Solar Online

User Documentation

CHAPTER 1

Introduction

This report discusses the work done in the development of the online data entry system for solar sales.

Background and motivation

The system that was being used to record product and sales data for Last Mile Entrepreneurs (LMEs) was a Microsoft Access based data entry system/database. A copy of the system was needed on every data-entry personnel's computer in order for them to use it. Also, data transfer was only via flash memory disks or email.

Objective

The final goal of the project was twofold

1. To make it easier to generate reports and statistics.
2. Allow access to the system from anywhere as long as the computer has an internet connection.

To make it easier for LME sales data to be entered and shared, an online system based on PHP, MySQL, HTML and CSS web technologies was implemented.

Data can be entered from any computer as long as the computer has an internet connection. The data can be easily shared in CSV, Excel, PDF or print format on the click of a button.

Methodology

To implement the above goals the following methodology needs to be followed

1. Specifying the various components required for the application.
2. Specifying how the components connect with each other.
3. Analysis. Specifying the data required for analysis and generation of report.
4. Identifying the technologies that will be used to build the system.
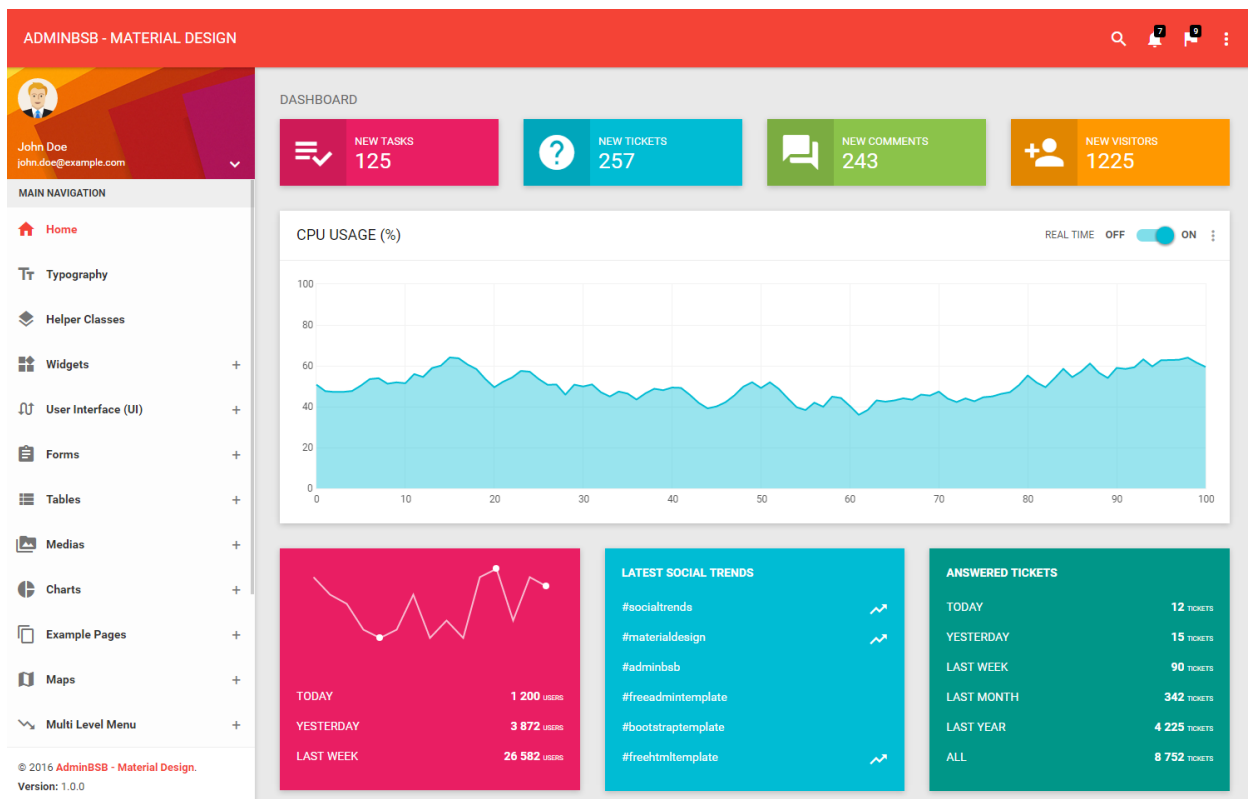
CHAPTER 2

TOOL DESCRIPTION

User Interface

The interface is very user friendly and is built using the following technologies

HTML/CSS/JavaScript
AdminBSB - Material Design

AdminBSB - Material Design is a fully responsive and free admin template. It was developed with Bootstrap 3.x Framework and Google Material Design of powers.

