THOMAS MORE

KMITL

User Manual

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Introduction

Welcome to the comprehensive user manual for our E-borrowing web application, a robust tool designed to enhance the management and distribution of school supplies within your school. This document serves as a detailed guide to each aspect of the application, developed during our internship to streamline the borrowing process and ensure efficient utilization of resources.

In the following pages, we will explore every functionality of our platform, from user registration to the management of borrowing requests. We aim to provide you with clear instructions and insights into how each feature operates and how it can be best utilized to facilitate both students and staff in their daily educational activities. Whether you are a teacher, student, or administrator, this manual will assist you in navigating and maximizing the potential of our application effectively.

Our goal with this manual is not only to educate users on the technical features but also to highlight the practical benefits that our application brings to your educational environment. By the end of this document, you should feel confident in using our application to its full potential, enhancing the educational experience and operational efficiency at your institution.

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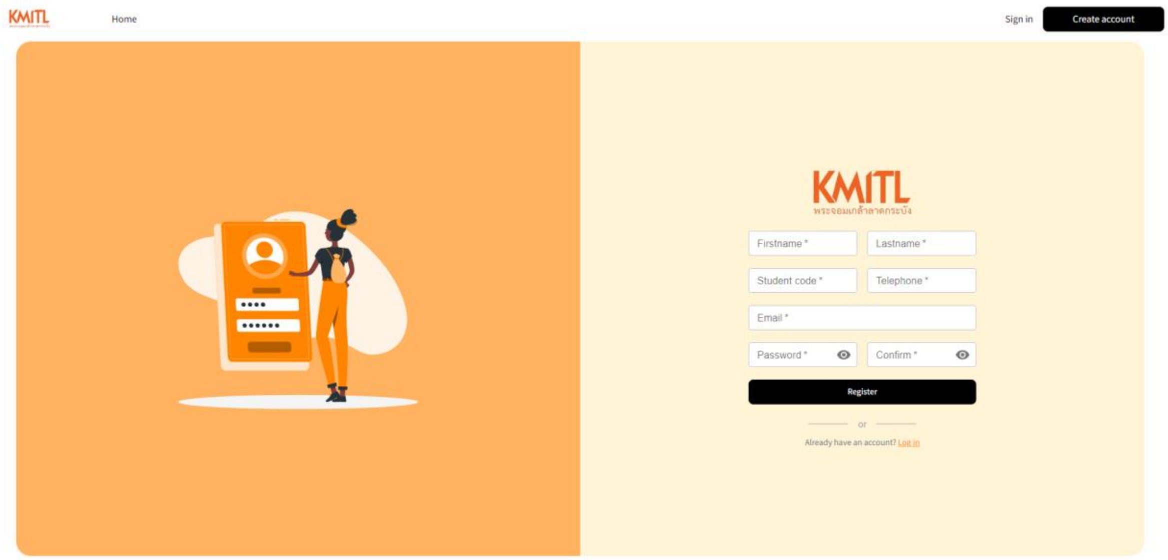
1. General

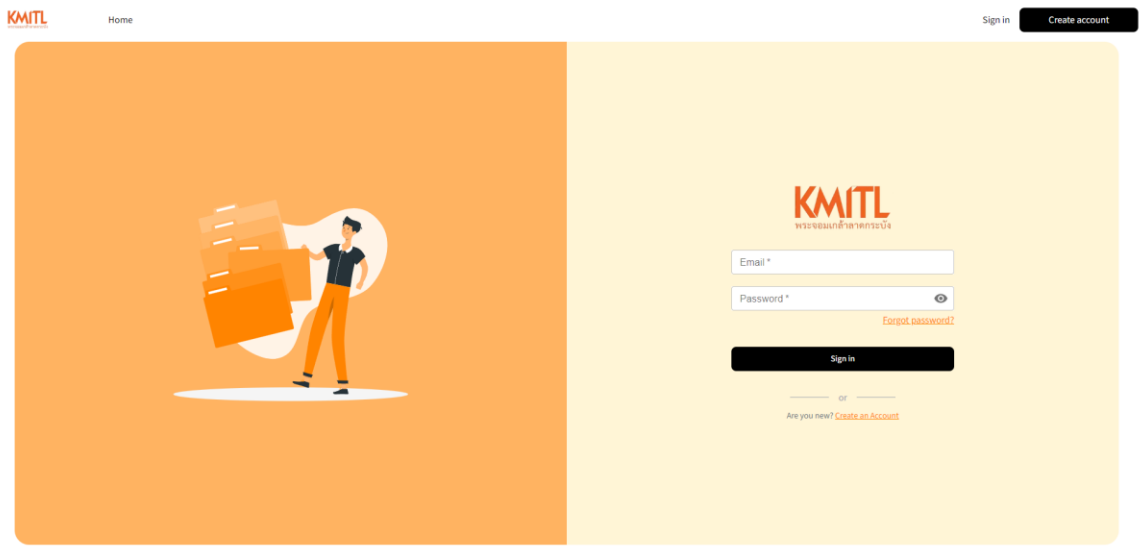
1.1. Register

The first part of the application, making an account. This is where the users can create an account. Standard when a user creates an account, he has the role "Student". We did this because most of the people that are going to use this system will be students. Only people with a valid telephone number or email (ending with @kmitl.ac) can create an account. When you want your role changed, or you want to use an email other than the one ending with @kmitl.ac you must contact an administrator.



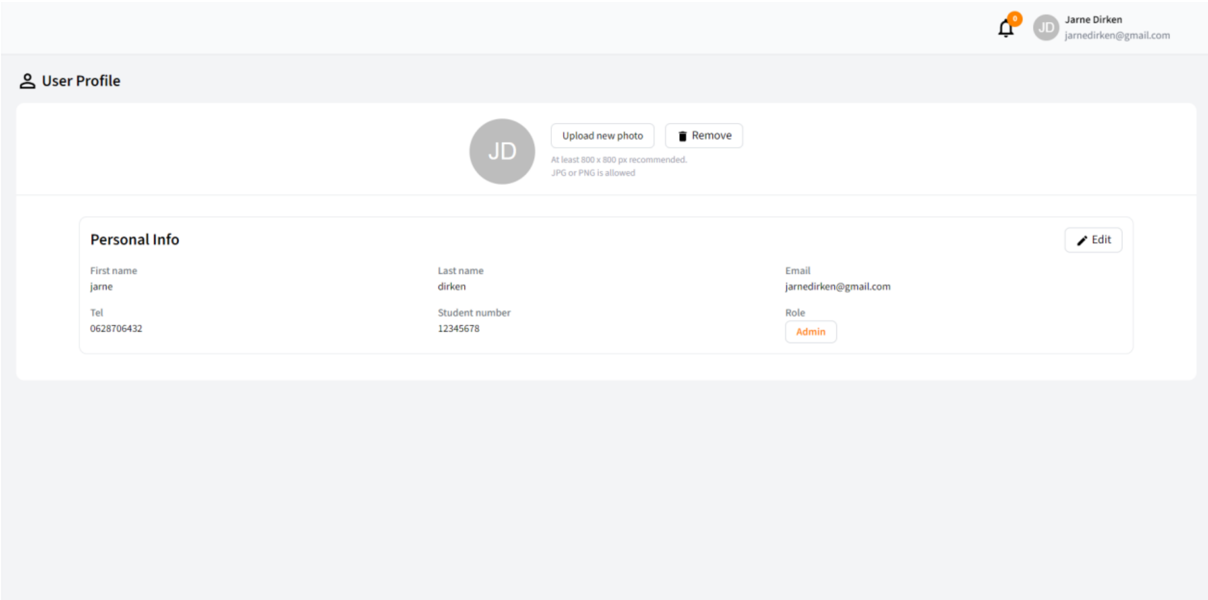
1.2. Login

After you create an account, you can now log in to your account. You just need to fill in all the fields. When you forget your password, you can click the "Forgot password" button, this will send a link to reset your password to your email.



1.3. Profile

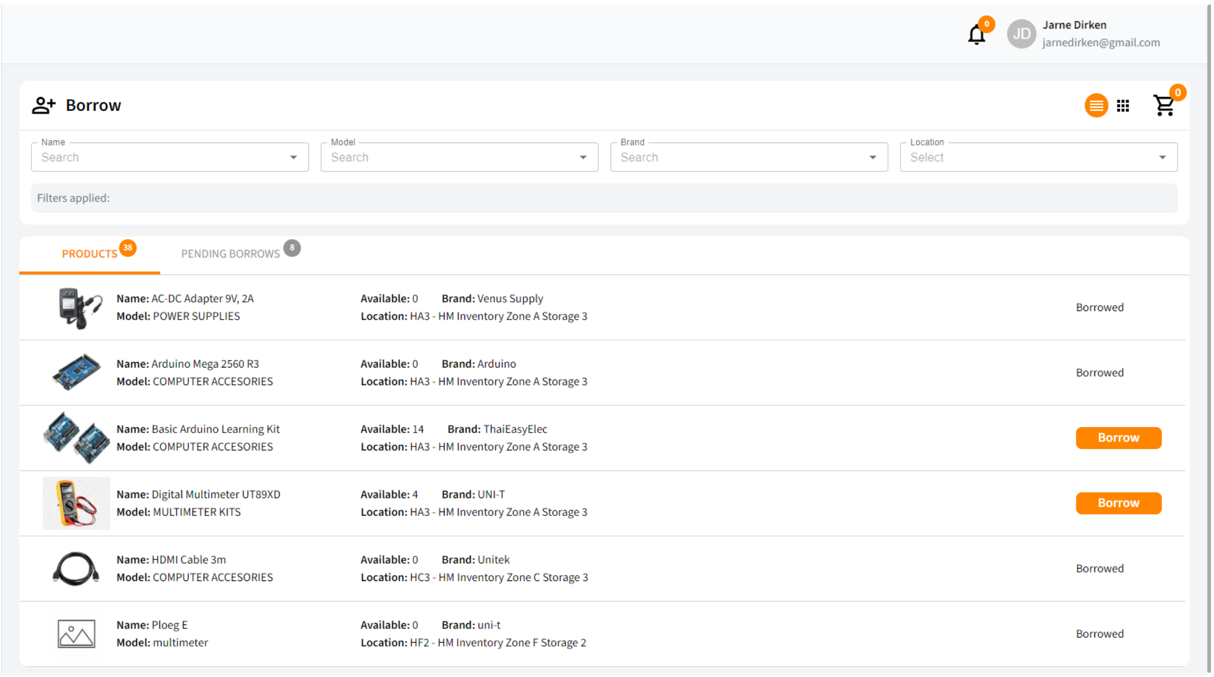
At the user profile user can modify their profile. They can upload a profile picture if they want to or change their account summary. It is not possible for the user to modify their e-mail or their role. They can only view these. An administrator can change that for them.

