

PROJECT REQUIREMENT FORM

Project title

FarmersMarket

Customer name

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Project advisor

Project description

30% of food produced for human consumption is lost or wasted along the supply chain every year. In Africa, it is about 30-50%.

Can we develop a web application to help reduce postharvest losses and waste of perishable commodities?

The application shall allow individuals and businesses to bulk purchase items from farmers directly thus helping to increase revenue.

Think amazon for fresh produce in Africa. This project aims to provide an e-commerce marketplace that would allow farmers to list and upload their produce, sell it to local and urban customers.

Some useful Links

1. <https://stripe.com/docs/api>
2. <https://developer.paypal.com/docs/api/overview/>

Features list

What are the key features of the software? Please list at least 8

1. The application shall allow farmers to list their produce for sale.
2. The application shall allow all users to register and log in before they can purchase food items.
3. Individuals looking to purchase items would be able to make purchases from multiple farmers at the same time.
4. Individuals looking to make purchases would be able to search for food items for sale based on categories pre-defined by the site's administrators.
5. Details of purchases made will be viewable by farmers in their admin areas. Emails would also be sent to farmers once a purchase has been made.

6. All users of the application shall be required to login and validate their email address the first time they login.
7. It would be possible for farmers to bulk upload items via a CSV or excel file.
8. Once an item uploaded for sale by a farmer has run out, it would be automatically removed from the public page, but it should still be possible for the farmer to update the items left.
9. The application shall make use of paypal and stripe for payment collection.
10. The application shall be made as secure as possible and should not at any point store credit or debit card details of buyers.
11. As this project deals with sensitive data, the client advises the teams to only make use of sandbox environments of PayPal and Stripe.
12. When the same item is listed from multiple farmers, the application shall allow multiple items to be viewed with the cheapest item starting first.
13. It shall be possible for users to add items to a wish list to be purchased at a later date.
14. The application shall contain a dashboard where the site administrators can see a snapshot and graph of relevant metrics- number of listings, number of purchases, total number of farmers and several others over a defined period.
15. The application shall make it possible to generate PDF reports for the various data stored.

Application users

Who are the primary users of the application?

The primary users of the application are the site administrators, individual users and farmers willing to sell their produce on the marketplace.

Programming language required

What programming language does the customer require students to use?

Python or Java

Database required

Does the system require a database?

What database does the customer require students to use?

Yes, it will likely require a database. Ideally, MYSQL/MariaDB should be used.

Data provided

What data (or document) is the customer providing?

Links to various payment and social media APIs have been provided. Upon request, the client can provide relevant data if necessary.

Out of scope

What is considered out of scope?

N/A