



PROJECT INDEX: PRJ 109

ONE-STOP ONLINE DISCOUNT PLATFORM FOR STUDENT SUPPORT

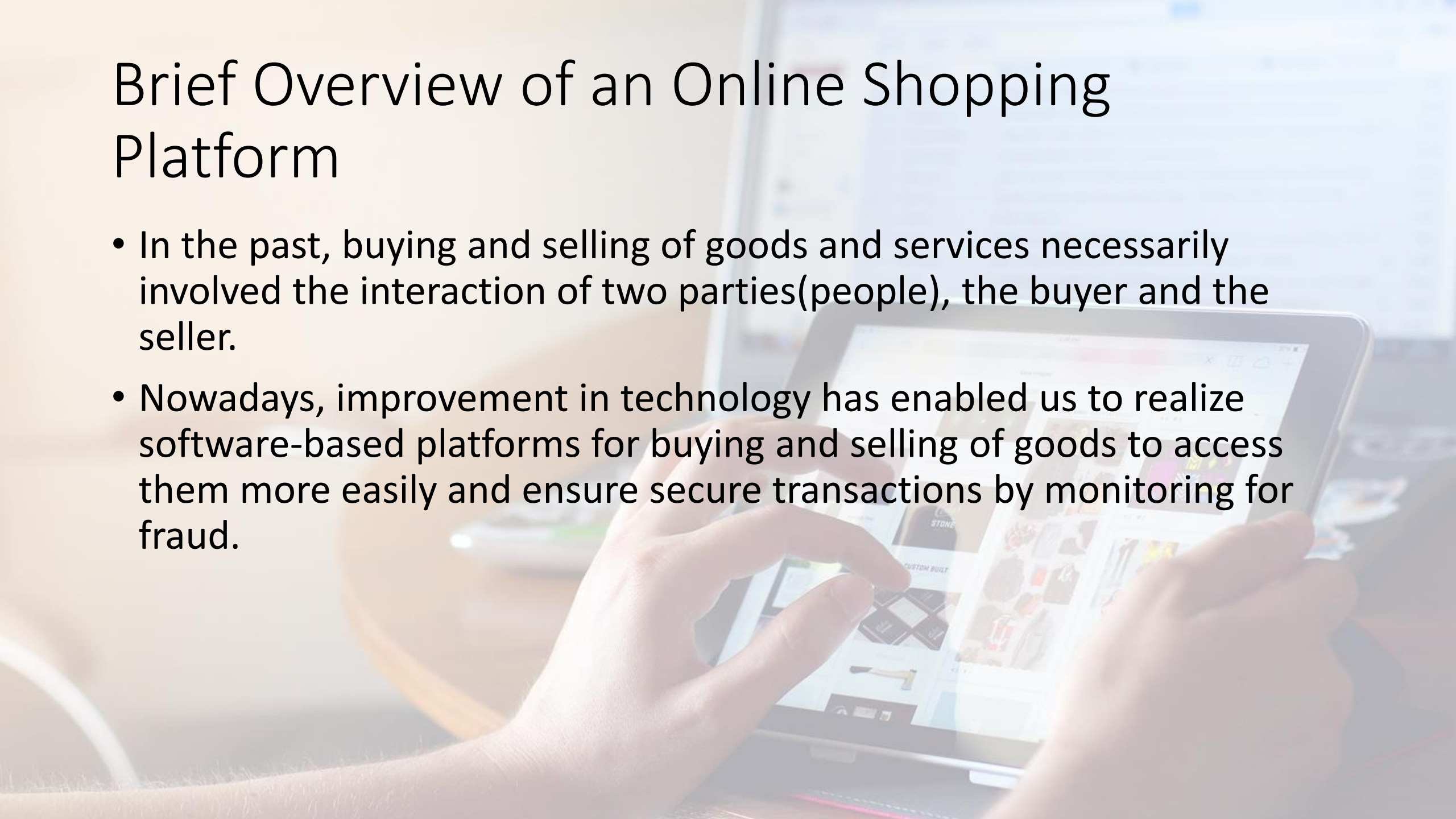
Presented By: Muiruri Andrew Maingi

Introduction

- **Mwafunzi** is a **one-stop online discount platform** that serves the students of the University of Nairobi by providing goods at discounts.
- Anyone who stays and works within or near the university can access the application, visit the **main office at Mahatma Gandhi Wing** for any enquiries or visit the **bazaar located nearby** where electronic goods on sale could be displayed.
- Main objective:
 - To implement a one-stop online discount platform for students
- Specific objectives:
 - To provide a safe platform for buying and selling of goods
 - To provide a faster option for exchange of goods and currency
 - To provide goods to students at a discounted price