It's really easy to customize and usage. You can use for from 320px to large resolution pixels of new generation screens and mobile devices. (Fully Responsive Material Design)

[Here's the link to the source code](#)

CodeIgniter
CodeIgniter is a powerful PHP framework with a very small footprint, built for developers who need a simple and elegant toolkit to create full-featured web applications.

Specification

Application Specification

Account creation

1. A user creates a data entry account first by filling in the following details

2. After successful registration the user will be redirected to the **dashboard** page.
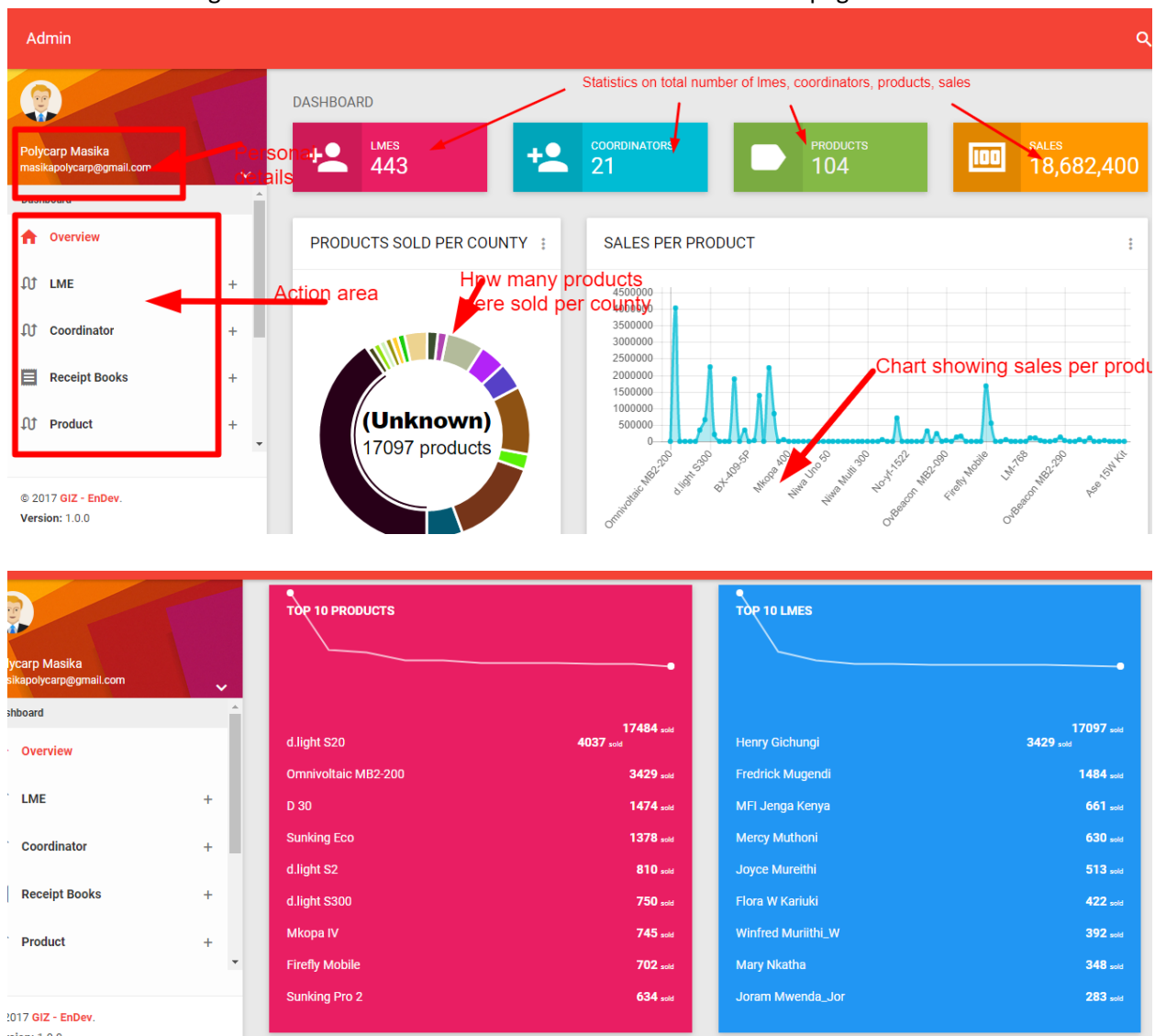
The major components are highlighted in the images above

