CHAPTER 9:

Mentor: Dr. LE HUNG TIEN

SOFTWARE SPECIFICATION

9.1. WHM OVERVIEW

9.1.1. General requirements of the software

Currently, the management of materials is still done manually, made in paper and excel, so there are some difficulties and inconveniences such as loss of materials, long-term censorship steps, through many stages, disagreements about data, ... And this is also the reason to express the need to deploy warehouse management programs to optimize and limit the disadvantages.

9.1.2. The goal of the software

- The implementation of the program will create collaborative working environment among departments.
- With the number of users as well as the amount of information about them huge need to handle. This requires a lot of time of the management department and with the traditional model it is difficult to implement effectively.
- Building a management program will make the work more authentic and more effective. Reduce labor costs and replace the need to print manual statistics.
- The program is an integrated information system, the most effective service for every need to get evaluation information, operational activities, search, reporting, synthesis and statistics.

9.1.3. Who will use WHM?

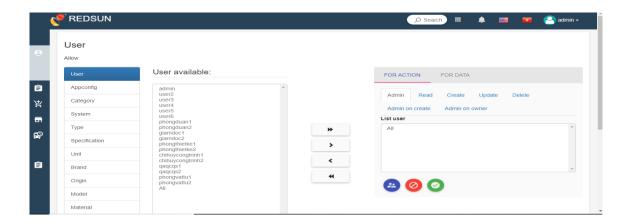
- Construction companies.
- Companies specializing in warehouse services.

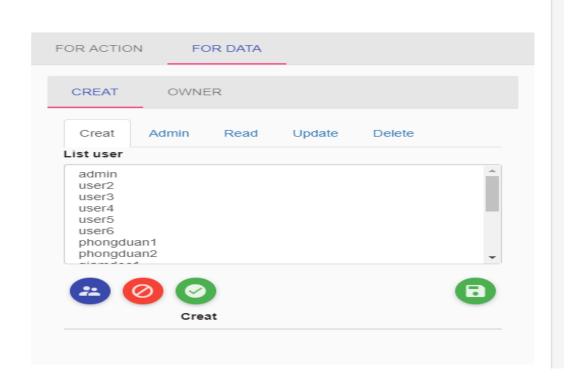
9.2. FUNCTION

9.2.1. Permission

- a. Allow
 - i. Introduction:

Enable users can perform operations such as editing, deleting, updating.....





Describe		Functions: display, for action: ac	dmin, delete, create
Beginning	condiction	Logged in successfully	
		User Operation	System
	Display	Click table of contents → choose funtion.	Show all user list in user available.
Describe the steps	Create	 Click funtion (ex. Choose Unit.) Choose user in user avilable(ex. user 4). Click for action or for data. Choose admin or read or create(ex . choose create) Click move button Click save button 	Returns results successfully and user 4 can create new units
	Read	 Click funtion (ex. Choose Unit.) Choose user in user avilable(ex. user 4). Click for action or for data. Choose admin or read or create(ex . choose read) Click move button Click save button 	Returns results successfully and user 4 only read new units
	Delete	Click funtion (ex. Choose Unit.)	Returns results successful and user 4 can delete units

	 Choose user in user avilable(ex. user 4). Click for action or for data. Choose admin or read or create(ex . choose Delete) Click move button Click save button 	
Update	 Click funtion (ex. Choose Unit.) Choose user in user avilable(ex. user 4). Click for action or for data. Choose admin or read or create(ex. choose update) Click move button Click save button 	Returns results successfully and user 4 can update units
All	• If you want to choose all to admin, you can click all admin button	Returns results successfully and display all list in list user
All permisso n	• If you want to choose all list, you can click all permission	Returns results successfully and display all list in list user
All denies	If you want to cancel all list, you can click all permission	Returns results successful and result opposite all permission

iii. Deny:

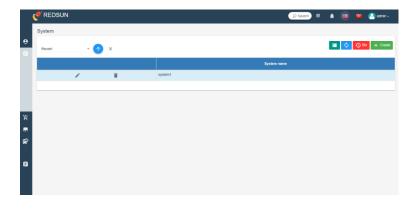
Deny same like that but opposite.

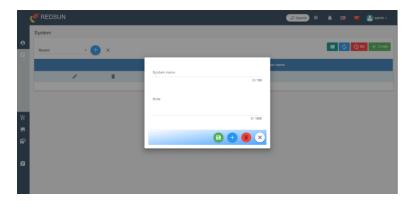
9.2.2. Catalog Management

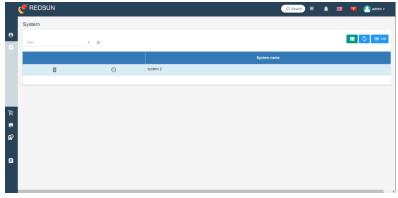
b. System

i. Introduction:

The system is an attribute of the material, used to classify construction materials such as materials used in construction, structure, light electrical systems, heavy electricity, mechanical, water supply, . .







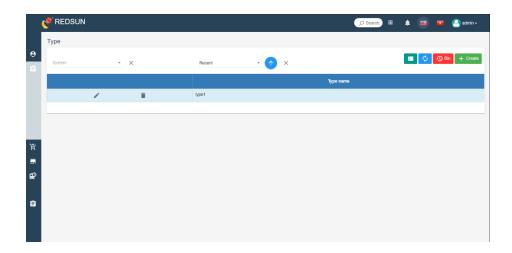
Describe		Functions: display, Create, edit,	delete system
Beginning condiction		Logged in successfully	
		User Operation	System
	Display	Click Catalog Management → System.	Show all system information.
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
Describe the steps	Sort	Click box sort and chose how to sort.	 Returns results with the order user choose. Chose name →Sort alphabetically of System Name. Chose recently→Sort with updatedate.
	Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database