Brief Overview of an Online Shopping Platform

- In the past, buying and selling of goods and services necessarily involved the interaction of two parties(people), the buyer and the seller.
- Nowadays, improvement in technology has enabled us to realize software-based platforms for buying and selling of goods to access them more easily and ensure secure transactions by monitoring for fraud.



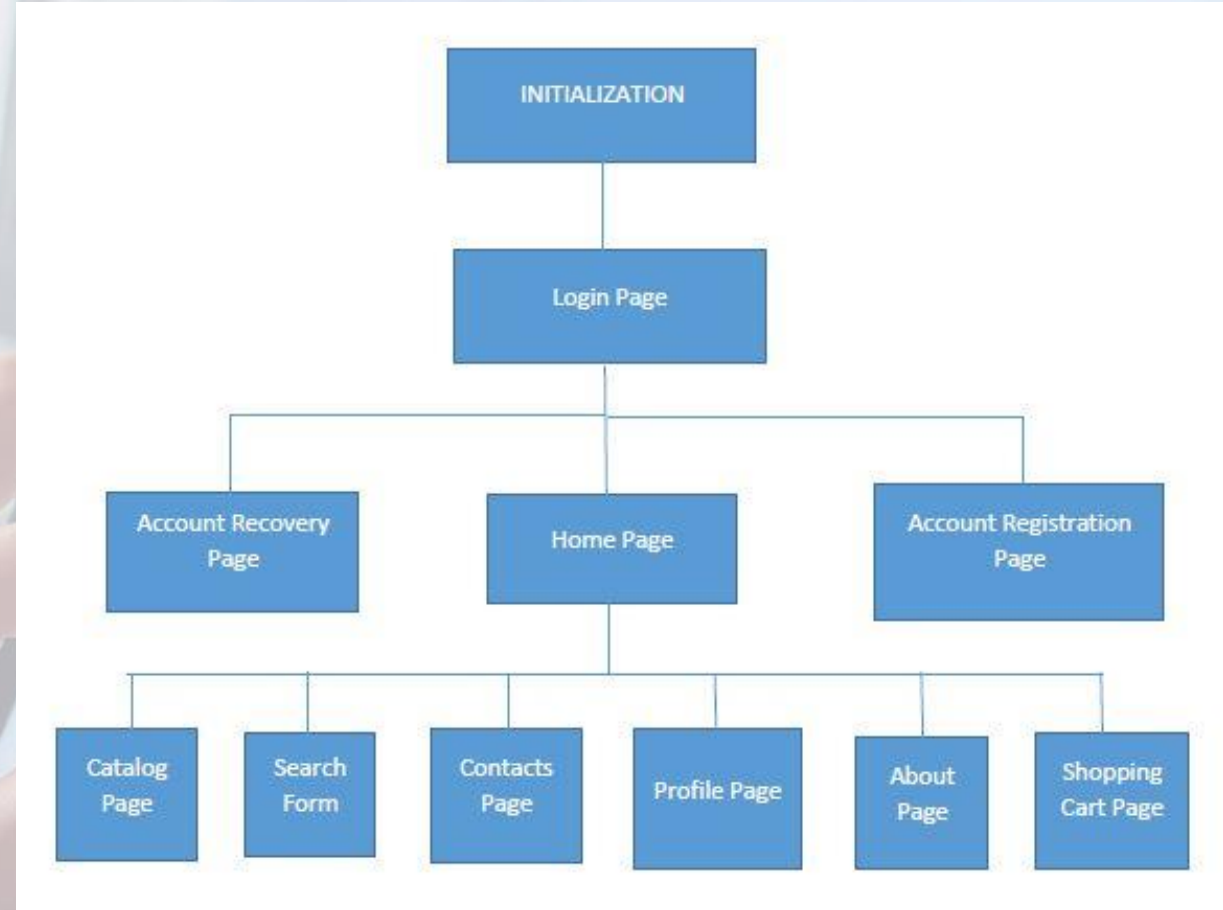
The Purpose of this Platform

- The reduced prices of goods will help students to **save on shopping costs** and **use the total amount saved in other aspects of life** where finances are required.
- Also, this platform could **help reduce wastage**, as goods that are not needed by one user could be sold to another user through the platform.