Action area
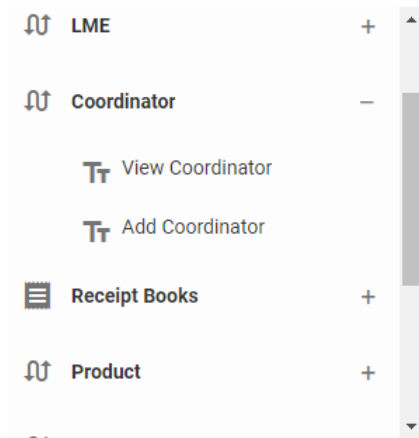
This is a scrollable area that contains the functionality to add/view/edit/delete a record from the system. Clicking on the **+** expands all the available actions.

Lme Action Area
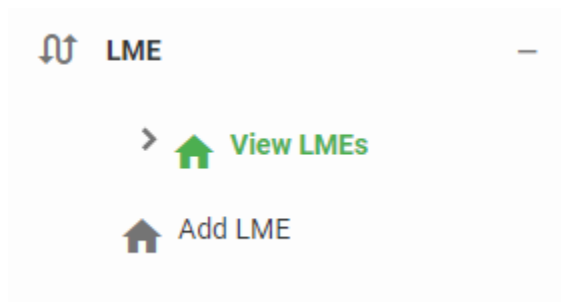
Clicking View LMEs loads a list of all lmes

A list of all lmes

| Copy | CSV | Excel | PDF | Print | ← Actions that allow you to export the data in various formats | | | | | Search: |

Edit   Delete

#	LME	Cluster	County	Coordinator	Sub County	Phone Number	Category		
1	Fredrick Mugendi	Central	Embu	Gregory Nzomo	Manyatta	728324457	Other	✏	🗑
2	Gabriel Kinyua	Central	Embu	Gregory Nzomo	Runyenjes	724985825	Other	✏	🗑
3	Nancy Murugi 2	Central	Embu	Gregory Nzomo	Mbeere North	792019946	Other	✏	🗑
4	Mary Muthoni	Central	Embu	Gregory Nzomo	Mbeere North	721125601	Freelancer	✏	🗑
5	Justin Ngungi	Central	Embu	Gregory Nzomo	Mbeere North	717330288	Freelancer	✏	🗑

Clicking Add LME loads the add interface for lme
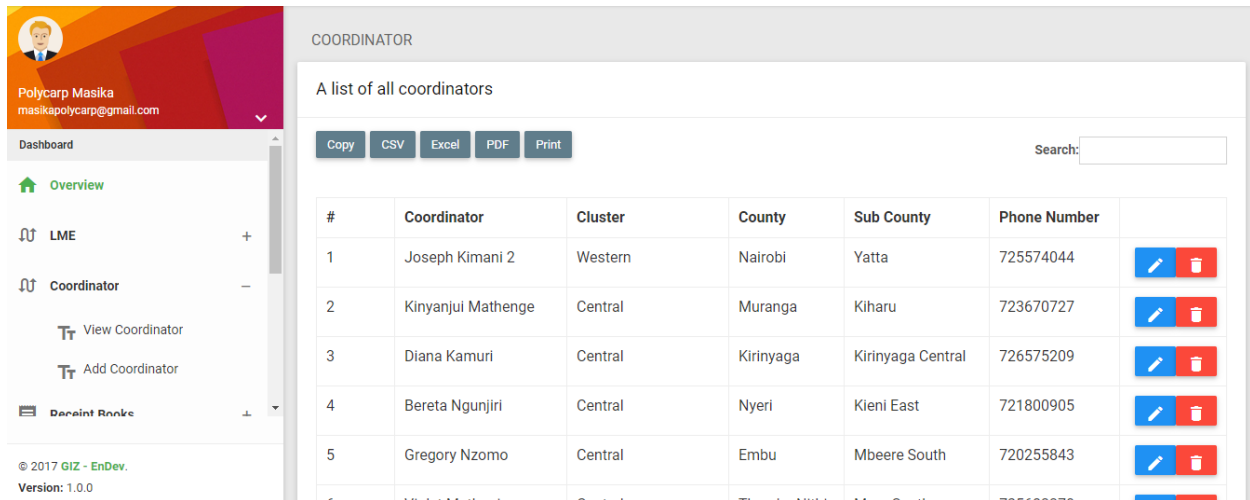
ADD (Last Mile Enterpreneur) LME