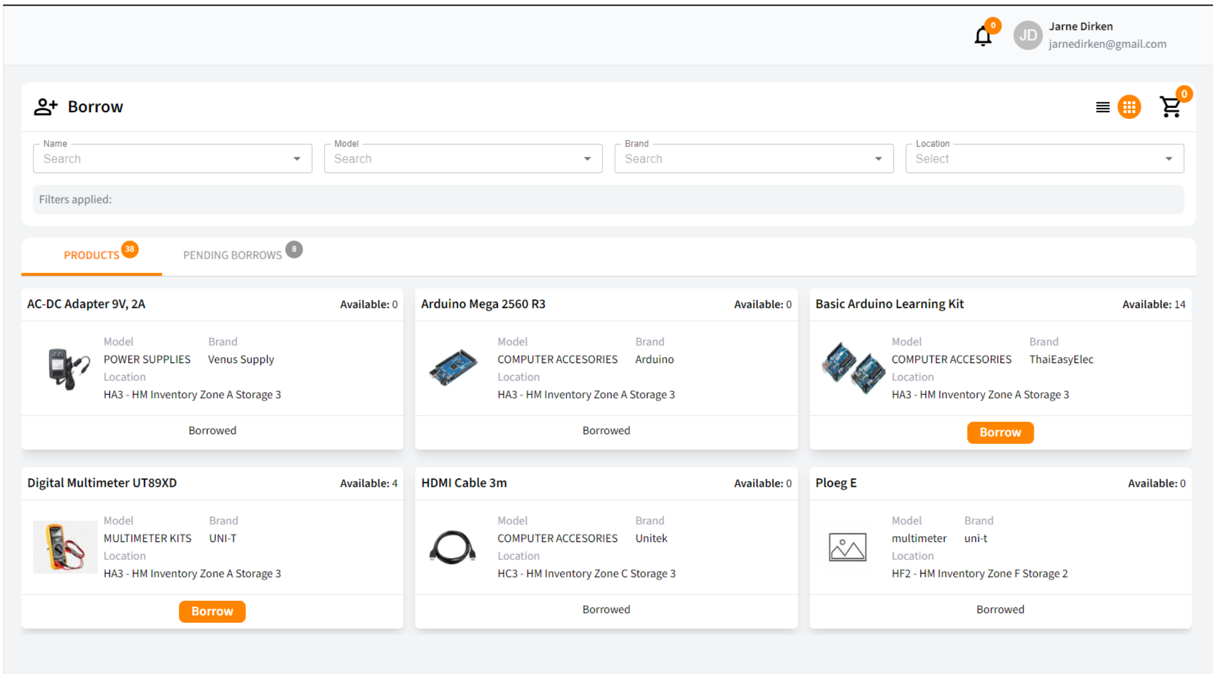


2. User

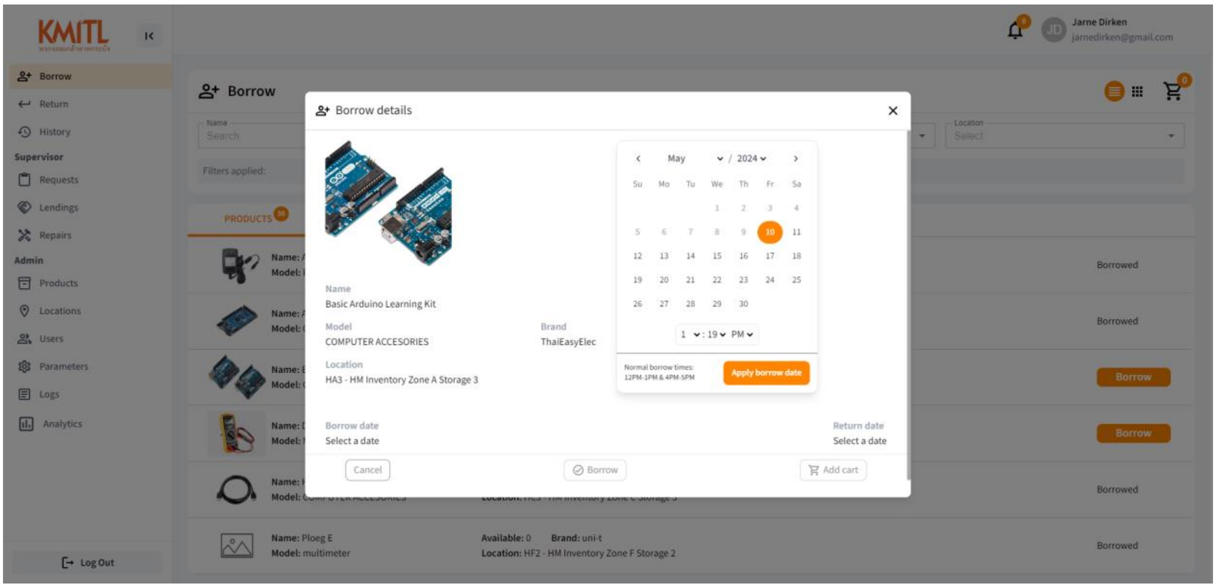
2.1. Borrow

After you have logged in or created an account this is the page that you will get automatically redirected to. The page where students can borrow items. We chose to make this page as well as almost every page taggable between a list and a card view for better user experience. At small screens you will be forced into card view that way our application is 100% responsive for mobile devices.

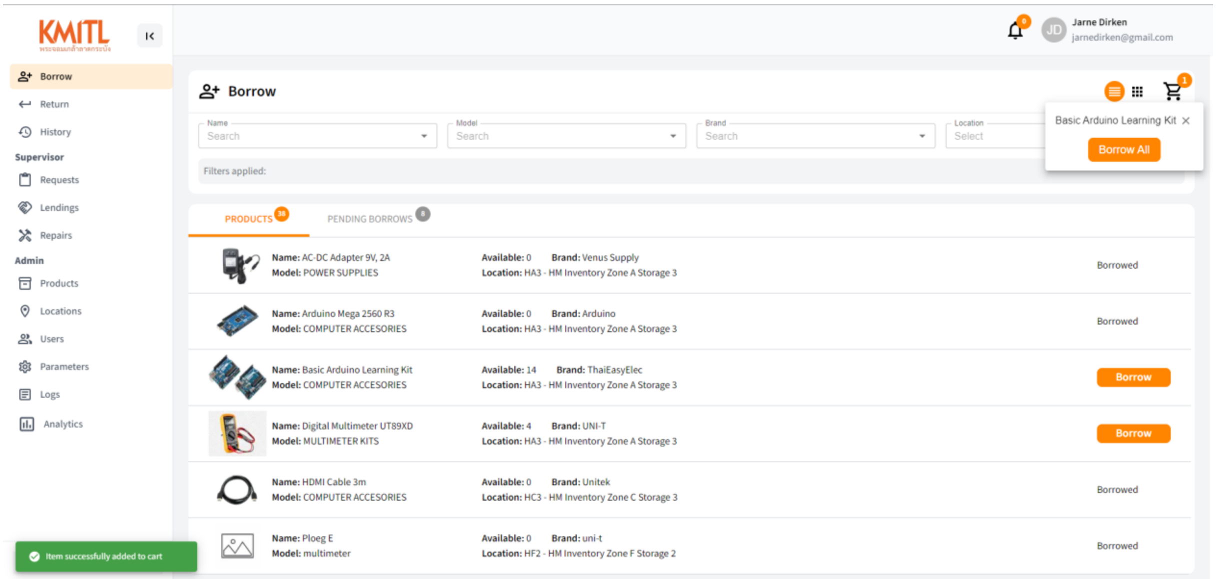




The items are grouped together so you can see how many items there are left. You can also choose to use the filter at the top to get a more accurate search. When you find the item you want to borrow you simple click "Borrow", a popup opens. Inside the popup you must select a borrow and return date. This will allow you to borrow the item directly or add the item into your cart, that way you can borrow multiple items at once.



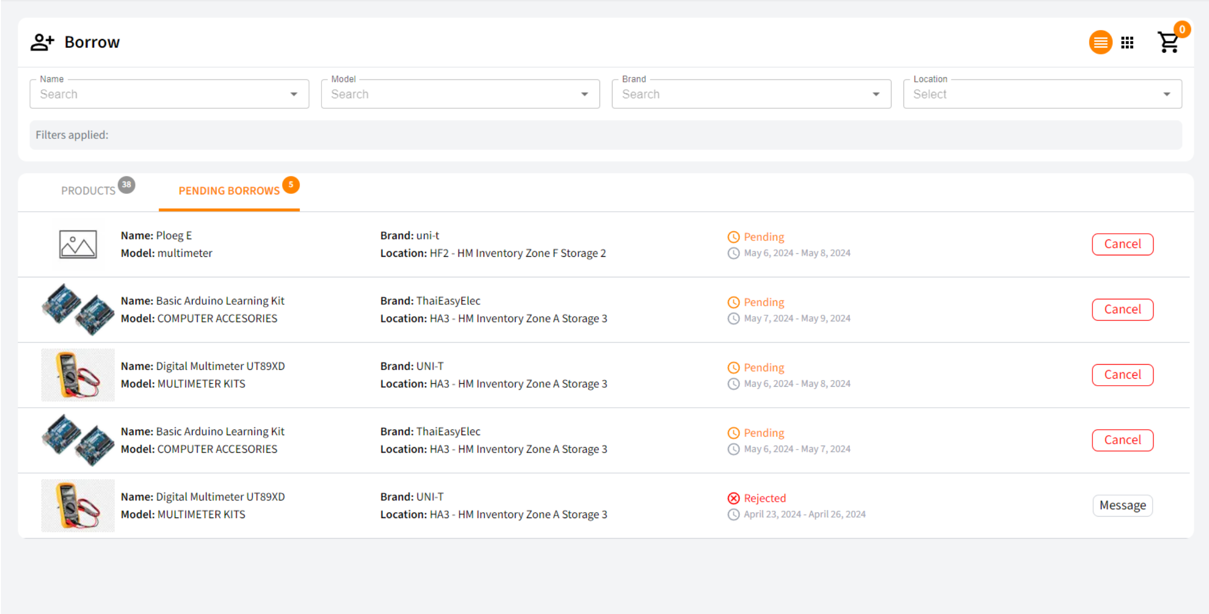
After making a request or in this screenshot, adding an item into your cart you will be greeted with a popup message in the bottom left corner. This allows for great user feedback. When doing this a notification will be sent to the supervisors and admins.



After you have borrowed an item, you can go to the tab "Pending Borrows". Here you will see all the borrowings that are pending, accepted, or rejected.

When clicking on cancel you will cancel your request. This will also give you a popup for a good user experience.

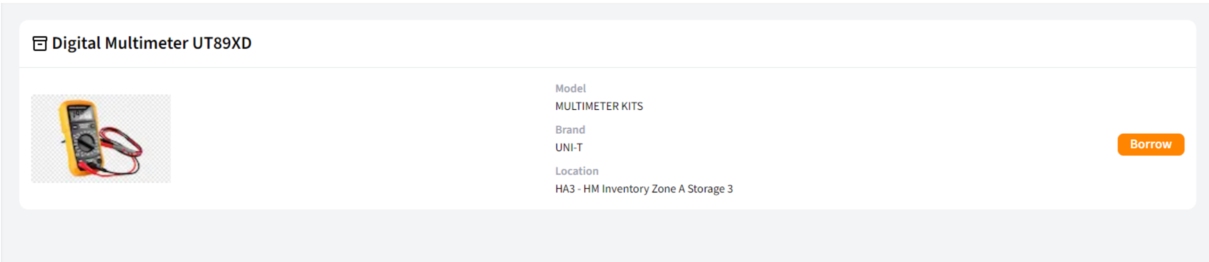
When clicking on the message tab you will see a popup with the message on why the item got rejected.

