can even login).

Luckily, if there is a user attached to a position, you shouldn’t even be able to delete that position. This means that to successfully delete a position, **you must ensure that there are no users in that position.**

9.4 Banner Alerts Are Important

Banner alerts that appear at the top of a page after a user action are the most important indicator that the action succeeded. If the banner did not display at the top of the page after an action, it’s a safe bet that the action failed.

For example, if you try to delete a Member Position that still has users attached, the banner will not display. In addition, you will then notice that the position was not removed from the screen.

This is consistent throughout the site. If the banner does not display after adding stock, removing stock, adding new items, or modifying item properties, those actions did not succeed and will not be reflected.