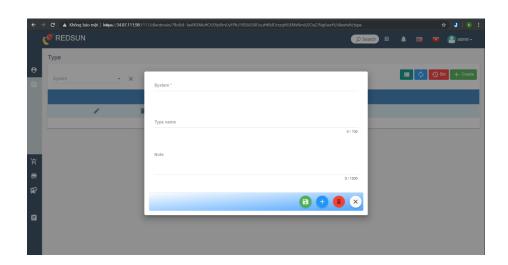
		Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Create	Click Create button. Filled the data. System Name: Must filled. Must not be existed. Datatype: varchar. Maxlength: 100. Note: No need to filled. Datatype: varchar. Maxlength: 1000. Click Save button.	 • Wrong syntax. • Name already exists. • Lack of data. → Show error message. If not: → Data will be saved to the Catalog table in database with scope is System.
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and version +1

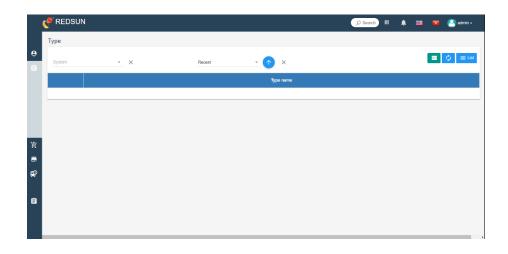
c. Type

i. Introduction:

Type is a sub attribute of system.







Describe		Functions: display, Create, edit, delete Type.	
Beginning condiction		Logged in successfully. Already have System in database.	
		User Operation	System
Describe	Display	Click Catalog Management → Type.	Show all Type information.
the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
	Sort	Click box sort and chose how to sort.	Returns results with the order user choose.

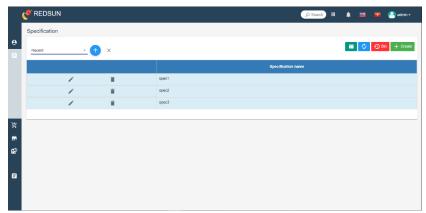
			 Chose Name →Sort alphabetically of Type Name. Chose Recently→Sort with updatedate. Chose System →Sort alphabetically of System Name.
De	elete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
	elete rever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
Re	store	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Cr	eate	Click Create button. Filled the data. System Name:	 Wrong syntax. Name already exists. Lack of data.

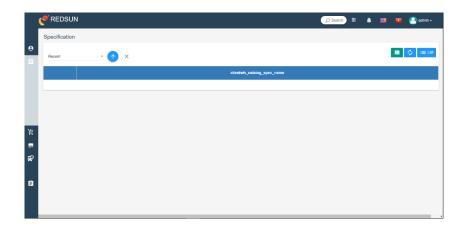
	 Must choose. Type Name: Must filled. Must not be existed. Datatype: varchar. Maxlength: 100. Note: 	→Show error message. If not: →Data will be saved to the Catalog table in database with scope is Type.
	 No need to filled. Datatype: varchar. Maxlength: 1000. Click Save button. 	
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and version +1

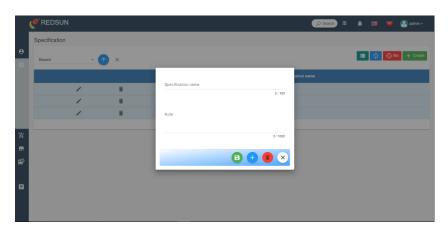
d. Specification

i. Introduction:

Used to briefly describe the characteristics of materials.







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Describe		Functions: display, Create, edit,	delete Specification.
Beginning condiction		Logged in successfully.	
		User Operation	System
Describe the steps	Display	Click Catalog Management → Specification.	Show all Specification information.
	Search	Click Search Box.Input data.Enter/Click Search button.	Returns results with characters in the search box.

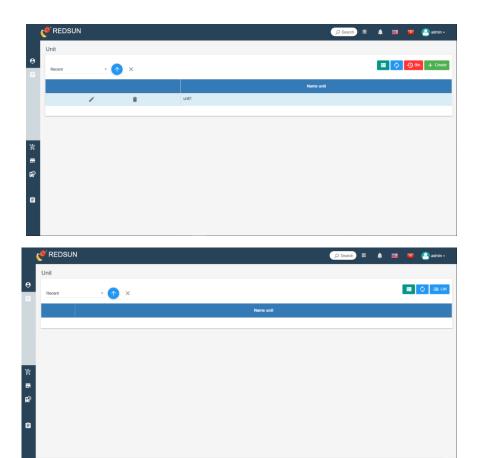
		- To cancel click Cancel button.	
	Sort	Click box sort and chose how to sort.	 Returns results with the order user choose. Chose Name →Sort alphabetically of Specification Name. Chose Recently→Sort with updatedate.
	Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
	Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
	Create	Click Create button. Filled the data. Type Name: • Must filled.	 Wrong syntax. Name already exists. Lack of data.

	 Must not be existed. Datatype: varchar. Maxlength: 100. Note: No need to filled. Datatype: varchar. Maxlength: 100. Click Save button. 	 →Show error message. If not: →Data will be saved to the Catalog table in database with scope is Specification.
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and version +1

e. Unit

i. Introduction:

Using to describe the type of unit that materials are using such as m(meter), piece, kg(kilogram),





ii. Processing

Describe		Functions: display, Create, edit, delete Unit.	
Beginning	condiction	Logged in successfully.	
		User Operation	System
	Display	Click Catalog Management → Unit.	Show all Unit information.
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
	Sort	Click box sort and chose how to sort.	 Returns results with the order user choose. Chose Name →Sort alphabetically of Specification Name. Chose Recently→Sort with updatedate.

Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Create	Click Create button. Filled the data. Name Unit: Must filled. Must not be existed. Datatype: varchar. Maxlength: 100. Note: No need to filled. Datatype: varchar. Maxlength: 1000. Click Save button.	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Catalog table in database with scope is Unit.

Edit

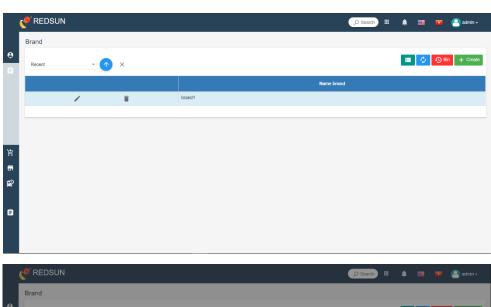
Click Edit button on the data want to edit.
Click Save button.