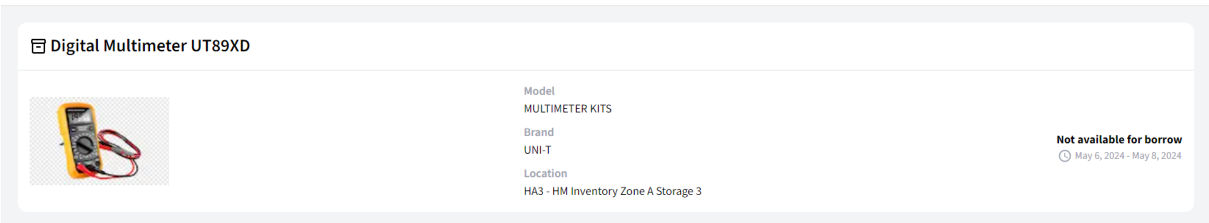


2.2. QR-code page

Most items will have a QR-code on them. This QR-code has 2 functionalities. One for the user that wants to borrow it and one for the supervisor that is going to check the items. In this part we will only cover the user part.

When the student scans the QR-code they will be redirected to this page. Here they can see the item and if the item is available or not. If the item is available and the user wants to borrow it, they can by simply pressing on the "Borrow" button.



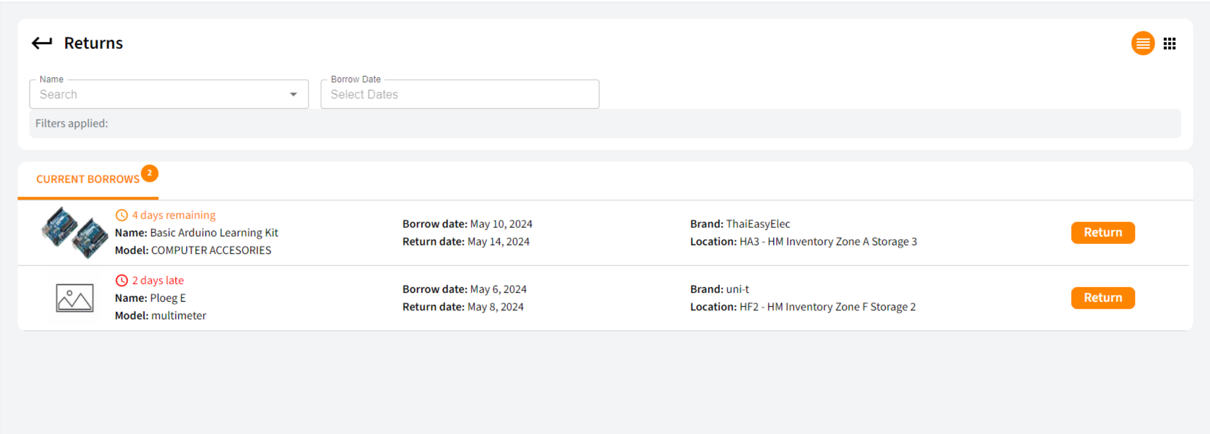


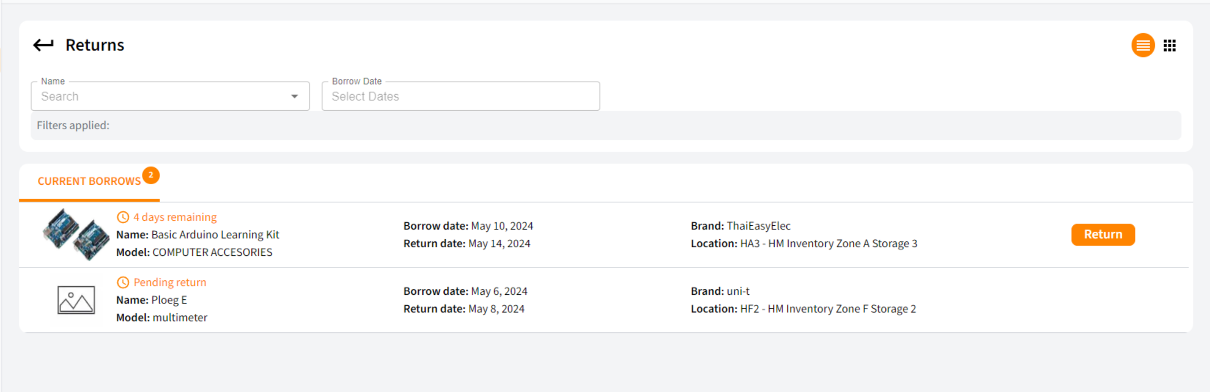
2.3. Return

When you made a request, a supervisor approved the request and when you actually received the item you will see your item show up in the return section of our application.

Here you can see how many days remain before you must bring it back and if it’s already too late or not.

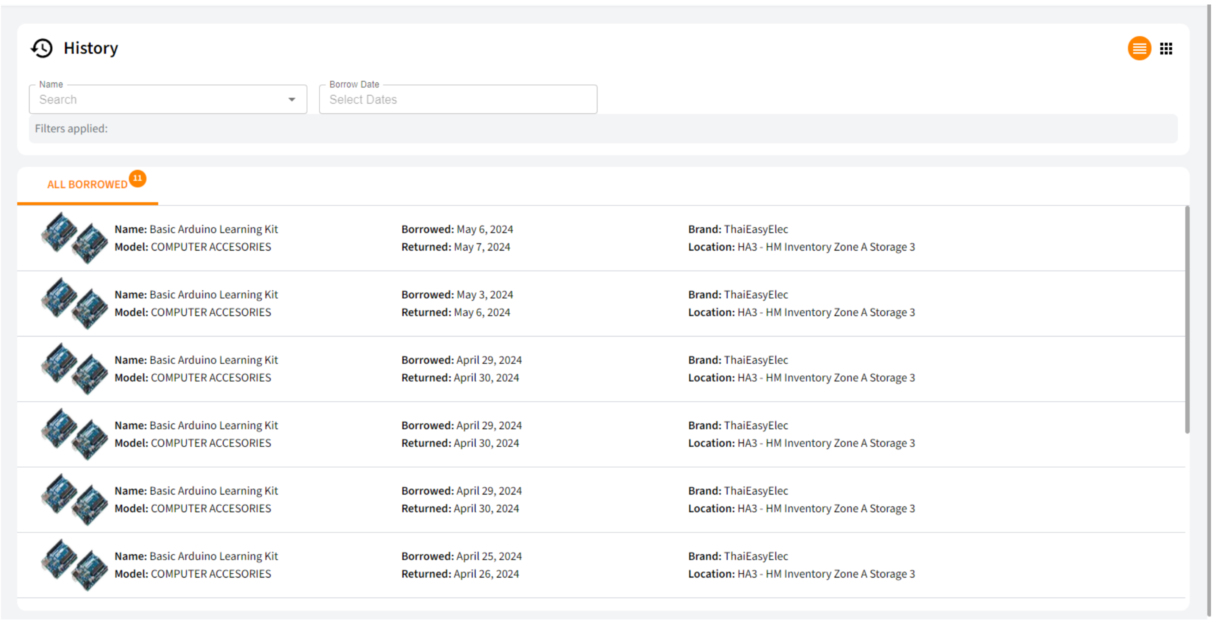
When clicking on return your request will be put into “Pending”, waiting until the supervisor received your item.





2.4. History

When the supervisor receives your return request your item will be marked as "complete". This means the request has been finished and for the user you will see your items appear on the history page.



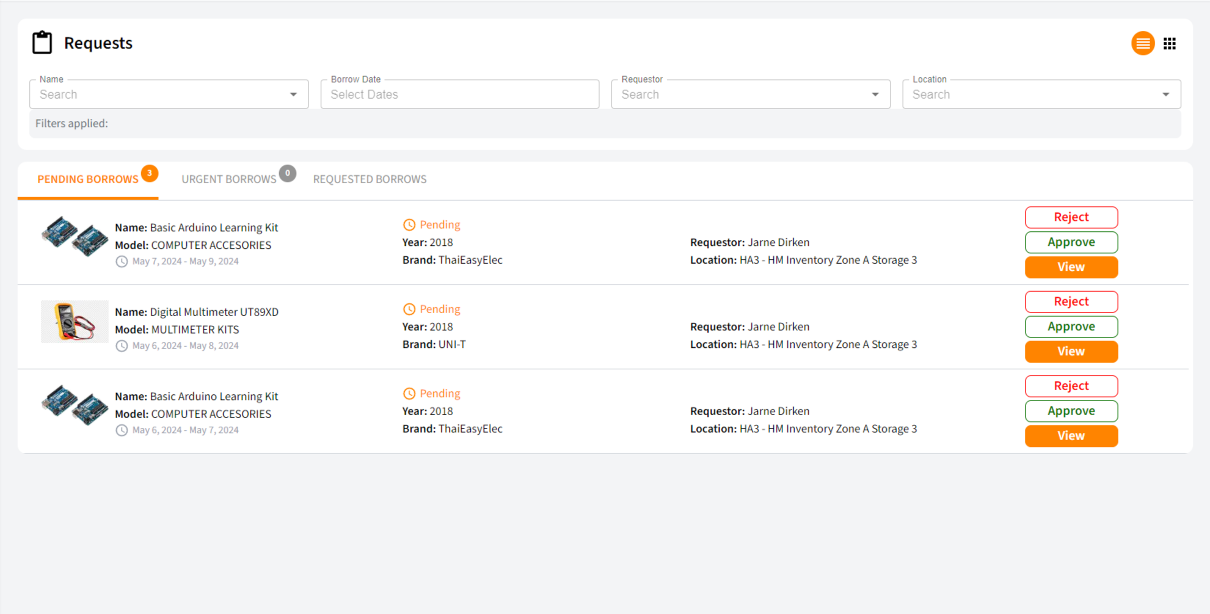
That was the whole cycle for the student.

3. Supervisor

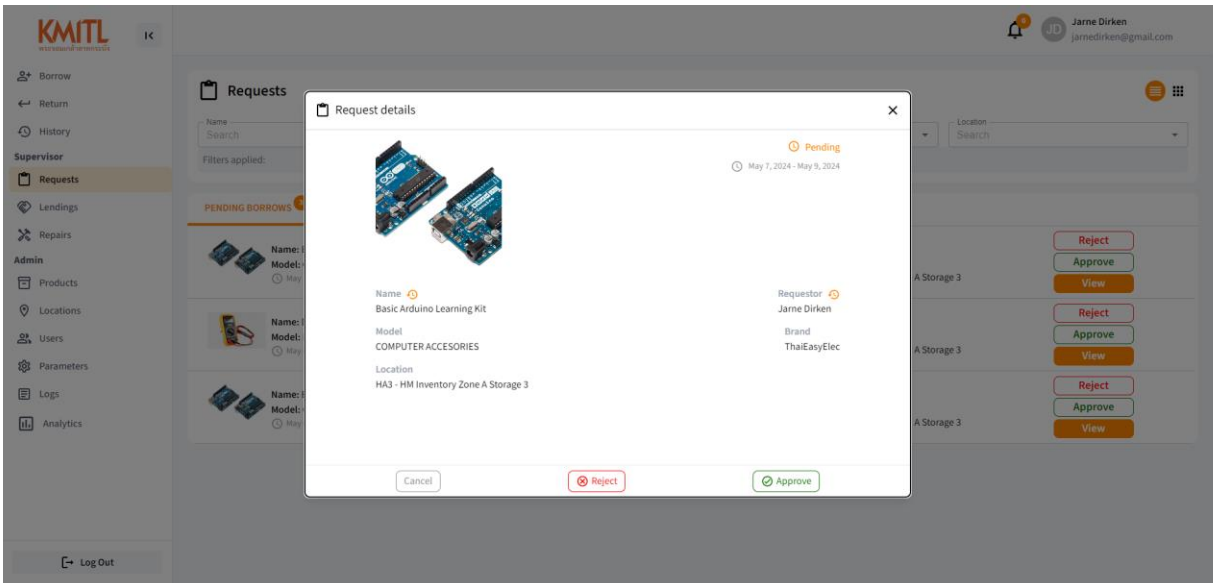
3.1. Requests

For the supervisor you start with the request page. Here all the requests will come in. There are two types of requests, normal borrows or urgent borrows. These are shown at the top with a number next to them. This way you can easily see how many of each there are.