Please enter the details below

LME First Name

LME Last Name

County

Mombasa ▾

Cluster

Central ▾

Coordinator First Name

Coordinator Last Name

Phone Number

Sub County

Ainabkoi ▾

Category

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Coordinator Action Area
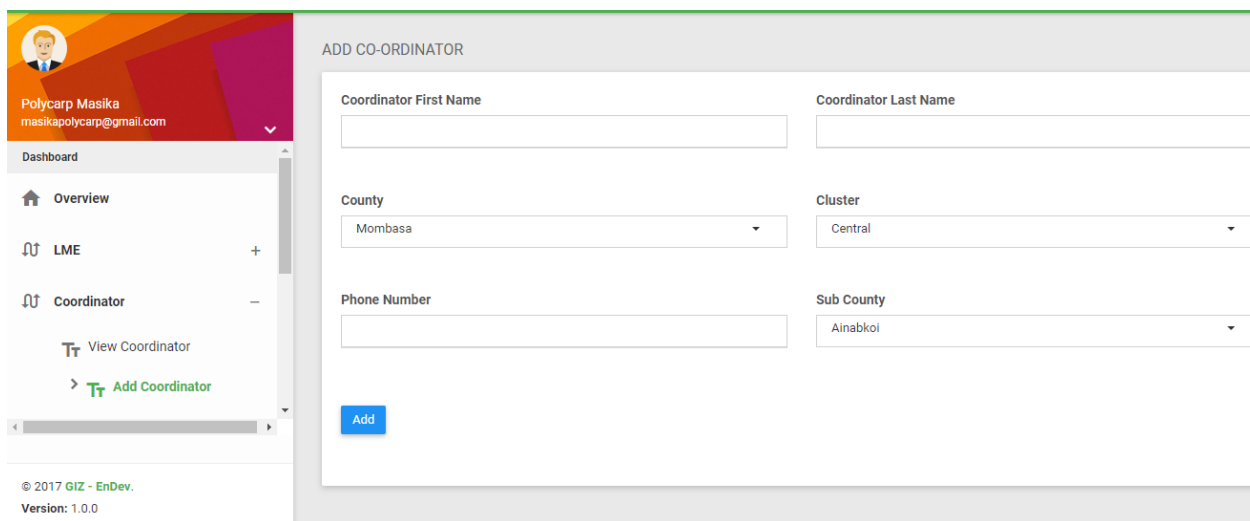
Clicking view coordinator lists all coordinators
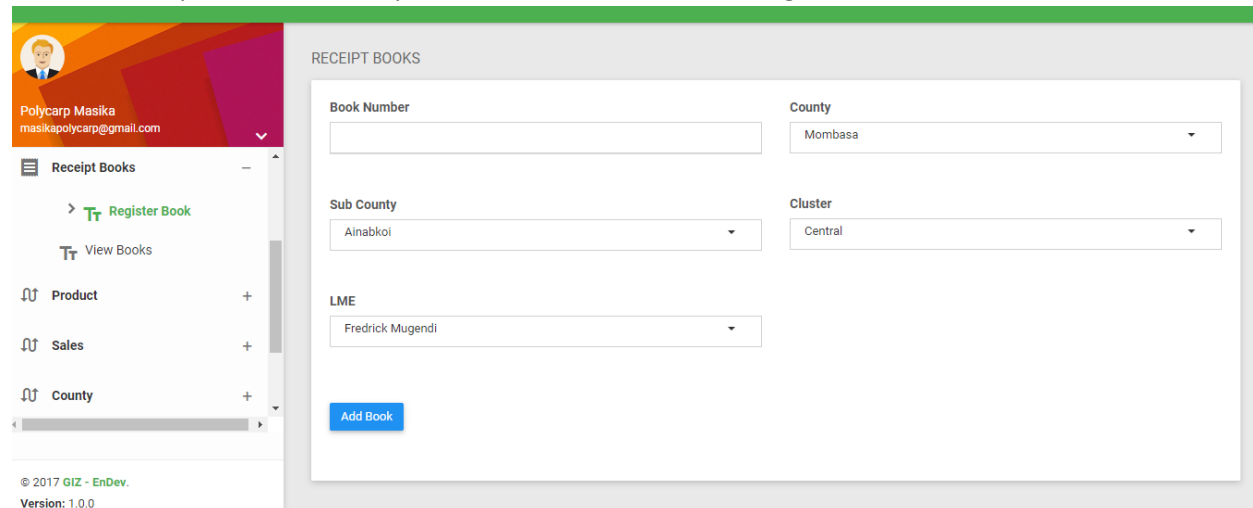
Clicking add coordinators brings up the add coordinator interface