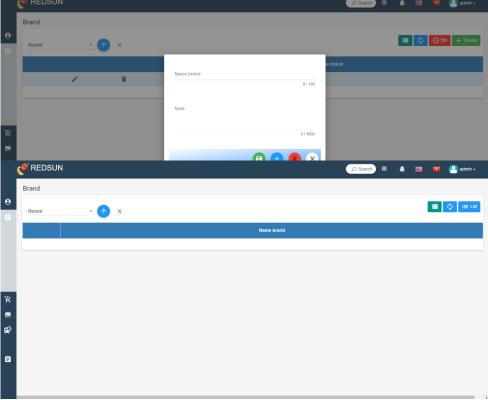
Show combobox to edit
→Data change and version +1

f. Brand

i. Introduction:

Useing to describe the brand of the material in use.





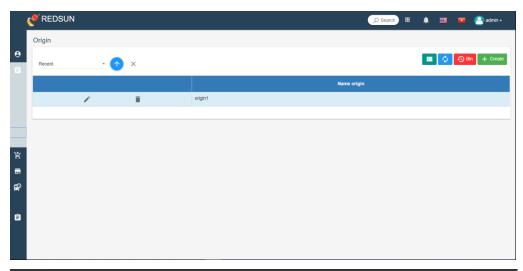
Describe		Functions: display, Create, edit, delete Brand.		
Beginning	condiction	Logged in successfully.		
		User Operation	System	
	Display	Click Catalog Management → Brand.	Show all Brand information.	
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.	
Describe the steps	Sort	Click box sort and chose how to sort.	 Returns results with the order user choose. Chose Name →Sort alphabetically of Brand Name. Chose Recently→Sort with updatedate. 	
	Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.	
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database	

		Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Create	Click Create button. Filled the data. Name Brand: Must filled. Must not be existed. Datatype: varchar. Maxlength: 100. Note: No need to filled. Datatype: varchar. Maxlength: 1000. Click Save button.	 • Wrong syntax. • Name already exists. • Lack of data. → Show error message. If not: → Data will be saved to the Catalog table in database with scope is Brand.
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and version +1

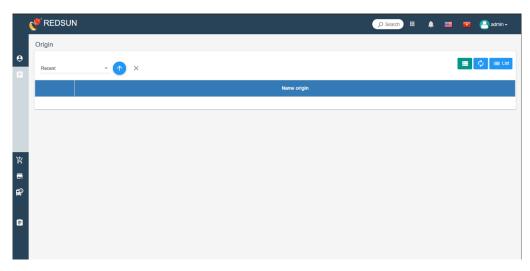
g. Origin

i. Introduction

Using to describe the origin of used materials such as VN, USA, PRC, . . .







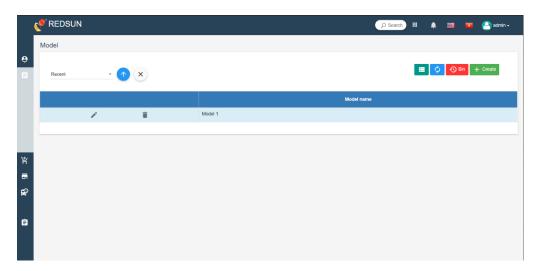
Describe		Functions: display, Create, edit, delete Origin.		
Beginning	condiction	Logged in successfully.		
		User Operation	System	
	Display	Click Catalog Management → Origin.	Show all Origin information.	
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.	
Describe the steps	Sort	Click box sort and chose how to sort.	 Returns results with the order user choose. Chose Name →Sort alphabetically of Origin Name. Chose Recently→Sort with updatedate. 	
	Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.	
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database	

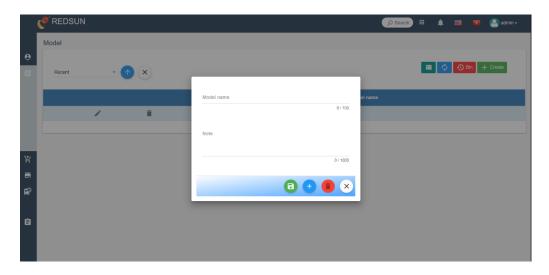
		Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Create	Click Create button. Filled the data. Name Origin: Must filled. Must not be existed. Datatype: varchar. Maxlength: 100. Note: No need to filled. Datatype: varchar. Maxlength: 1000. Click Save button.	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Catalog table in database with scope is Origin.
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and version +1

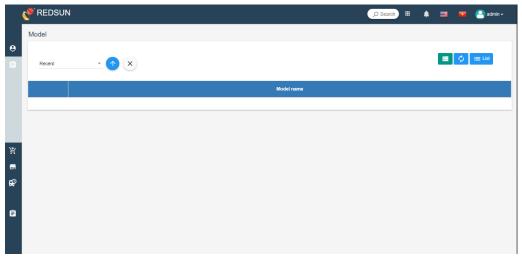
h. Model

i. Introduction

Using to show the model of used materials.







Describe		Functions: display, Create, edit, delete Model.			
Beginning	condiction	Logged in successfully.			
		User Operation	System		
	Display	Click Catalog Management →Model.	Show all Model information.		
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.		
Describe the steps	Sort	Click box sort and chose how to sort.	 Returns results with the order user choose. Chose Name →Sort alphabetically of Model Name. Chose Recently→Sort with updatedate. 		
	Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.		
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database		

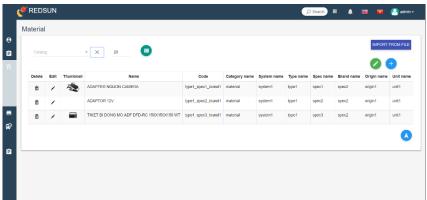
		Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Create	Click Create button. Filled the data. Model Name: Must filled. Must not be existed. Datatype: varchar. Maxlength: 100. Note: No need to filled. Datatype: varchar. Maxlength: 1000. Click Save button.	 • Wrong syntax. • Name already exists. • Lack of data. → Show error message. If not: → Data will be saved to the Catalog table in database with scope is Model.
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and version +1

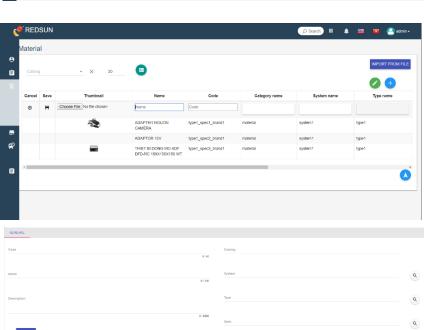
9.2.3. Material Management

i. Material

i. Introduction

Using to create data for material, possibly from the site, has not been confirmed yet and has not been used for other task.