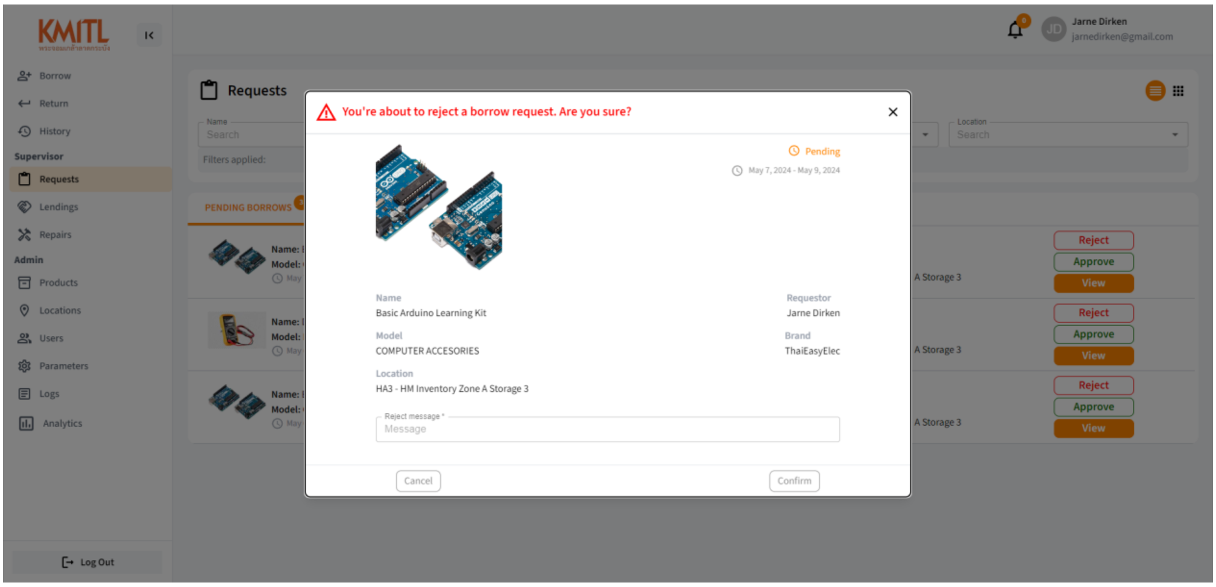
When viewing a borrow request you can choose to view it or approve or reject it.



In our example we click on view so we can view the information before accepting or rejecting the request. Here we can view the mutual history of the item or user by clicking on the clock next to the name.

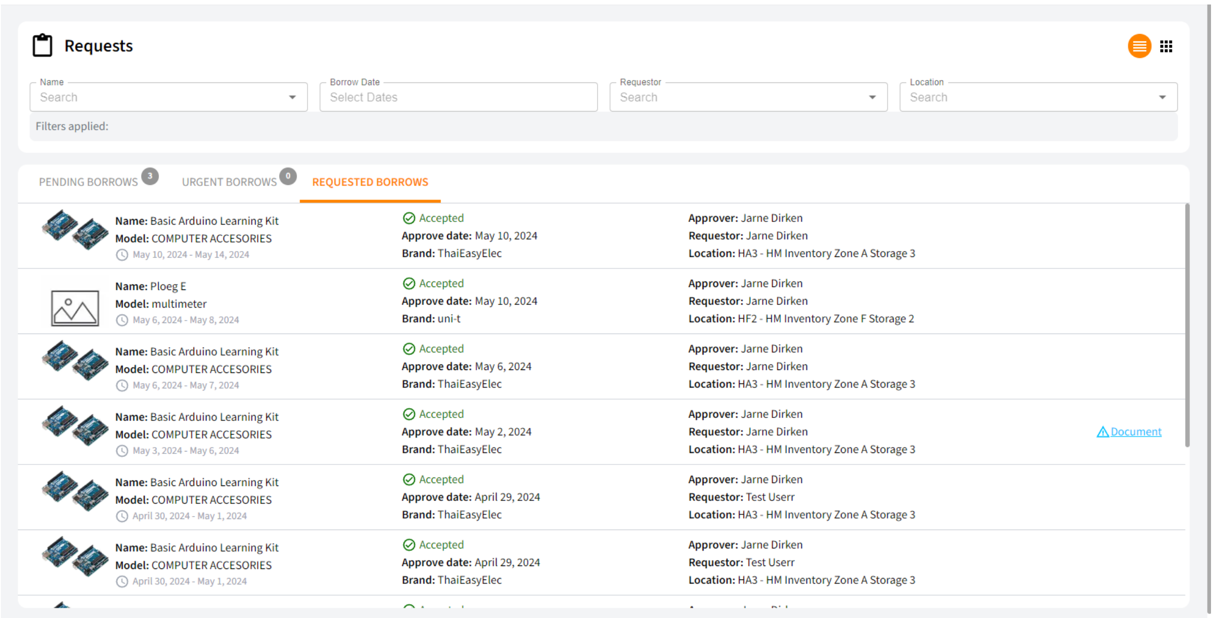


When clicking on accept or reject you will get a confirmation message asking if you really want to accept or reject a request. When rejecting a request, a message is mandatory, when accepting a request it is optional.



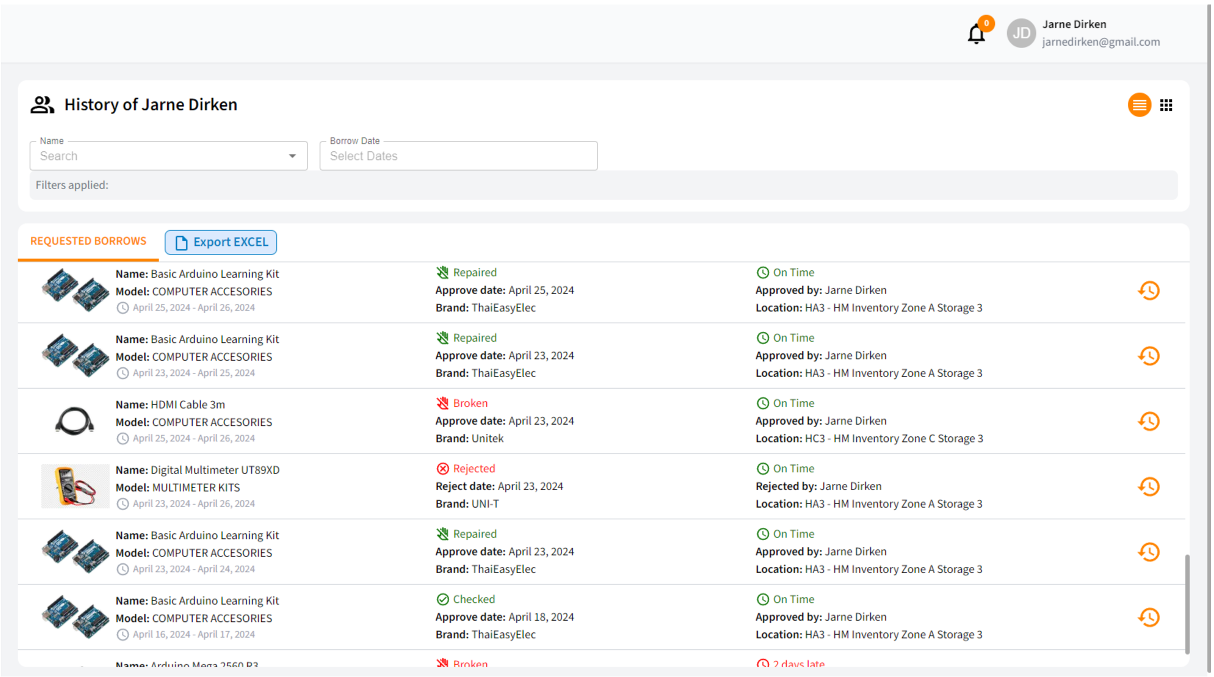
After accepting or rejecting a request the user will get a notification saying that the request has been processed and that they must come pick it up at the given location at the given time.

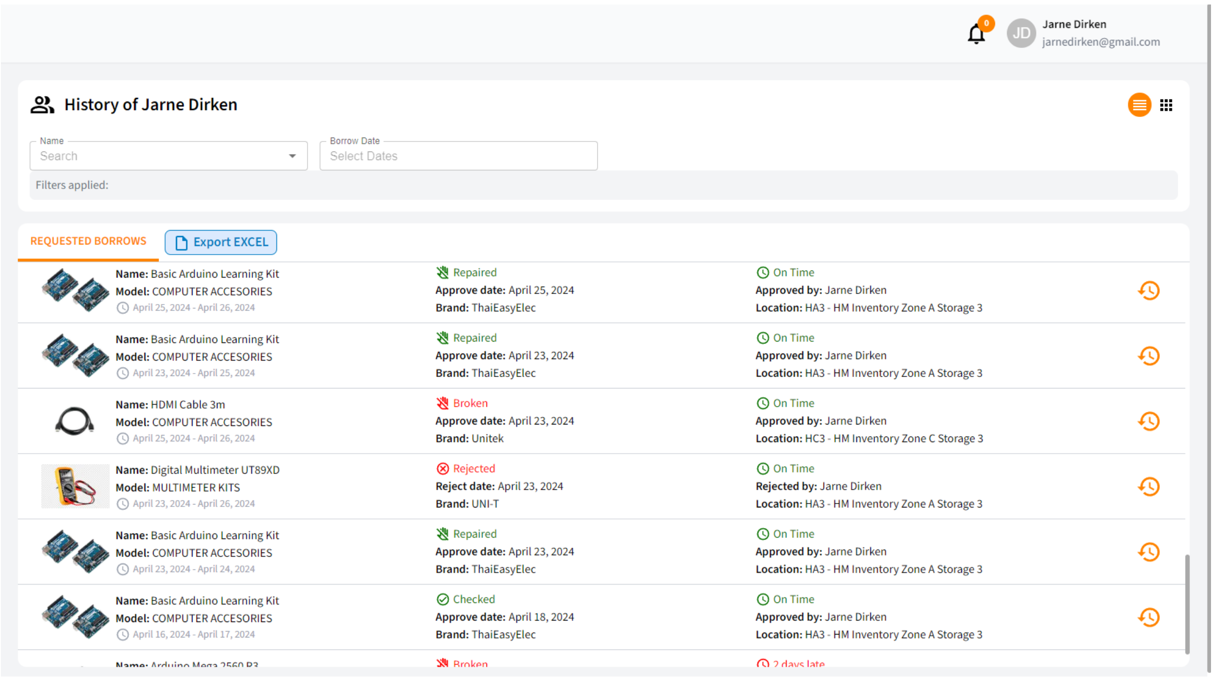
Then in the last tab "Requested borrows", you will see all the borrows that have been requested. Here you can see what has been rejected, accepted, if there was a document connected to the request (urgent).