Tools used for Design and Implementation

- Mwafunzi was designed using **block diagrams** and **AFP**(Algorithm-Flowchart-Pseudocode) method.
- It was implemented using **Flask** micro-framework, **HTML** and **CSS**.
- **VS Code** was used to input and run all code.



Testing

- **Selenium IDE** was used to check the platform for broken links and pages that did not work as expected.
- The application was also tested **manually** to check if only admins could access certain pages.

The screenshot displays the Selenium IDE interface for a project named 'OPLAT*'. The 'Tests' panel on the left lists three test cases: 'Add Commodity*', 'Login and Navigation', and 'Shopping Cart and Check...', all marked with green checkmarks. The main area shows a sequence of commands for a test run at 'http://127.0.0.1:5000/'.

	Command	Target	Value
2	set window size	1141x675	
3	click	linkText=Catalog	
4	click	linkText=Shopping Cart	
5	click	linkText=Admin	
6	click	linkText=See bought goods	

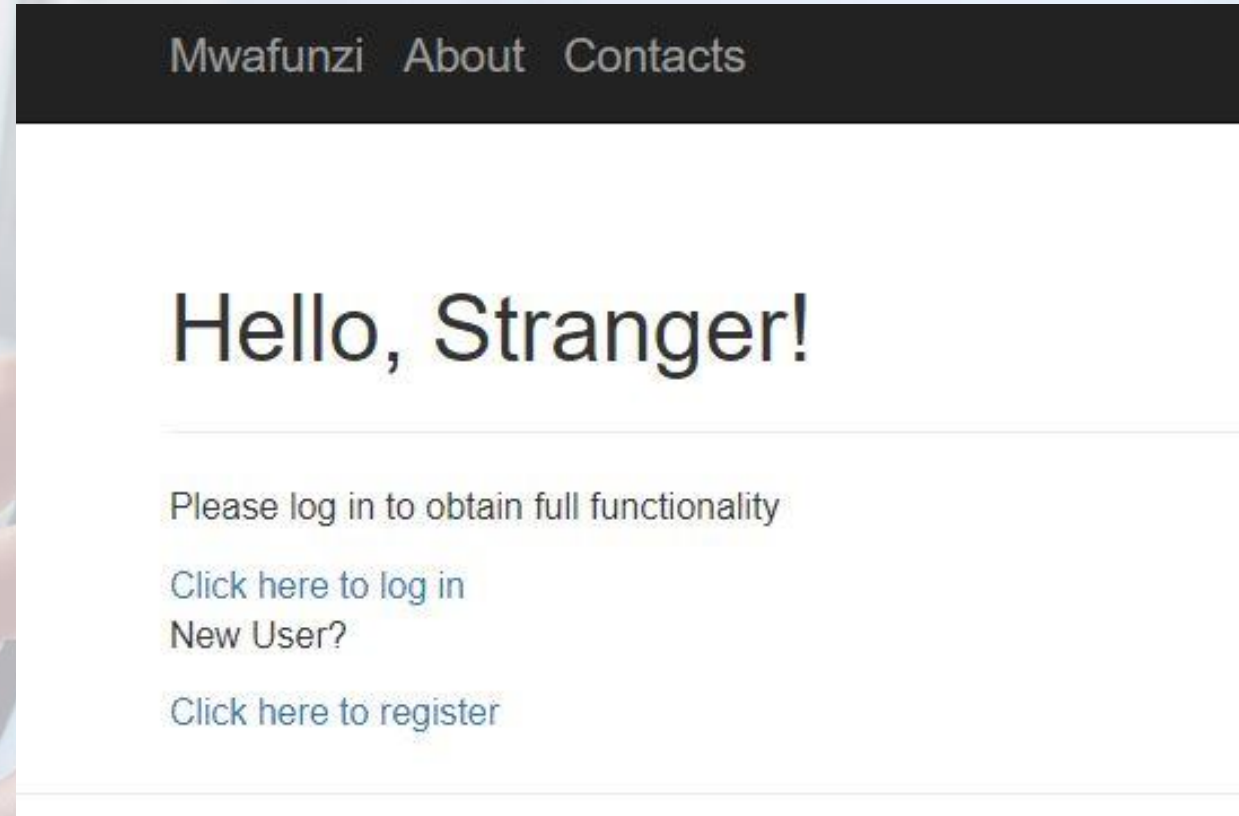
Below the command list, the 'Command' field is set to 'open', 'Target' is 'http://127.0.0.1:5000/', and 'Value' and 'Description' are empty.