Describe		Functions: display, Create, edit, delete Material.		
Beginning	g condiction	Logged in successfully.		
		User Operation	System	
	Display	Click Material Management → Material.	Show all Material information.	
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.	
Describe the steps	Sort	Click box sort and chose how to sort.	Returns results with the order user choose. 4 options in Category Name: • Material • Device • SubMaterial • SubDevice • Other	
	Delete	Click Delete button on the data row/data card.	Show combobox to confirm the action. Click Yes→ the data will be delete from database Click No→back to main screen.	

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Click Create/Create new directly button.

Filled the data.

Thumbnaill:

- Not required.
- Choose picture file for material from user device (laptop, destop, mobile phone, tablet, . . .).

Name:

- Must filled.
- Must not be existed.
- Datatype: varchar.
- Maxlength: 300.

Create

Code:

- Not required.
- Must not be existed.
- Datatype: varchar.
- Maxlength: 50.

Catalg, System, Type, Spec, Brand, Origin, Unit:

• Must filled.

Description:

- No need to filled.
- Datatype: varchar.
- Maxlength: 5000.

Click Save button to creat more attribute as material sub, comment, attachment or see that material in store.

If:

- Wrong syntax.
- Name already exists.
- Code allready exists.
- Lack of data.
- →Show error message.

If not:

→Data will be saved to the Materiall table in database.

Catalg, System, Type, Spec, Brand, Origin, Unit linked from Catalog table in database.

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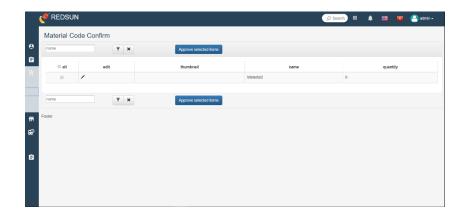
See material in used Add	Click on material want to see. Click on Store tab. Click on material want to see. Click on Attachment tab. Click Choose file button	Show all Material information in used. The data will save in
Attachment	Click Choose file button Choose file from user devices for more detailing. Click on material want to add.	attachment table in database
Add Material Sub	Click on Material want to add. Click on Material Sub tab. Click Create button. Filled the data. Thumbnaill: Not required. Choose picture file for material from user device (laptop, destop, mobile phone, tablet,). Name: Must filled. Must not be existed. Datatype: varchar. Maxlength: 300. Code: Automatically created according to the type-specbrand principle . Spec, Unit:	 If: • Wrong syntax. • Name already exists. • Code allready exists. • Lack of data. →Show error message. If not: →Data will be saved to the in database. Spec, Unit linked from Catalog table in database.

	Must filled.	
	Description:	
	No need to filled.Datatype: varchar.Maxlength: 5000.	
Click Save button to save and show more function for add detailing.		
Import materials from file	Click on Import materials from file button. Choose materials file(.csv) from user devices.	Auto save materials from file user import to database. Auto check name and code if already exists will be delete that material.
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and version +1

j. Approval Material

i. Introduction

The newly created materials cannot be used immediately but must wait for the approval function to avoid each site using a different name for one material.

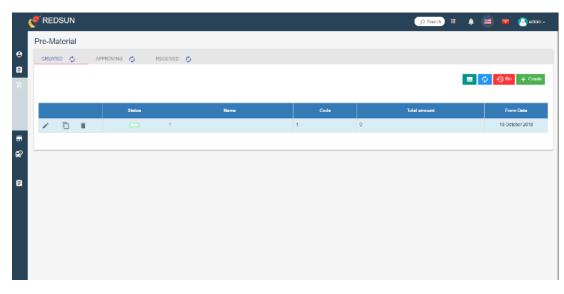


Describe		Functions: Approval Material.		
Beginning	condiction	Logged in successfully.		
		User Operation	System	
Describe	Display	Click Material Management → Approval Material.	Show all Material information.	
the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.	
	Edit	Click Edit button on the data.	Show combobox to show more detail.	
	Approval	 Click Approve selected items button. Choose one or many materials want to approve. 	Show combobox to confirm. If name of code dupplicated, system will show error message. If no error all data will be ready for using.	

k. Pre-Material

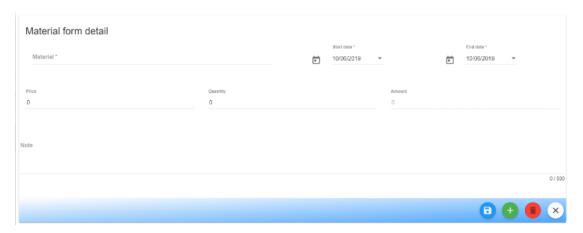
i. Introduction

Representing the number of calculated materials, expected to be available.









ii. Processing

Describe		Functions: display, add, edit, delete, assign or deny.		
Beginnir	ng condiction	Logged in successfully.		
		User Operation	System	
	Display	Click Material Management → Pre Material. Choose List View or Card View.	Show all information of Pre Material forms (status (Created, Approving or Received), name, code, total amount of materials, form date).	
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.	
•	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Recent Name Code Form date Total amount 	
	Create Pre- Material Form	Click Create Button. Fill the data: Input new code and name (required). Choose Form Date (required).	 Wrong syntax. Name/Code already exists. Lack of data. 	