Receipt Books Action Area

To add a receipt book click receipt books action menu and the register book
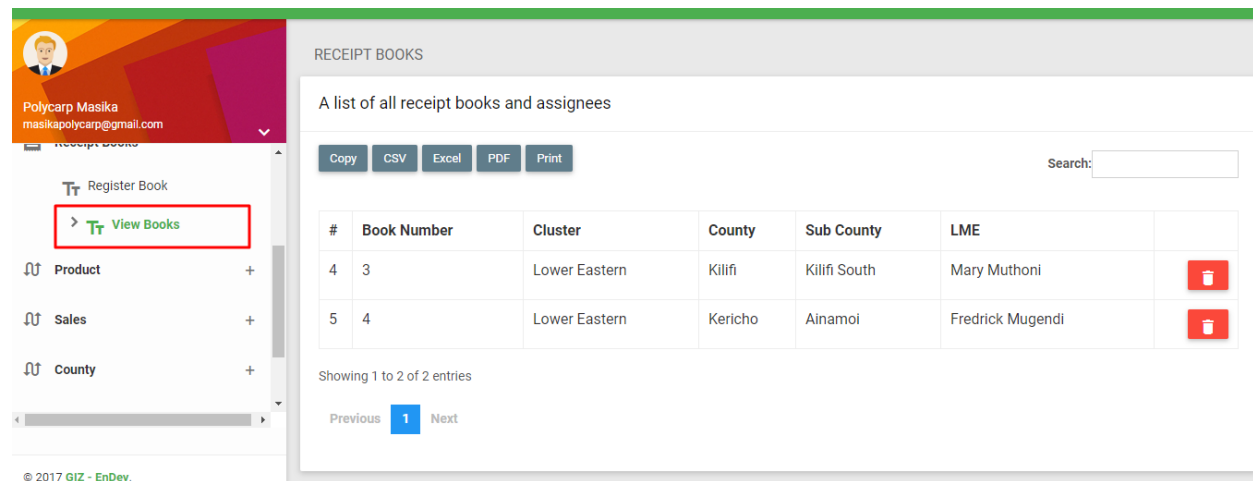
To view books click view books link on the action menu

Products Action Area
View products Interface

Add Product Interface

Edit Product Interface

Product Distribution Interface

Sales Action Area
View Sales Interface

Add Sales Interface

Add sales workflow

- Enter all lme details first

Book Number

| 3 | ▾ |

Step 1

Period

2017-09-07

Cluster

| Central | ▾ |

County

| Embu | ▾ |

LME

| Mary Muthoni | ▾ |

⚠ Add Products

Fill in all empty textboxes

☑ Save Sales

- Add all the products for that lme by clicking add products button

⚠ Add Products

When you click add products button the following screen pops up

Add products for Mary Muthoni

Product Name

| Barefoot Go 250 | ▾ |

Quantity

| 21 | ⇕ |

☑ Add

#	Product Name	Quantity	

SAVE CHANGES   CANCEL

Mary Muthoni | ▾ | ⚠ Add Products

☑ Save Sales

- Choose the product name from the "product name" dropdown and enter the quantity.

After entering the above details click **"Add"** button. The product will be automatically displayed bellow the form

If you change your mind you can delete the product by clicking on the delete button. You can add as many products as you wish
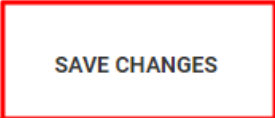
- After adding all the products click save changes to effect what you have done