The 'Log' panel at the bottom shows the execution results:

- 4. click on linkText=Shopping Cart OK 12:48:36
- 5. click on linkText=Admin OK 12:48:40
- 6. click on linkText=See bought goods OK 12:48:43
- 'Shopping Cart and Checkout' completed successfully 12:48:46
- moouikfkahbdckldjndioackbalphokd/index.html# 12:48:58

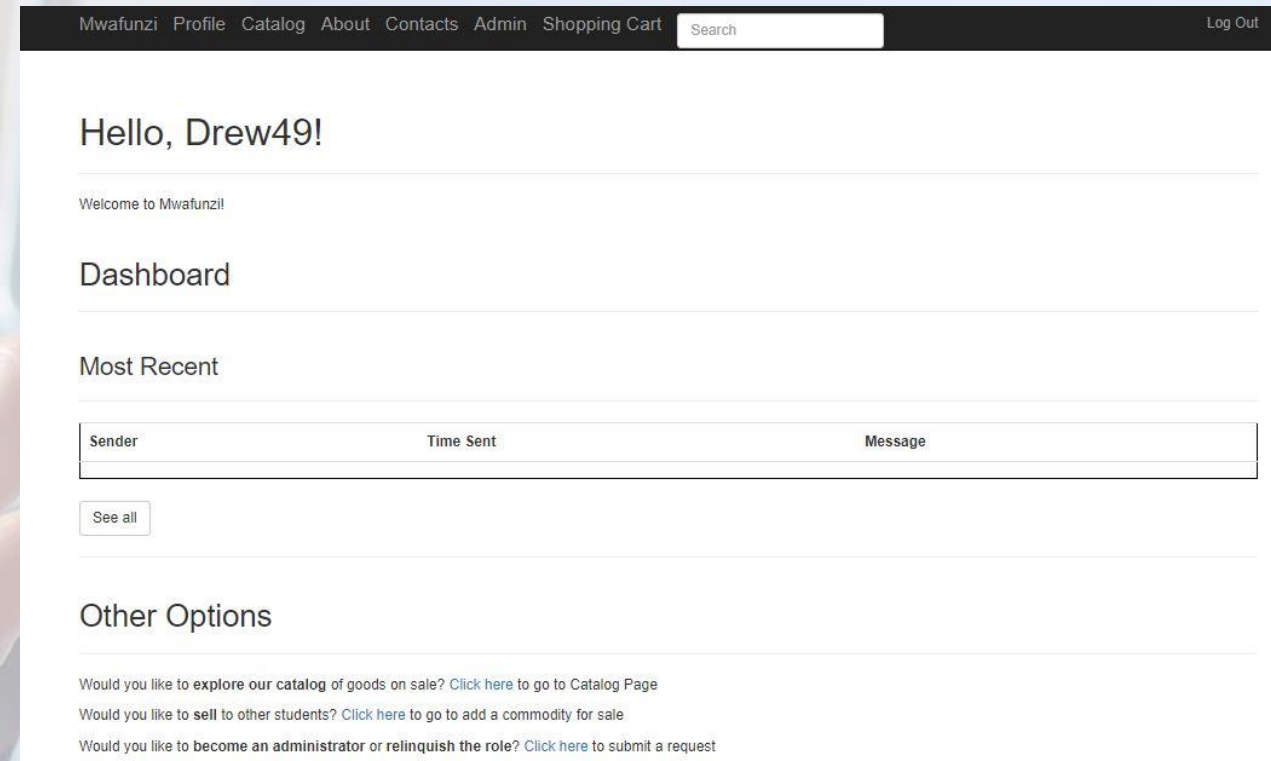
Login and Registration

- When a user accesses the app for the first time, the application welcomes the user as a stranger and displays **two options**: The user can either **log in** using his/her credentials or **register** as a new user.