3.2. Mutual history page

When clicking on the clock icon we can see the item or user history page. Here you can view the history and export all data to excel.

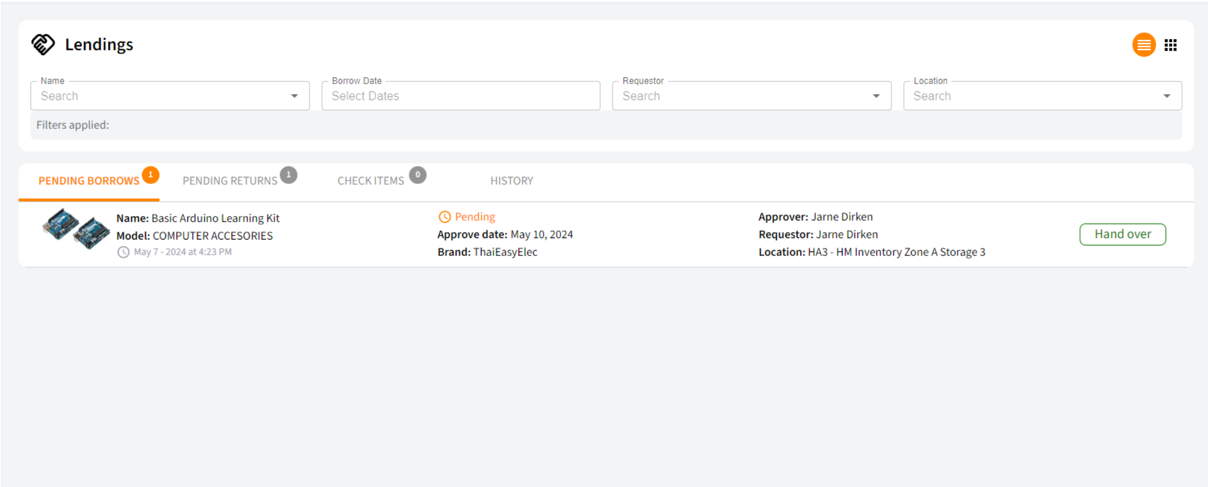




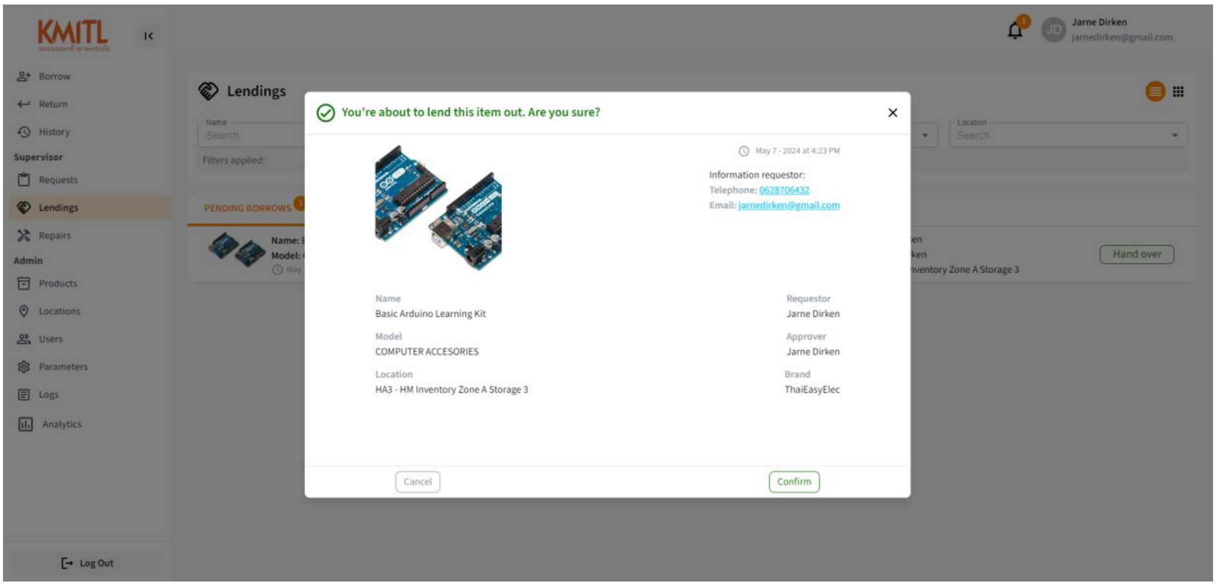
3.3. Lendings

When a supervisor approves a request, the student must come and pick up the item at the given location. This means that we must check whether we have actually given the item away or not. This is what the tab lending's is for. It works as a double check in order to make sure we have handed over the item to the student.

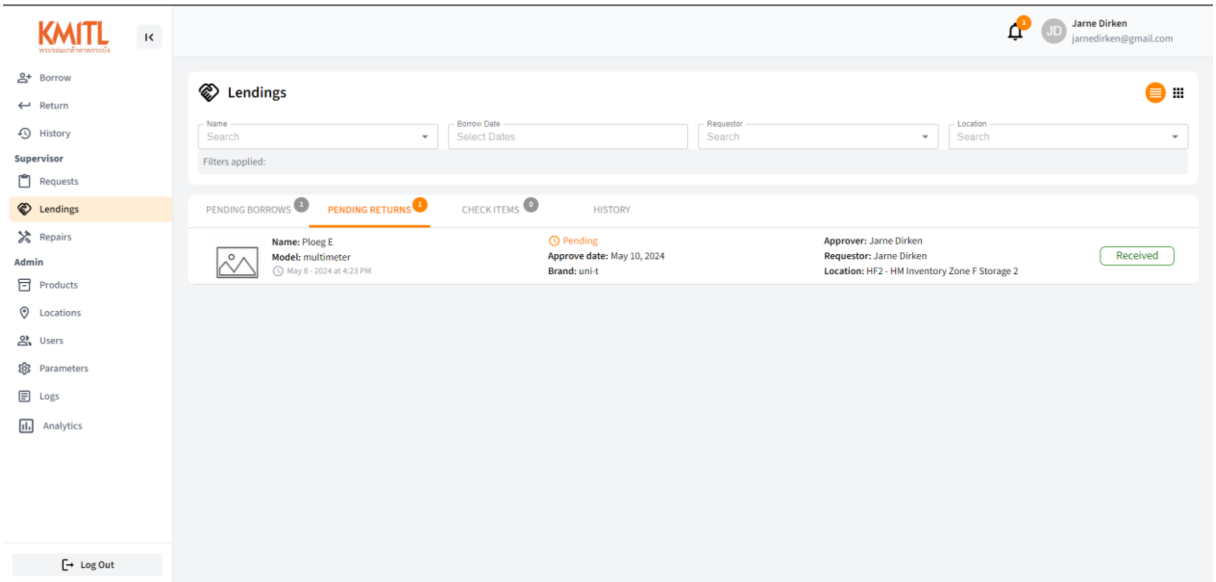
Here we can view some information about the item and what user needs to come and pick it up. When clicking on "Hand Over" A popup appears with more detailed information.



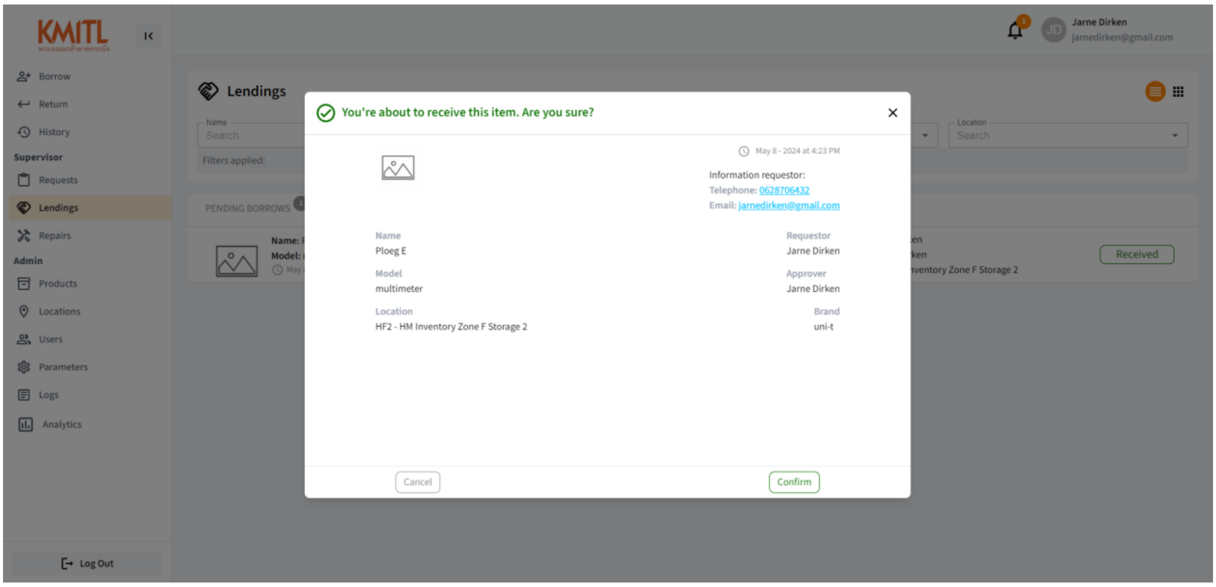
Seeing the popup, we see more information about the user like telephone number and email. Here we can click confirm if we have handed over the item to the user.



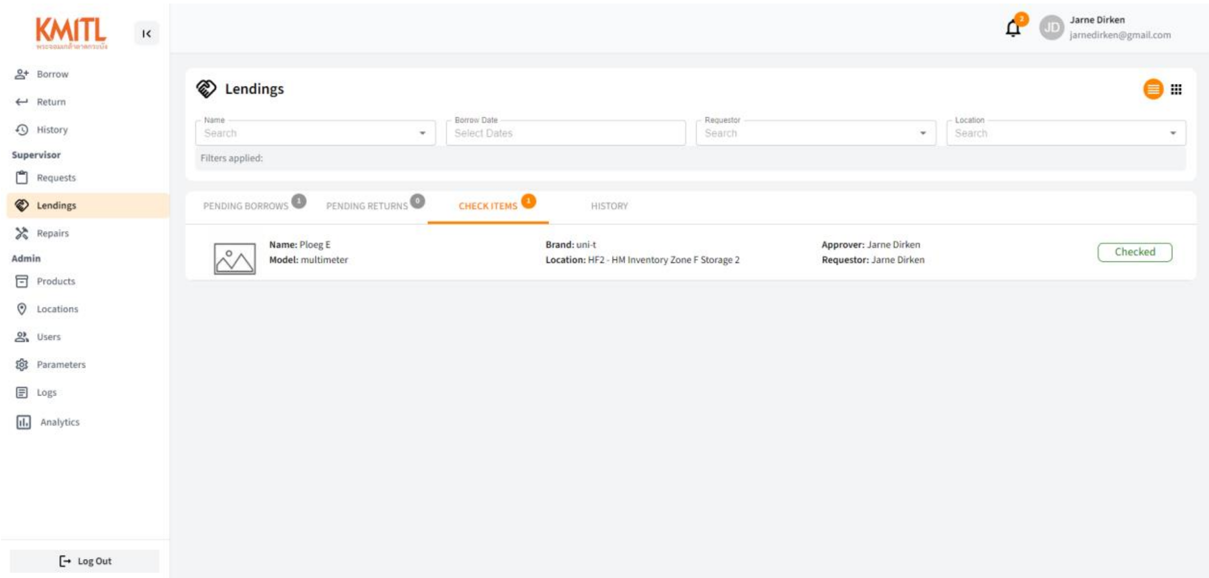
Going further, we have another tab for “Pending Returns” right next to “Pending Borrows” This tab does exactly the same thing as pending borrows but the other way around. Now we are not giving away the item, but we are receiving it. Because when a user clicks on “Returned” we have to check if we have returned this item.