Clicking cancel removes all the changes you have made. To avoid accidental removal a confirm box appears when you click cancel
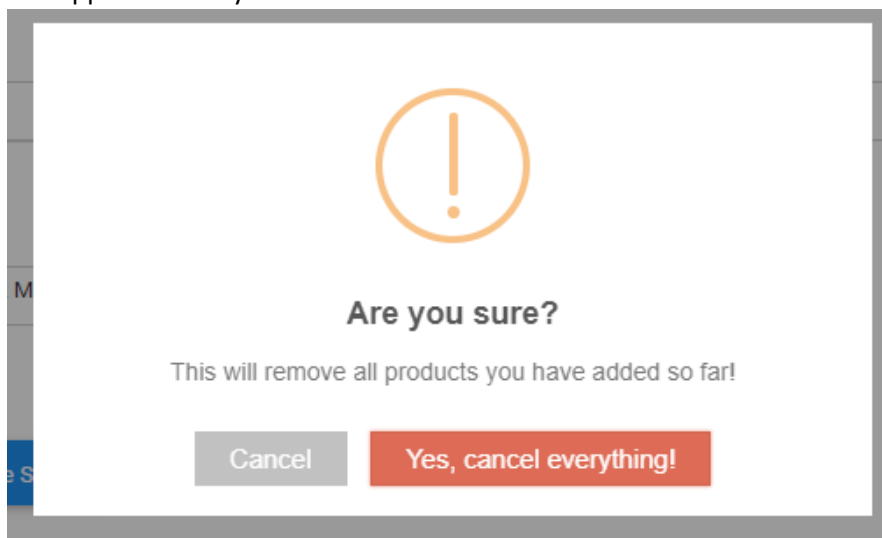
Once you have saved changes the "Add Products" button changes to the following button showing how many products you have added
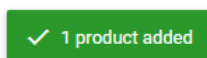
- You can now click save sales and the data will be posted to the database.

- After the data is posted you will automatically be taken to the distribution where the product distributions are posted

To add distribution data (where the individual products were sold) click "Add Distributions Button". The following pops up.

Choose the Customer County, Sub-County and the Quantities sold for that location the click "Add". The distribution will automatically be added to the table below.

- After adding distributions click save changes to save what you have done
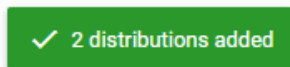

Clicking cancel removes all the changes you have made. To avoid accidental removal a confirm box appears when you click cancel.

Once you have saved changes the "Add Distributions" button changes to the following button showing how many products you have added

- Click "Post Data" button to save your changes to the database

- After the data is posted all your changes will be displayed in the table below the button

- If the posted distribution quantities do not match with the sales data quantities you will be given a warning message to check your data

This number

Should be equal to the totals of
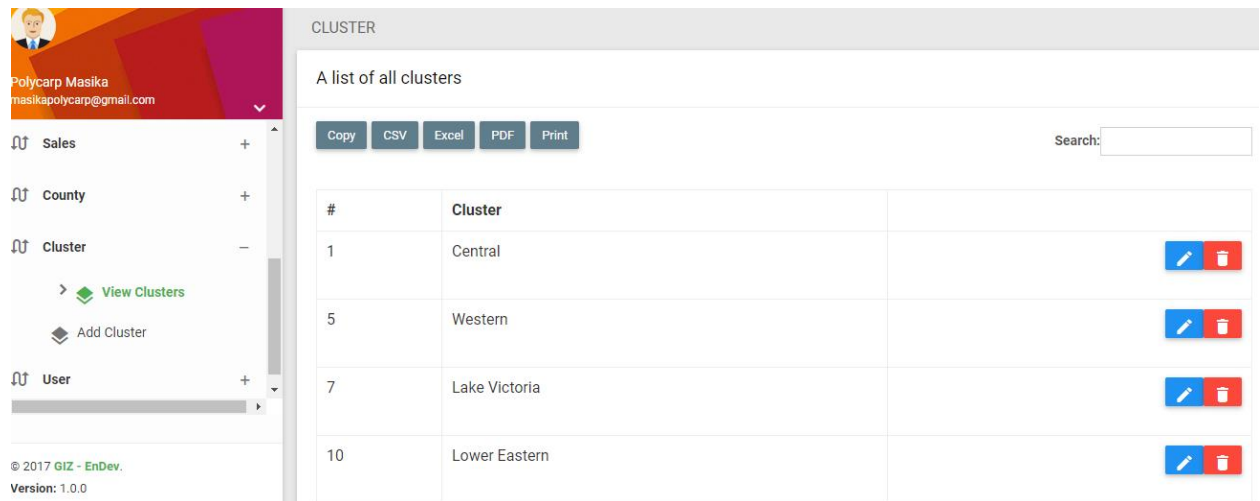
#	Period	Cluster	County	Coordinator	LME	Customer County	Customer Sub-County	Quantity	
1304	2017-09-07	Central	Mombasa	Gregory Nzomo	Samuel Muchangi	Samburu	Awendo	10	🗑
1303	2017-09-07	Central	Mombasa	Gregory Nzomo	Samuel Muchangi	Taita-Taveta	Awendo	2	🗑

If they are not equal you can't proceed with the data entry process.