- When logging in, the credentials required are the **user's email address** and **password**. The platform flashes a warning if incorrect credentials are used.



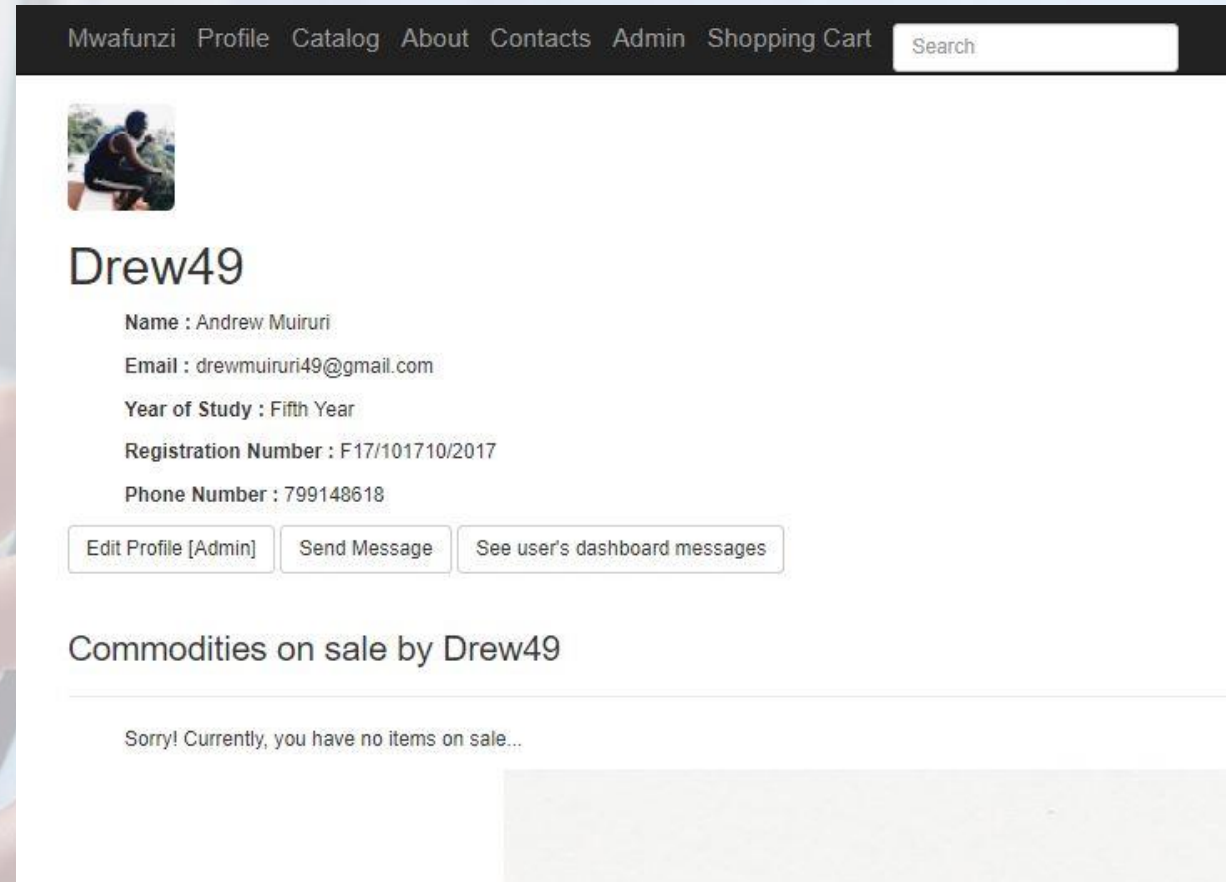
Home Page and Navigation Bar

- The home page has **three sections**:
 1. The greeting section, with the user's username
 2. The dashboard section
 3. The Other Options Section
- The navigation bar has tabs that redirect the user to other important pages of the platform, for example, the profile page, catalog page and shopping cart page.