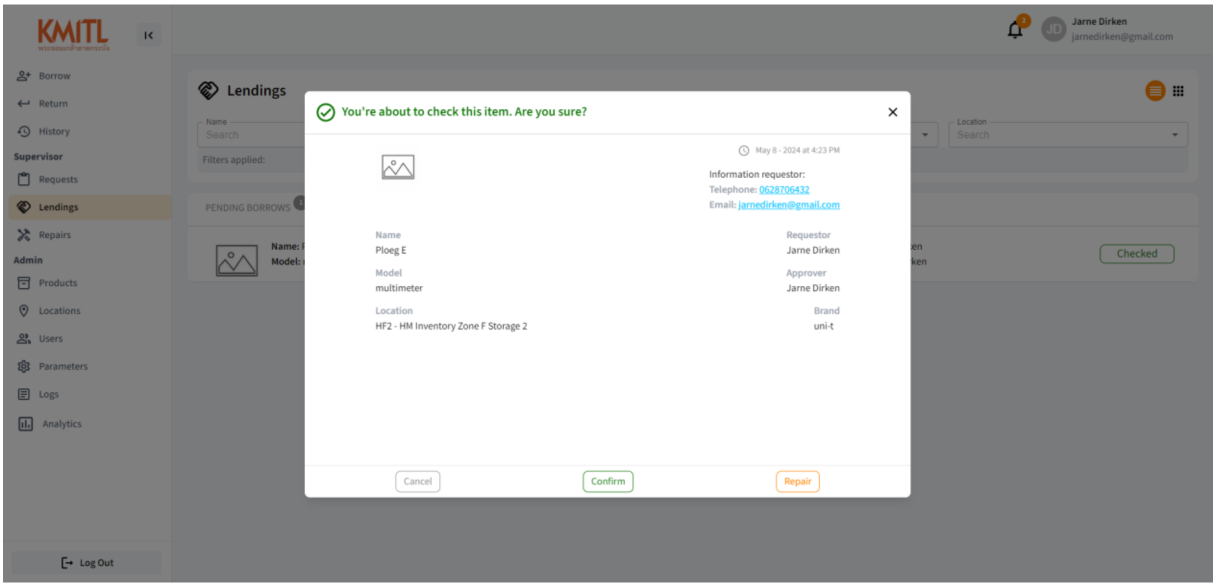
When we have received the item, we can click on the button “Received” this will open a popup with more information, the same as pending borrows. Here we can choose to call up our fellow student if he has not returned the item or accepts it.



Next stage in the lending's process is that we must check the items. When students bring back an item the supervisor doesn't always have time to check the item on the spot. This is why all the items that have been returned will be placed in the "Check Item" Tab. This way the supervisor can later check all the items that have been returned to see if they have been damaged or not.

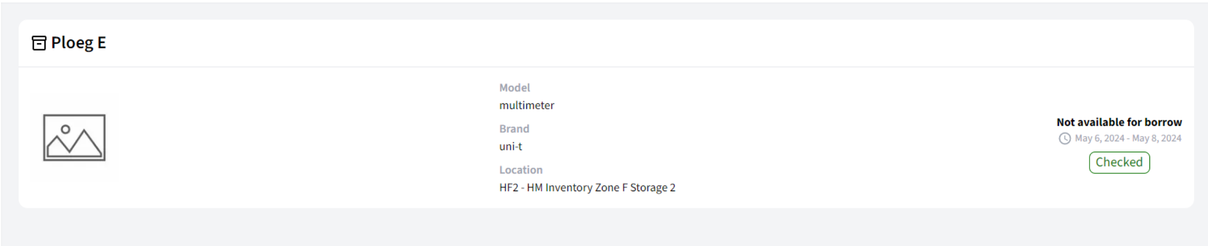


After clicking on "Checked" the supervisor will be prompted with a confirmation popup where he can choose to confirm the item as good or to put it in repair. When putting an item in repair the supervisor must give a message so we can keep track of what actually broke with the item.



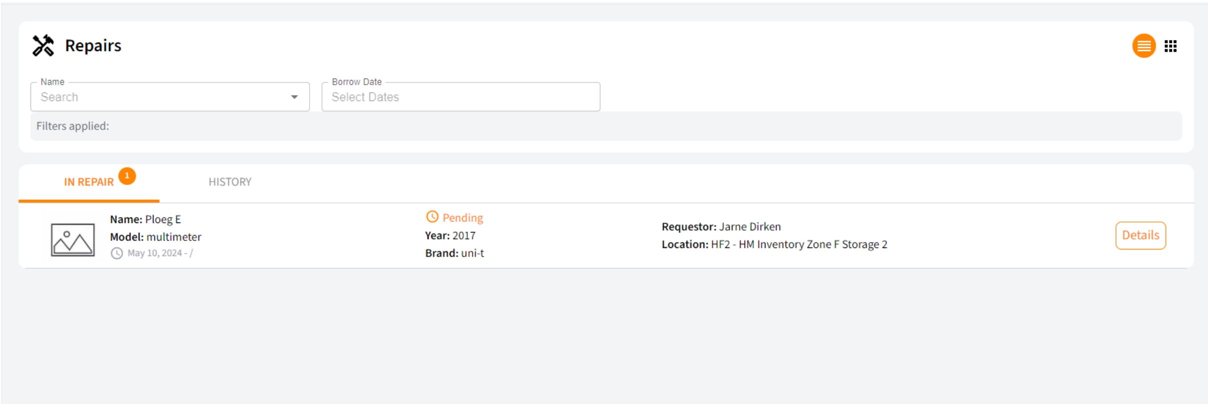
3.4. QR-Code page

The same as lending's where you can check the item is this page for the supervisor. When checking the items you can easily scan the item you checked and from your phone by scanning the QR code on the item, you will be able to mark it as good or put it in for repair. (Only supervisors or admins will be able to see this "Checked" button.)

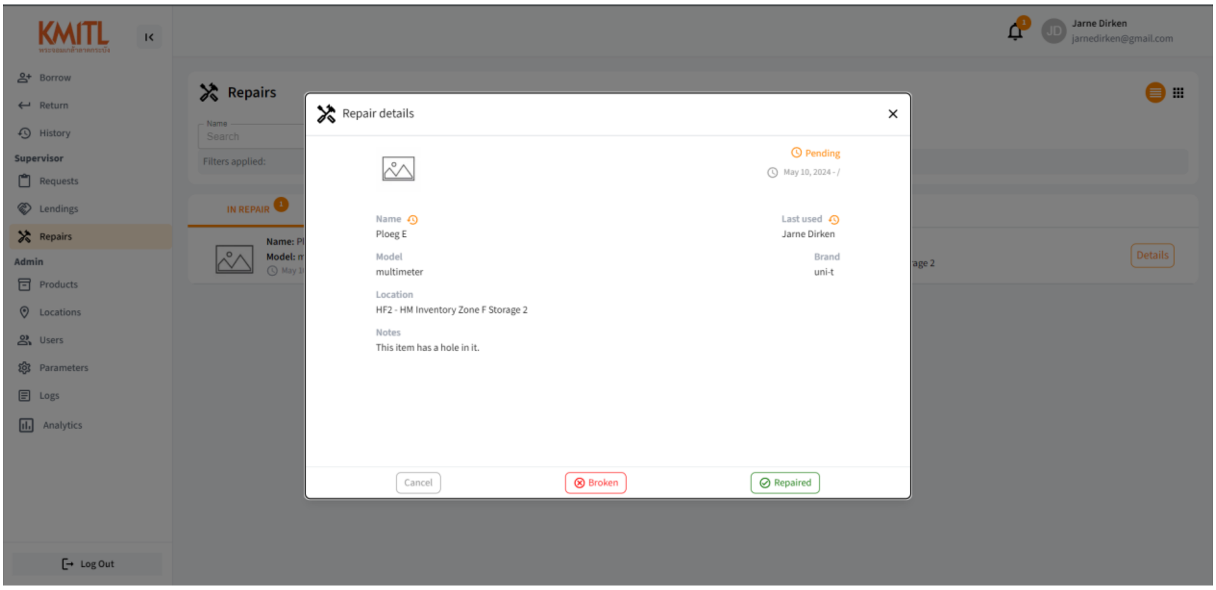


3.5. Repairs

The last page to where supervisors have access is the repair page. Here we will see all the current items that are in reparation.



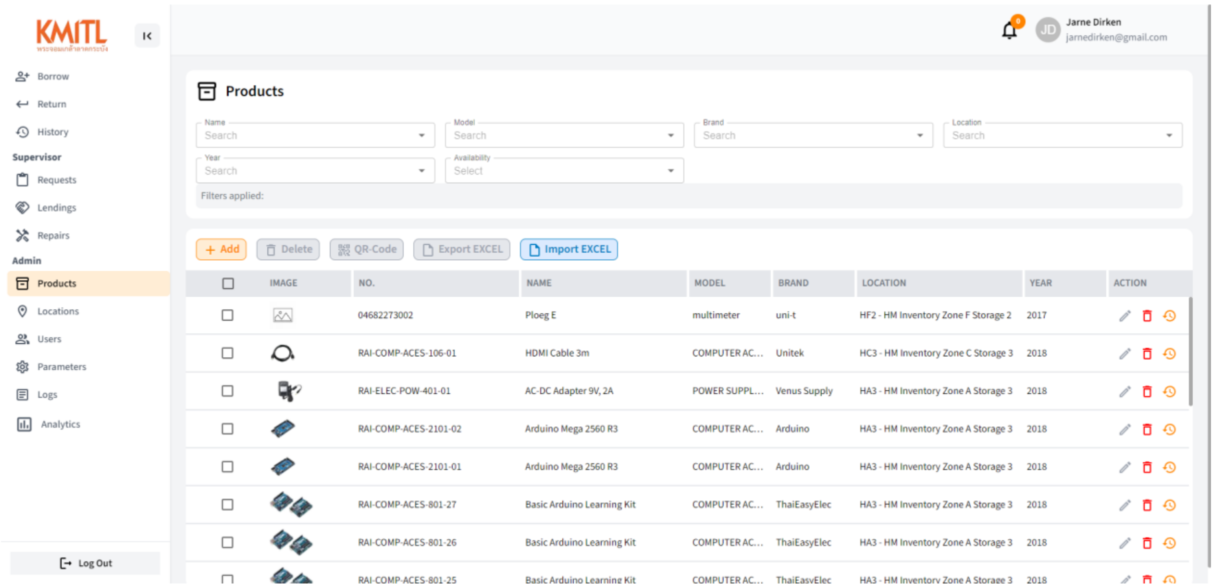
When clicking on details you will be greeted with more details about the reparation request. Here you can mark the item as repaired or broken.