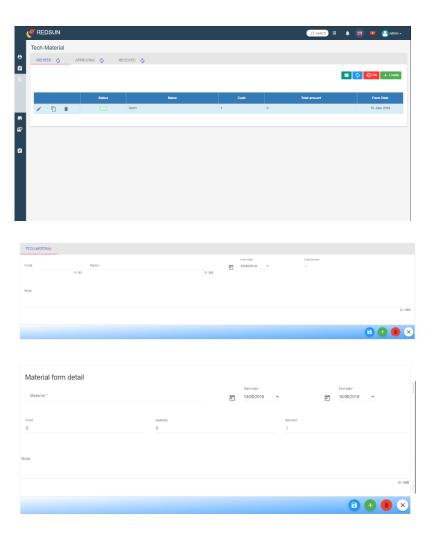
	Add information in Note.	→ Show error message. If not: → Data will be saved to the Material form table in database with Pre-Material scope.
Create Pre-Mater Detail For	- 1 /	 If: Wrong syntax. Name already exists. End Date before Start Date. Lack of data. →Show error message. If not: →Data will be saved to the Materialformdetail table in database with Pre-Material scope.
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen

Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and status +1

1. Tech-Material

i. Introduction

Showing the number of materials statistics from the drawing.



Describe		Functions: display, add, edit, delete, assign or deny.	
Beginning condiction		Logged in successfully.	
Describe the steps		User Operation	System
	Display	Click Material Management → Tech Material. Choose List View or Card View.	Show all information of Tech Material forms (status (Created, Approving or Received), name, code, total amount of materials, form date).
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Recent Name Code Form date Total amount
	Create Tech- Material Form	Click Create Button. Fill the data: Input new code and name (required). Choose Form Date (required).	 Wrong syntax. Name/Code already exists. Lack of data. →Show error message.

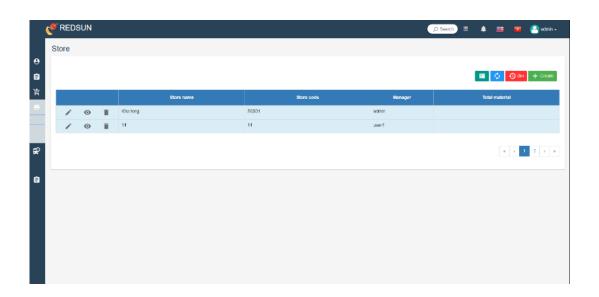
	Add information in Note.	If not: →Data will be saved to the Material form table in database with Tech-Material scope.
Create Tech- Material Detail Form	Click Tab Tech-Material Detail. Click Create Button. Fill the data: Choose Material. Input quantity of material (required). Input price of material (option). Choose Start/End Date (required). Add information in Note.	 Wrong syntax. Name already exists. End Date before Start Date. Lack of data. →Show error message. If not: →Data will be saved to the Materialformdetail table in database with Tech-Material scope.
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen

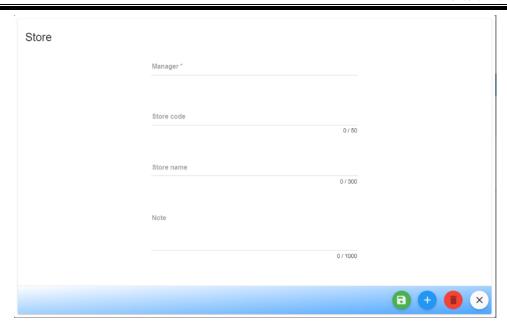
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1

9.2.4. Store Management

m. Store

i. IntroductionManage the information of Warehouses.





Describe		Functions: display, add, edit, delete.	
Beginning condiction		Logged in successfully.	
		User Operation	System
	Display	Click Store Management → Store. Choose List View or Card View.	Show all Store information (name, code, manager, quantity of materials).
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name →Sort alphabetically of Name.

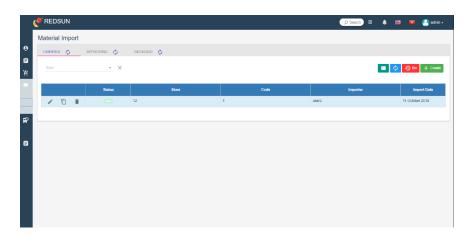
			• Choose Recently→Sort with updatedate.
	Create	Click Create Button. Fill the data: Choose Manager of Store Input new code name of store (required) Add information in Note.	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Store table in database.
	Delete Click Delete button.	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
	Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
	Edit	Click Edit button on the data want to edit.	Show combobox to edit

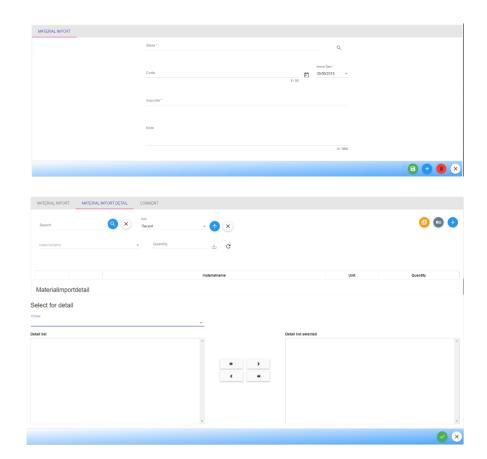
Click Save button. →Data change and status +1

n. Material Import

i. Introduction

Manage the information of material import forms, forms must be approved before importing warehousing.





Describe		Functions: display, add, edit, delete, assign or deny.	
Beginning condiction		Logged in successfully.	
		User Operation	System
	Display	Click Store Management → Material Import. Choose List View or Card View.	Show all information of Material Import forms (status (Created, Approving or Received), name, code, importer, quantity of materials, import date).
	Filter	Click Filter Box.Choose Store or input Store name.	Returns results with the import form for that Store you want to search.
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name →Sort alphabetically of Name. Choose Recently→Sort with update date.
	Create Material Import Form	Click Create Button. Fill the data:	 Wrong syntax. Name already exists.