Profile Page

- This page has **two sections**:
 1. The user information section
 2. The user commodity section
- The user information section contains the public details of the user, while the user commodity section contains information about the goods on sale by the user.



Admin Page

- Only users who are admins can access this page. This page has **three sections**:
 1. Pending Requests section
 2. Goods Sold section
 3. Goods Out of Stock section
- In the Pending Requests section, admins can follow up on requests by going into the user's profile page to either edit the user's role or inspect the user's commodity post.

Pending Requests

Posted by	About	Time	Option
Andrew Muiruri	Commodity uploaded for review.	2022-05-27 13:15:00.569622	Delete request
Mwafunzi Traders	Confirm user registration.	2022-05-27 05:54:17.351911	Delete request
Andrew Muiruri	Confirm user registration.	2022-05-25 14:20:17.651249	Delete request

Goods Bought

[See bought goods](#)

Goods out of stock

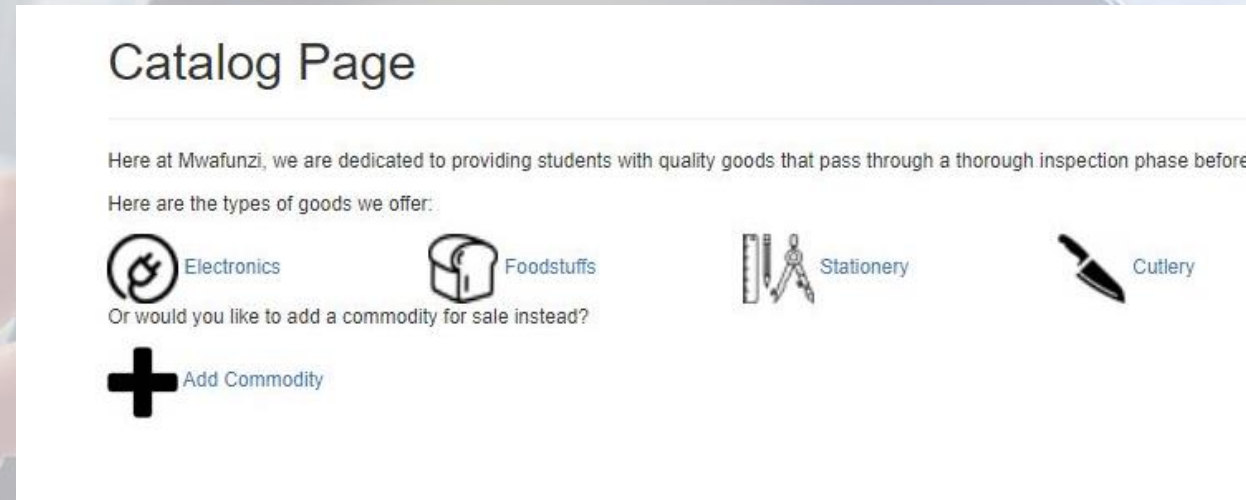
[See goods](#)

Catalog Page

- The catalog page is the page that contains the categories of goods on sale by the users. These **four categories** of commodities are:

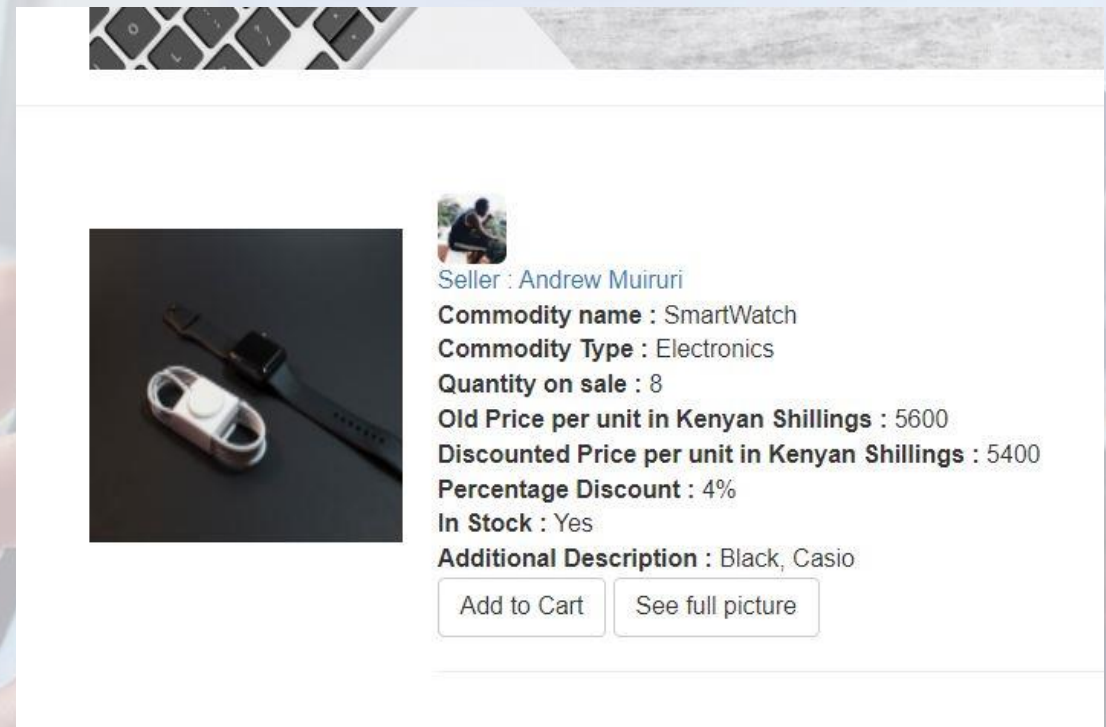
1. Electronics
2. Stationery
3. Cutlery
4. Foodstuffs

- There is also a “Add commodity” link for users who would like to add goods for sale



Category pages

- Upon clicking on any category of goods in the Catalog page, the user is presented with a list of commodities on sale, if any. Otherwise, a message is displayed that tells the user that no such category of commodity is on sale.
- **Each commodity is displayed as a post with its picture** and other crucial details that help a buyer to make decisions. These details include the **commodity's name, discounted price, percentage discount and expiry date.**



Shopping Cart and Checkout

- Upon adding a commodity to the shopping cart, the commodity's name, price and quantity are displayed to the user in this page in a table.
- **Two options for payment** are available:
 1. Pay with cash
 2. Pay via MPESA
- Once a cash payment method is selected and the order confirmed, the user is asked to come and collect the goods from the main office.

Payment Page

Commodity ID	Commodity name	Price in Kenyan Shillings
1	Smartwatch	6400

Pay via MPESA

Pay in cash

Claim of goods and user details confirmation

- Once the user comes to collect goods from the main office in Mahatma Gandhi Wing, the user will be required to present his/her **school ID** so that an admin can confirm the user's details were registered correctly on the platform.
- If the user's details are correct, the user is asked for the receipt number of the transaction so as to claim the bought goods.
- The admin then confirms the claim of goods on the platform.

Goods bought by users

Receipt number	Buyer	Commodity name	Commodity Type	Expiry Date	Manufacture Date	Quantity bought	Price in Kenyan Shillings	Time of Purchase	Bought	Claimed	Sold by	Option
00001	Andrew Muiruri	Smartwatch	Electronics	None	2022	5	16000	2022-05-27 13:15:28.856784	True	False	Andrew Muiruri	<input type="button" value="Confirm claim"/>

Analysis and Conclusion

- Mwafunzi, the one-stop online discount platform, was implemented using Python, Flask, CSS and HTML. This is a platform that enables students to buy and sell new and used commodities to and from each other to minimize wastage and encourage reusability
- To buy a commodity, the user needs to add the commodity to the shopping cart and choose a preferred method of payment: either via MPESA or cash. Once the purchase is confirmed, the user needs to claim his/her goods from the main office, where an administrator will confirm the details of the user in the platform and the dispatch of goods.

The End

THANK

YOU