4. Administrator

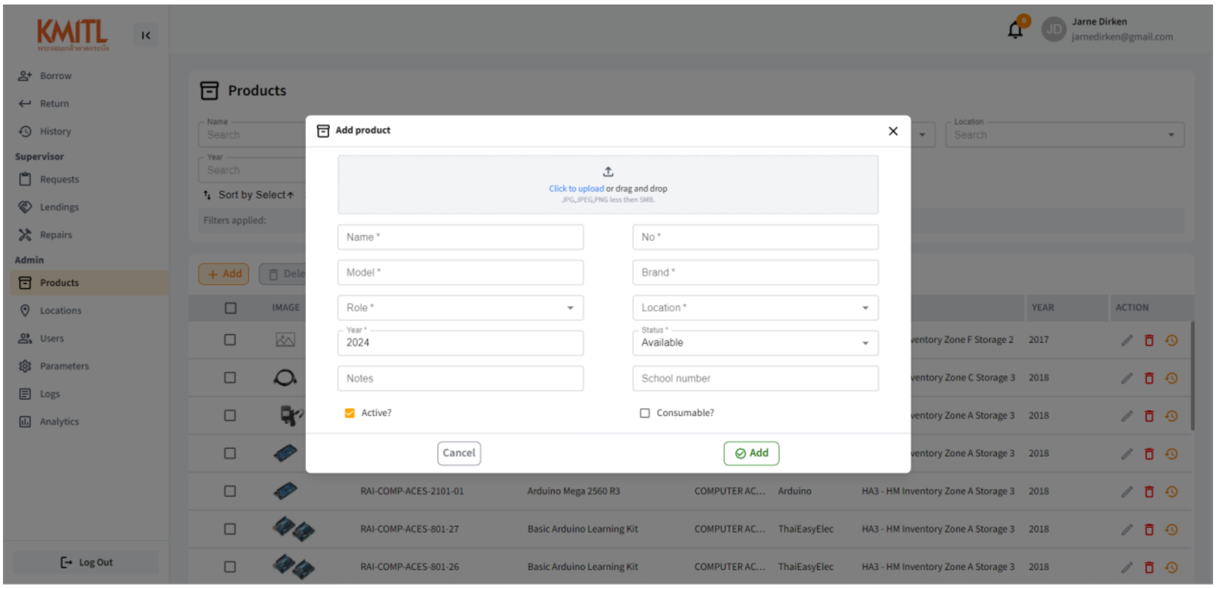
4.1. Products

We have finally arrived at the administrator side of the application. This is where we will be able to configure and manage everything. First the products tab where we can add, edit, delete, soft delete, make QR-codes, export or import products.

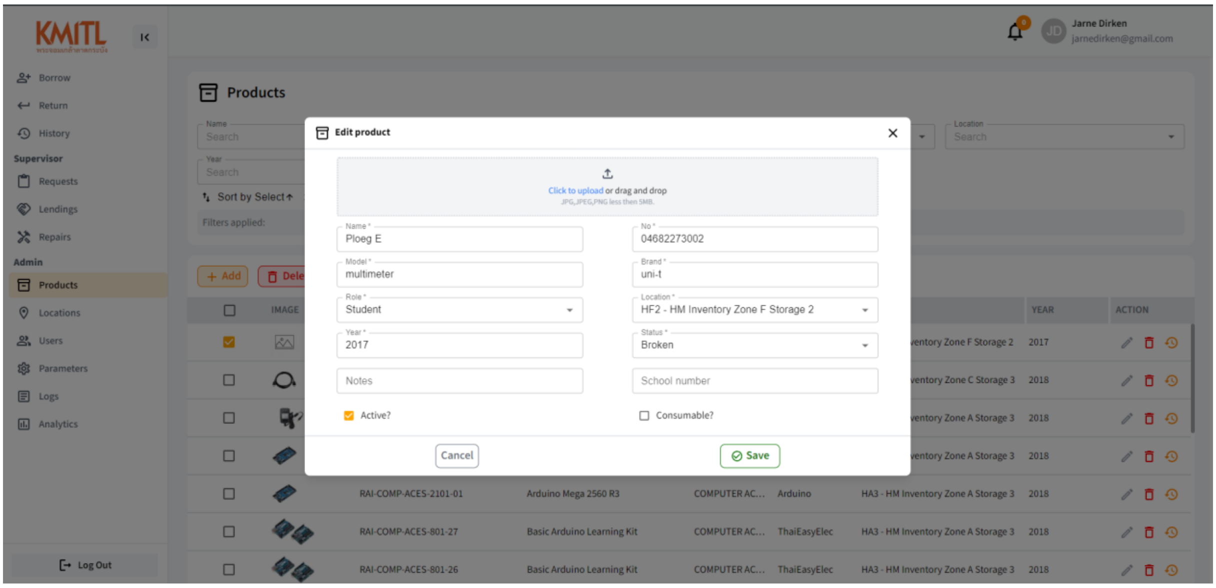


First, we will look at how we can add a new product. We simply press on the button add at the top and we get a popup where we can fill in everything that a product needs. Standard is the product active, available for borrowing and from this current year. These can be changed but are just here to make your life a bit easier.

Fields: name, brand, model, location are all autocomplete to make the users life easier when trying to create multiple of the same product. Image is optional.

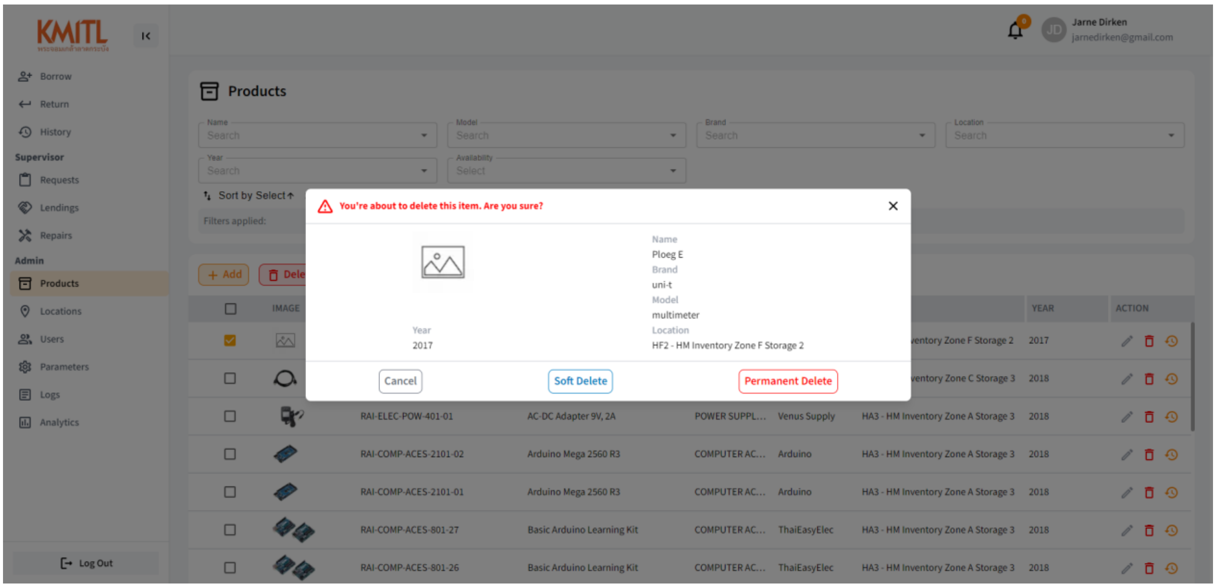


Next, we will see the edit functionality because this one is the most similar to add. We simply click on the pencil at the end if we want to edit an item and we see the same popup appear, but this time are all the fields filled in with data. We can choose to change these fields and press save to update an item.

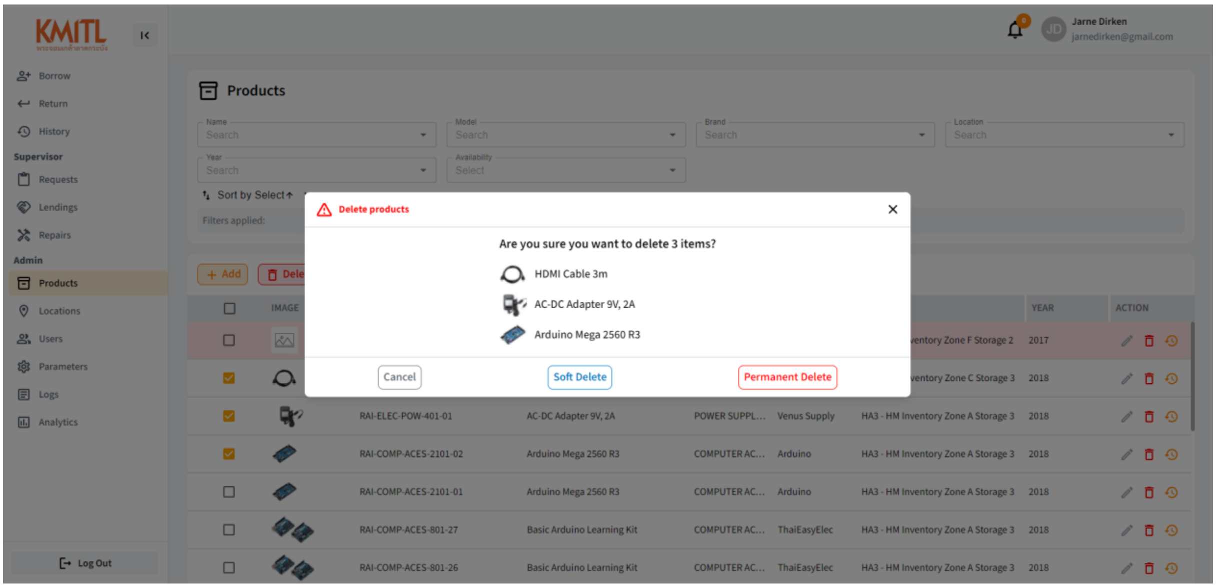


After this we will look at the single item "delete". This can be done by either selecting one item on the left and then pression the button delete at the top or clicking the delete icon associated with the item you want to delete.

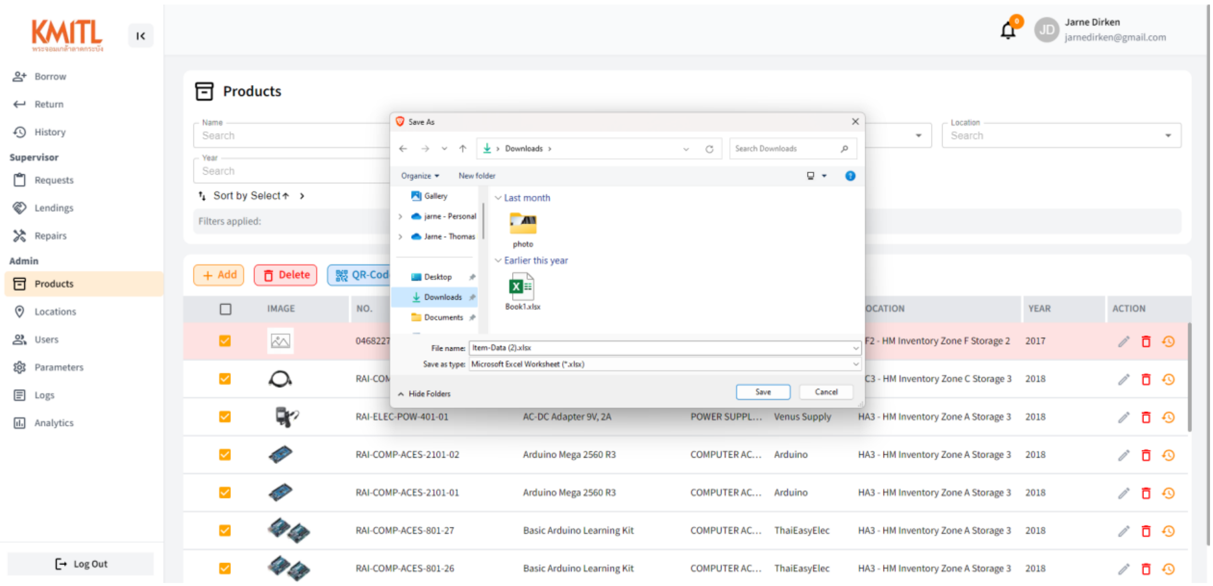
You will get a confirmation popup asking if you really want to delete the item. Here you can select soft delete (this will put the item inactive so no one can borrow it) or permanently delete the item this way the item is really gone from the database.