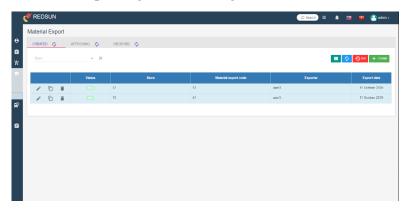
	 Choose Store you want to import material Input code of form, (required) Choose Import Date & Importer (required) Add information in Note. 	 Lack of data. Not create Material Import Detail. →Show error message. If not: →Data will be saved to the Materialimport table in database.
Create Material Import Detail Form	Click Tab Material Import Detail. Click Create Button. Fill the data: Choose Material you want to import. Input quantity of material (required) Add information in Note.	 Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Materialimportdetail table in database.
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen

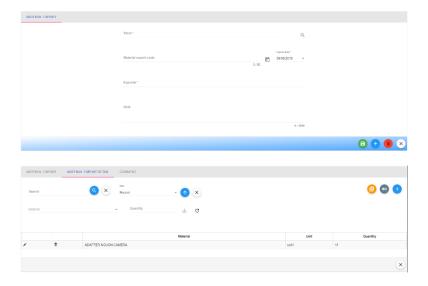
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1

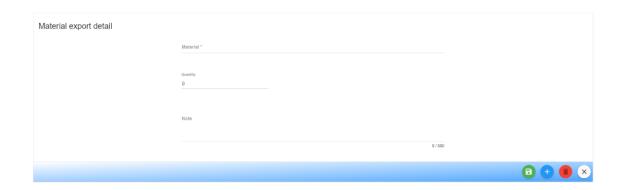
o. Material Export

i. Introduction

Manage the information of material export forms, forms must be approved before exporting warehousing.







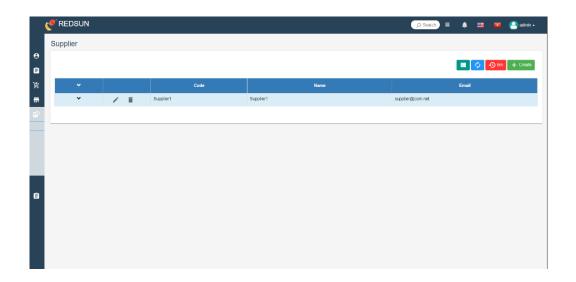
Describe		Functions: display, add, edit, delete, assign or deny.	
Beginning condiction		Logged in successfully.	
		User Operation	System
	Display	Click Store Management → Material Import. Choose List View or Card View.	Show all information of Material Import forms (status (Created, Approving or Received), name, code, importer, quantity of materials, import date).
Describe the steps	Filter	Click Filter Box.Choose Store or input Store name.	Returns results with the import form for that Store you want to search.
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.
	Sort	Click box sort and choose type of sort.	Returns results with the order user choose.

			 Choose Name →Sort alphabetically of Name. Choose Recently→Sort with updatedate.
E	Create Material xport Form	Click Create Button. Fill the data: Choose Store you want to export material Input code of form, (required) Choose Export Date & Exporter (required) Add information in Note.	 Wrong syntax. Name already exists. Lack of data. Not create Material Export Detail. →Show error message. If not: →Data will be saved to the Material Export table in database.
Ex	Create Material xport Detail Form	Click Tab Material Export Detail. Click Create Button. Fill the data: Choose Material you want to export. Input quantity of material you want to export (required) Add information in Note.	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Material export detail table in database.
	Delete	Click Delete button.	Show combobox to confirm the action.

			Click Yes→move data into recycle bin. Click No→back to main screen.
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
	Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
	Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1

9.2.5. Supplychain Management

- p. Supplier Management
 - i. IntroductionManage the information of Suppilers.





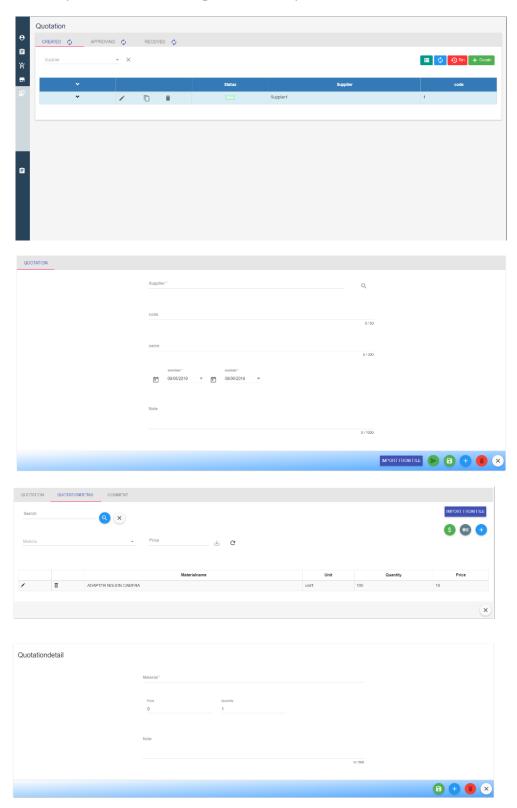
Describe		Functions: display, add, edit, delete.	
Beginnir	g condiction	Logged in successfully.	
		User Operation	System
	Display	Click Supply Chain Management → Supplier. Choose List View or Card View.	Show all information of Supplier (name, email, tel, address,).
	Filter	Click Filter Box.Choose Store or input Store name.	Returns results with the import form for that Store you want to search.
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name → Sort alphabetically of Name. Choose Recently→Sort with update date.
	Create	Click Create Button. Fill the data: code, name & email are required.	 Wrong syntax. Name & code already exists.

			Lack of data.
			→Show error message.
			If not:
			→Data will be saved to the Supplier table in database.
			Show combobox to confirm the action.
	Delete	Click Delete button.	Click Yes→move data into recycle bin.
			Click No→back to main screen.
	 Delete Forever Click Recyce bin button. Click Delete button on the data want to delete. 	button.	Show combobox to confirm the action.
			Click Yes→the data will be delete from database
		Click No→back to recycle bin screen	
		• Click Recyce bin	Show combobox to confirm the action.
	Restore	button.	Click Yes→the data will be restore
			Click No→back to recycle bin screen
	Edit	 Click Edit button on the data want to edit. Click Save button. 	Show combobox to edit → Data change and status +1

q. Quotation

i. Introduction

Manage the information of quotation forms, send materials to Suppliers then they will confirm and quote for us by email.



Describe		Functions: display, add, edit, delete, send mail			
Beginnir	ng condiction	Logged in successfully.			
		User Operation	System		
	Display	Click Supply Chain Management → Quotation. Choose List View or Card View.	Show all information of Quotation forms (status (Created, Approving or Received), supplier's name, form code, form name, date of creating).		
	Filter	Click Filter Box.Choose Supplier or input Supplier's name.	Returns results with the import form for that Supplie you want to search.		
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.		
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name →Sort alphabetically of Name. Choose Recently→Sort with update date. 		
	Create & Send	Click Create Button. Fill the data:	 Wrong syntax. Name already exists.		