If all distributions are entered you will be redirected back to the Sales tab to post sales for another lme.
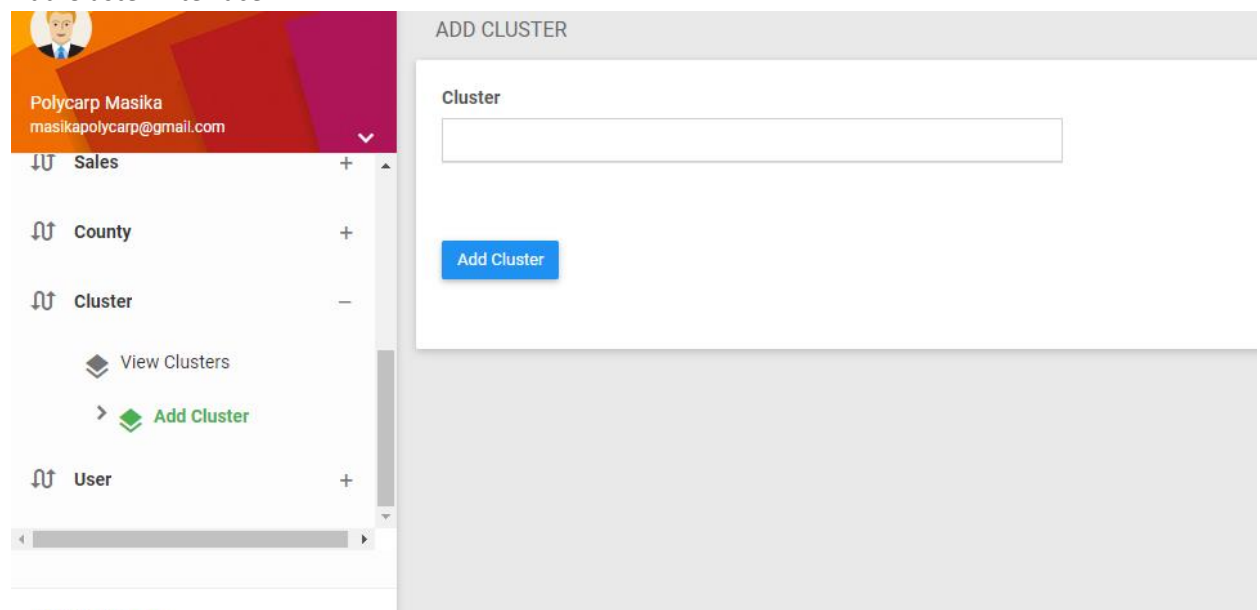
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Cluster Action Area

View Cluster interface

Add Cluster Interface

User Action Area

View Users Interface

Use levels
- Admin
  This user has complete control of all functionality and can add and remove other users as well as perform all data entry functions.
- Data Entry
  This user can only perform data entry functions but can't delete or add users.
- View Only
  This user can only view data but cannot perform data entry functions like adding/deleting data. This user can't add or delete other users.

Logging Out
To logout click on the arrow on the left sidebar
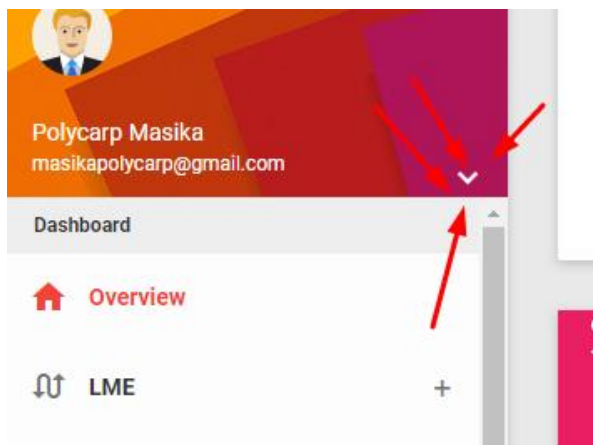
Click "**Sign Out**" and you'll be logged out of the system