We can also select multiple items and press the button “delete” at the top. This will give us this popup where we can see a quick overview of the items we have selected. Now we can choose to delete or soft delete all these items.



If we want to export data to excel, we can simply select the data we want to export. Or filter on the data by entering the name, model, location. We can select everything by clicking on the topmost checkbox. This will select everything. Then we can click “Export Excel” and we will get a file that we can save on our computer with the data.

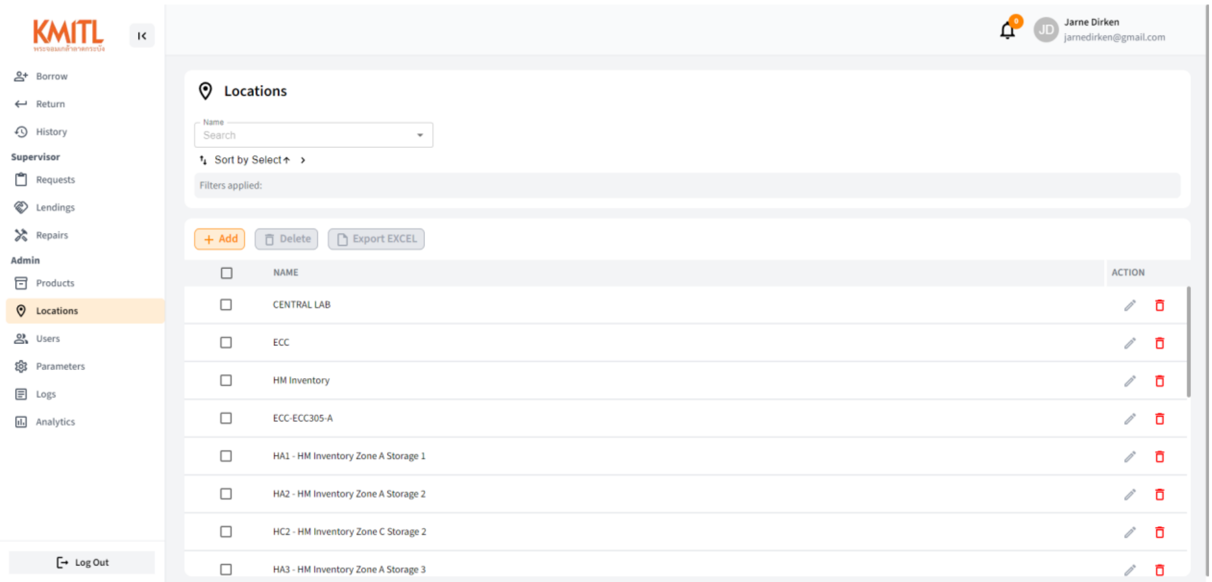


As for import excel…

As for generating QR-codes….

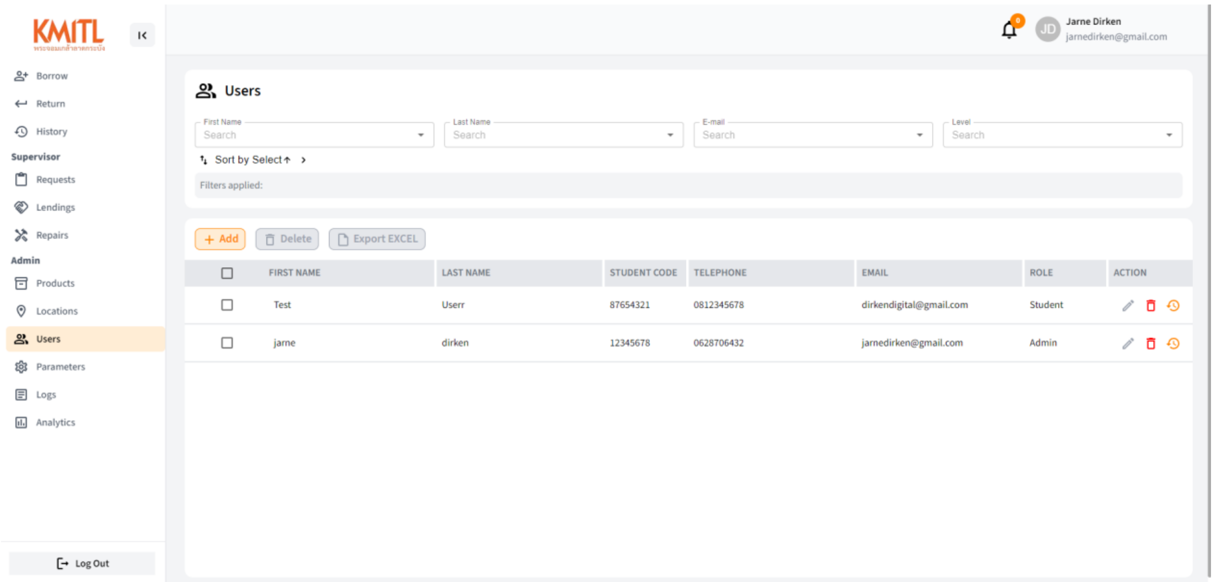
4.2. Locations

As you can see from the image. Locations have the exact same functionalities as products. The add, delete, edit, multi delete all work the exact same.



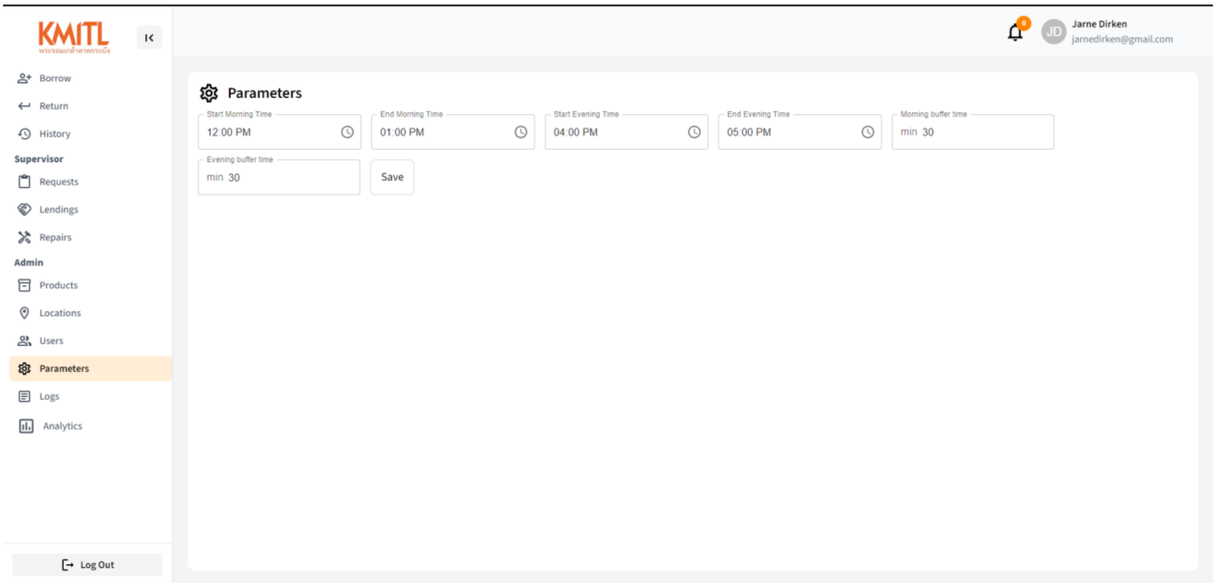
4.3. Users

As you can see from the image. Users have the exact same functionalities as products. The add, delete, edit, multi delete all work the exact same.



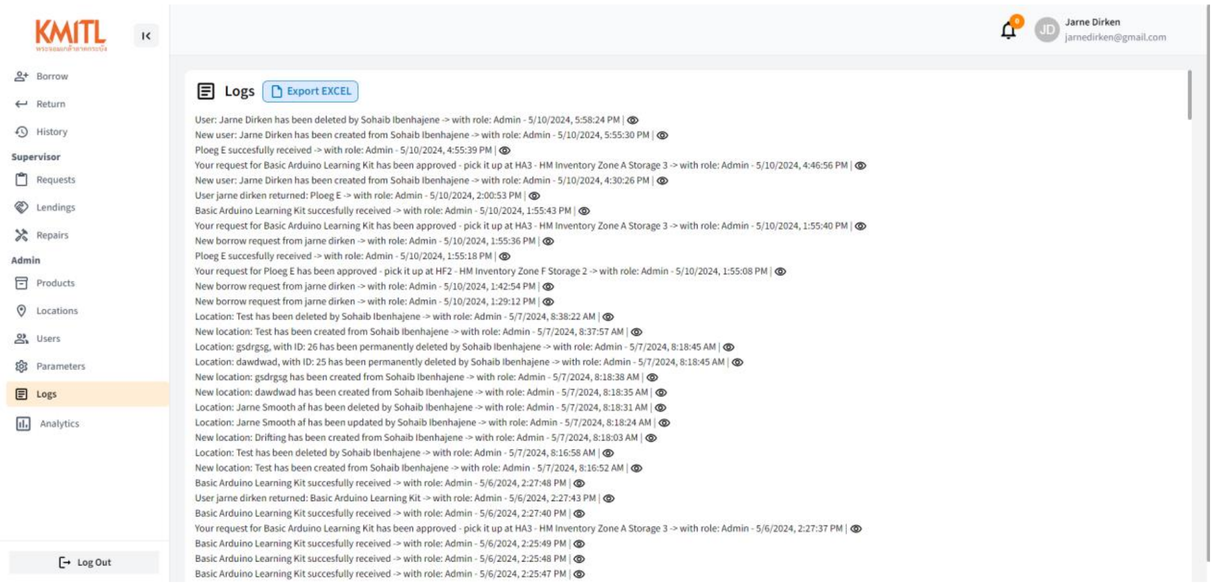
4.4. Parameters

The parameter page looks simple because it has only one purpose, change some specifications of our system. In this case we can change the start and end borrow and return time with the buffer time. Buffer time should always be the time in minutes and for the others we have date time pickers so that we can select the exact time we want. This influences the times the students can make borrow requests.



4.5. Logs

As we know sometimes, we get a notification when making a request, canceling, accepted, etc. An admin can view all the logs that happened in our application on this page. This way there will be no confusion when something happens. The admin can simply go back and view who did what at the given time.



4.6. Analytics

As for an extra we made a quick little analytics page where we can view the bare minimum of data for our application. Standard filter is the current year. Here we can view a line chart of how many requests were made each month. On the pie chart we can view how many requests were made in total that year, how many requests were cancelled and how many were completed. The same goes for the KPI's at the bottom.