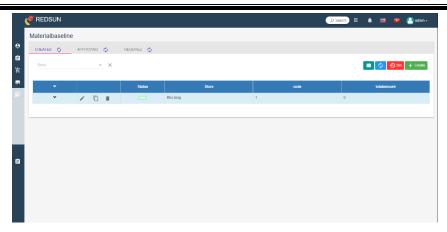
Q	Quotation	Choose Supplier you	Lack of data.	
	Form	want him to quote for Input code & name of form (required). Choose Quotation Date (required) Add information in Note. Click Save button to save and after creating Quoation Detail form, click Send button to send to supplier by email. Or Click "Import from file"	 Lack of data. Not create Quotation Detail. →Show error message. If not: →Data will be saved to the Quotation table in database. 	
		button to create quotation form faster through .csv file.		
	Create Quotation etail Form	Click Tab Quotation Detail after saving Quotation Form. Click Create Button. Fill the data: Choose Material you want to quote for. Input quantity of material you want to quote for (required) Add information in Note. Or Click "Import from file" button to create quotation form faster through .csv file.	 Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Quotationdetail table in database. 	

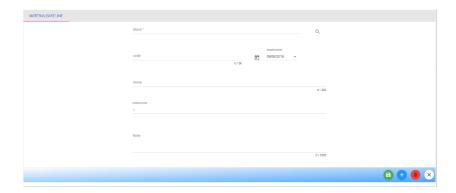
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
Delete Forever	• Click Recyce bin button. • Click Delete button on Click Yes→the database	Click Yes→the data will be delete from database Click No→back to recycle bin
 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen	
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1

r. Baseline Material

i. Introduction

Using to finalize the mateias list before handing it over to the purchasing department.









Describe		Functions: display, add, edit, delete, send mail		
Beginnir	ng condiction	Logged in successfully.		
		User Operation	System	
	Display	Click Supply Chain Management → Baseline Material. Choose List View or Card View.	Show all information of Baseline material forms (status (Created, Approving or Received), store's name, form code, form name, date of creating form).	
	Filter	Click Filter Box.Choose Store or input Store's name.	Returns results with the import form for that Store you want to search.	
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	 Returns results with characters in the search box. 	
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name →Sort alphabetically of Name. Choose Recently→Sort with update date. 	
	Create Baseline	Click Create Button. Fill the data:	 Wrong syntax. Name already exists.	

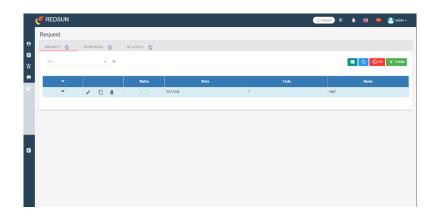
Material	Choose Store	Lack of data.		
Form	• Input code & name of form (required).	 Not create Quotation Detail. 		
	 Choose Date of creating form (required) Add information in Note. 	→Show error message. If not: →Data will be saved to the Materialbaseline table in		
	Click Save button to save.	database.		
Create Baseline Material	Click Tab Baseline Material Detail after saving Baseline Material Form. Click Create Button. Fill the data: • Choose Material	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: 		
Detail Form	 Input quantity and price of material Add information in Note. 	→Data will be saved to the Materialbaselinedetail table in database.		
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.		
Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen		

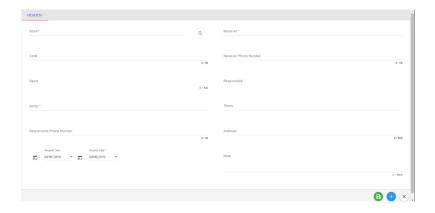
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and status +1

s. Request

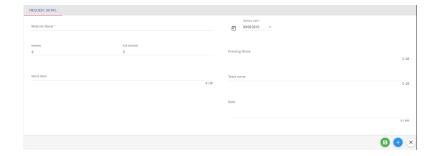
i. Introduction

Manage the information of request forms, request materials quickly from Site through creating Request form there.









Describe		Functions: display, add, edit, delete	
Beginning condiction		Logged in successfully.	
Describe the steps		User Operation	System

	Display	Click Supply Chain Management → Request. Choose List View or Card View.	Show all information of request forms (status (Created, Approving or Received), store's name, form code, form name, date of creating form).	
	Filter	Click Filter Box.Choose Store or input Store's name.	Returns results with the import form for that Store you want to search.	
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.	
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name →Sort alphabetically of Name. Choose Recently→Sort with update date. 	
Re	Create quest Form	Click Create Button. Fill the data: Choose Store Input code & name of form (required). Choose Date of creating form (required) Add information in Note.	 • Wrong syntax. • Name already exists. • Lack of data. • Not create Quotation Detail. → Show error message. If not: 	

	Click Save button to save.	→Data will be saved to the Request table in database.
Create Request Detail Form	Click Tab Request Detail after saving Request Form. Click Create Button. Fill the data: Choose Material Input quantity of material Add information in Note.	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Requestdetail table in database.
Delete	Click Delete button. Click Yes→m recycle bin. Click No→b.	Click Yes→move data into
Forever button. • Click Delete button	· ·	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen

Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1
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t. Extra Request

i. Introduction
 Manage the information of extra request forms when actual request missing.

Describe		Functions: display, add, edit, delete		
Beginnir	ng condiction	Logged in successfully.		
		User Operation	System	
	Display	Click Supply Chain Management → Extra Request. Choose List View or Card View.	Show all information of request forms (status (Created, Approving or Received), store's name, form code, form name, date of creating form).	
Describe the steps	Filter	Click Filter Box.Choose Store or input Store's name.	Returns results with the import form for that Store you want to search.	
	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	• Returns results with characters in the search box.	
	Sort	Click box sort and choose type of sort.	• Returns results with the order user choose.	

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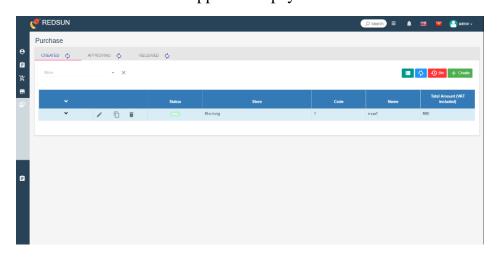
		 Choose Name →Sort alphabetically of Name. Choose Recently→Sort with update date.
Create Extra Request Form	Click Create Button. Fill the data: Choose Store Input code & name of form (required). Choose Date of creating form (required) Add information in Note. Click Save button to save.	 If: Wrong syntax. Name already exists. Lack of data. Not create Quotation Detail. →Show error message. If not: →Data will be saved to the Request table in database.
Create Extra Request Detail Form	Click Tab Extra Request Detail after saving Extra Request Form. Click Create Button. Fill the data: • Choose Material • Input quantity of material • Add information in Note.	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Requestdetail table in database.
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin.

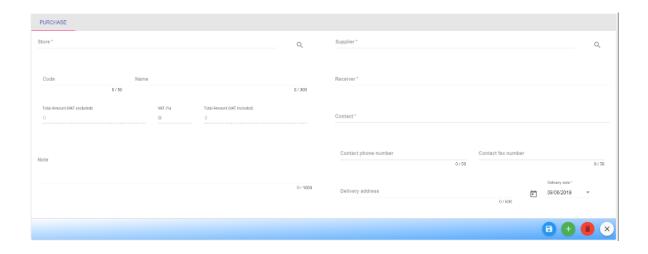
			Click No→back to main screen.
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
	Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
	Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1

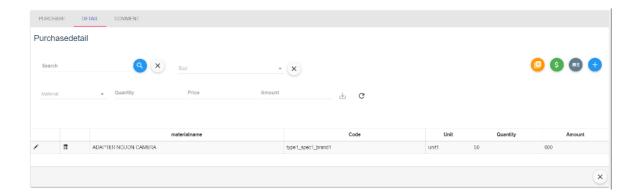
u. Purchase

i. Introduction

Manage purchase form, after quoting material, purchase form is created to confirm with the supplier and pay for those materials.









Describe		Functions: display, add, edit, delete	
Beginning condiction		Logged in successfully.	
		User Operation	System
	Display	Click Supply Chain Management → Purchase. Choose List View or Card View.	Show all information of request forms (status (Created, Approving or Received), store's name, form code, form name, date of creating form).
	Filter	Click Filter Box.Choose Store or input Store's name.	Returns results with the import form for that Store you want to search.
Describe the steps	Search	 Click Search Box. Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
	Sort	Click box sort and choose type of sort.	 Returns results with the order user choose. Choose Name →Sort alphabetically of Name. Choose Recently→Sort with update date.
	Create Purchase Form	Click Create Button. Fill the data:	 Wrong syntax. Name already exists.

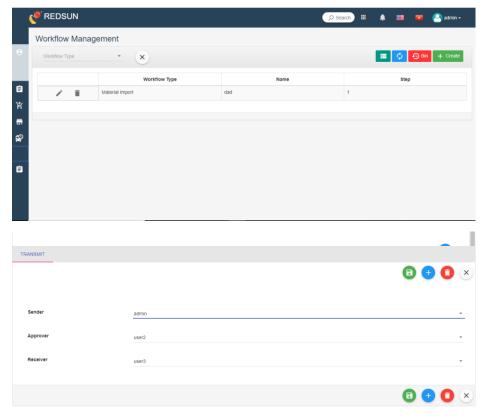
	 Choose Store, supplier, contact & receiver (required) Input code & name of form (required). Choose Date of creating form (required) Add information in Note. Click Save button to save. 	 Lack of data. Not create Quotation Detail. →Show error message. If not: →Data will be saved to the Purchase table in database.
Create Purchase Detail Form	Click Tab Purchase Detail after saving Purchase Form. Click Create Button. Fill the data: Choose Material Input quantity of material Add information in Note.	 Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Purchasedetail table in database.
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database

_		Click No→back to recycle bin screen
Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit →Data change and status +1

9.2.6. Workflow management:

iii. Introduction:

Transportation management processes stock



Describe		Functions: display, add, edit, delete.	
Beginning condiction		Logged in successfully. User have been permitted.	
		User Operation	System
	Display	Click Workflow Management → Workflow type.	Show all information.
	Search	 Click Search Box. Choose type stock. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
Describe the steps	Create	Click create button - Choose work flow type - Input information in code fill. - Input information in name fill - Input information in step fill - Input information in duration fill (only import number) Click save button	 If: Wrong syntax. Name already exists. Lack of data. →Show error message. If not: →Data will be saved to the Workflow table in database with scope . Returns results successfully and display stock in list

	Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.
	Delete Forever	 Click Recyce bin button. Click Delete button on the data want to delete. 	Show combobox to confirm the action. Click Yes→the data will be delete from database Click No→back to recycle bin screen
	Restore	 Click Recyce bin button. Click Restore button on the data want to restore to use. 	Show combobox to confirm the action. Click Yes→the data will be restore Click No→back to recycle bin screen
	Refesh	Click refesh button.	Refesh current page successfully
	Edit	Click Edit button on the data want to edit.Click Save button.	Show combobox to edit → Data change and status +1

v. Processing (Tranmit)

Describe		Functions: Choose approver, sender	
Beginning condiction		Already have a stock.	
		User Operation	System
Describe the steps	Sender	Choose sender → Sender. - Click Search Box.	 If: Same name. Lack of data. →Show error message. If not: →Data will be saved to the Transmit table in database with scope .
	Search	 Input data. Enter/Click Search button. To cancel click Cancel button. 	Returns results with characters in the search box.
	Approver	Choose approver →Approver.	 If: Same name. Lack of data. →Show error message. If not: →Data will be saved to the Transmit table in database with scope .

		(Approver and reciever can be same name)
Receiver	Choose receiver → Receiver.	 If: Same name. Lack of data. →Show error message. If not: →Data will be saved to the Transmit table in database with scope . (Receiverr and sender can't be same name)
Delete	Click Delete button.	Show combobox to confirm the action. Click Yes→move data into recycle bin. Click No→back to main screen.