Monitoring of Wool from Farm to Fabric

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Abstract-

Wool Transport (E-Commerce App. It is a digital platform designed to address the specific needs of the wool industry, offering a comprehensive and user-friendly solution for both wool (producer) and consumers. This specialized system serves as an online marketplace where wool farmers can efficiently showcase their products and engage potential buyers. The system aims to bridge the gap in the wool market, fostering a seamless and secure environment for farmers and users to connect.

PROJECT OVERVIEW

1.1. Introduction

In today's fast-paced digital age, there is a growing demand for a dedicated E-commerce platform specifically tailored to the wool industry. Despite, the significance of wool in various applications, such as fashion, textiles, and crafts, there is a noticeable gap in the market for a comprehensive and user-friendly platform that caters to both, wool farmers (producers) and consumers. Farmers often lack efficient and organized means to showcase their products, manage inventory, track transactions, and interact with buyers.

1.2 Scope and objective

Wool Transport (E-commerce) App encompasses the facilitation of a comprehensive digital marketplace for both wool producers and consumers, focusing on the seamless trading of wool products. The app aims to streamline the process for wool farmers, enabling them to exhibit their products efficiently, manage inventory, and monitor transactions. Simultaneously, it provides consumers with a user-friendly platform to explore, purchase, and monitor high-quality wool products.

The app's objective is to bridge the gap in the wool market by providing a secure and convenient space for trade, enhancing the accessibility of wool products, and fostering the growth of the wool industry in the digital realm. Additionally, it strives to create a sustainable and transparent ecosystem that promotes trust and collaboration between wool producers (farmers) and consumers, thereby contributing to the advancement and visibility of the wool industry.

2. Modules and their Description Admin

- Login
- The admin can register in applying their credentials.
- View Farmers
- They can explore or overlook agriculturists sorting by New Request/ All.
- They can check the agriculturists 'details.
- They can either authorize/ reject growers 'calls.

Farmer

- Register
- The agriculturist would be needed to register first.
- Login
- Once the admin accepts the planter's enrollment request, they can log in using their credentials.
- Profile
- They can view and contemporize their profile.
- Change word
- They can change their word if they want. Manage Products
- They can add/update/ delete/ view the products(hair).
- View Orders
- They can view all the orders placed by the guests.
- They can search for any order by filtering the date.

- They can change the status of the orders to- Approved Processing/ Dispatched/ Delivered/ Cancelled.
- sale
- They can view all deals plutocrat earned.
- They can search for any sale by filtering the date.

Stoner

- Register
- The stoner will need to register first to pierce the system.
- Logir
- They can log in using their credentials.
- Profile
- They can view and edit their profile.
- Change word
- They can change the word if needed.
- Hunt Product
- They can search and view products by using the pollutants-
- megacity/ Type
- Name/ Type
- They can buy the products they like or want.
- · View Orders
- They can view all the orders placed by them.
- They can also cancel any order before processing.

3. Existing System & Proposed System

- Problem with the current scenario
- -The wool industry lacks efficient infrastructure and a centralized marketplace.
- -Farmers face the challenges of showcasing their products to a wider audience.
- Drawbacks of the existing system
- -Manual inventory management and sales processes are timonsuming and prone to errors.
- -Traditional methods restrict wool farmers to local or regional markets.

Proposed system:

The system comprises three major modules: Admin, Farmer and User.

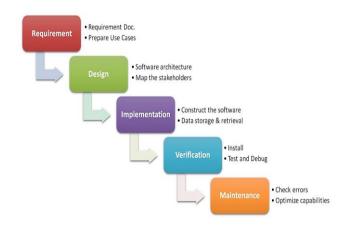
The admin can access the system via their login credentials. Within the system, they can browse and manage farmers' information. This includes the ability to pursue details of farmers and their registration requests. Also, they have the authority to approve or reject these requests based on their discretion.

Initially, the farmer is required to register within the system. Once the admin approves their registration, they can subsequently log in using their credentials. Once logged in, they can manage various aspects of their profile, including updating personal details and changing passwords. Additionally, they have the ability to oversee their product inventory and can perform tasks such as adding, updating, and deleting products. They can also monitor incoming orders, search for specific orders based on filters, and update status order statuses accordingly. The system enables them to track their financial transactions as well, with the option to filter transactions by date.

Similar to the farmers, the user also needs to register before accessing the system. Upon successful registration, they can log in using their credentials. They have the capability to view and modify their profiles and change their password if they want. The system empowers users to search for products using specific filters, such as city/type or name/type. They can place orders for desired products and track their order history. Notably, users can cancel pending orders prior to processing.

For this system, the front end involves XML and the back end involves SQLite. The programming language is Java. The IDE used is Android Studio.

4. Project Lifecycle Details



A data overflow figure is a visual device applied to draw and assay the move of data through a complex. These are the mid devices and the bottom from which the other factors are developed. The metamorphosis of data from input to affair, through processing, may be drew logically and singly of animal factors companied with the system. These are known as logical data inflow plates. The physical data inflow plates show data's factual perpetration and

movement between people, departments and workstations. A full description of a complex consists of a set of data inflow plates. Using two familiar memos Yourdon, Gane and Sarson memorandum develops the data inflow plates. Each element in a DFD is labelled with a descriptive name. The process is further related with a number that will be used for identification purposes. The development of DFD's is done on several situations. Each process in lowerposition plates can be busted down into a more full DFD at the coming position. The lop-position illustration is continually called a environment illustration. It consists of a single process bit, which plays a vital part in studying the current system. The process in the environment position illustration is exploded into other operations at the first position DFD. The idea behind the explosion of a process into additional processes is that compact at one position of detail is exploded into lesser detail at the coming position. This is done until the farther explosion is necessary and an acceptable quantum of detail is described for judges to understand the process. Larry Constantine first developed the DFD as a way of expressing system conditions in a graphical form, and this led to the modular design.

4.1 Salient feature of DFD

- 1. The DFD shows the flow of data, not of the control loop and decisions are controlled considerations that do not appear on a DFD.
- 2. The DFD does not indicate the time factor involved in any process whether the data flows take place daily, weekly, monthly or yearly.
- 3. The sequence of events is not brought out on the DFD.

TYPES OF DATA FLOW DIAGRAMS

- 1. Current Physical
- 2. Current Logical
- 3. New Logical
- 4. New Physical

CURRENT PHYSICAL:

The Current Physical DFD process label includes the names of people or their positions or the names of computer systems that might provide some of the overall system-processing labels including an identification of the technology used to process the data. Similarly, data flows and data stores are often labelled with the names of the actual physical media on which data are stored such as file folders, computer files, business forms or computer tapes.

CURRENT LOGICAL:

The physical aspects of the system are removed as much as possible so that the current system is reduced to its essence to the data and the processors that transform them regardless of actual physical form.

NEW LOGICAL:

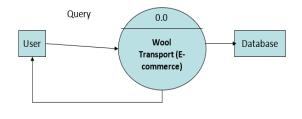
This is exactly like a current logical model if the user were completely happy with the functionality of the current system but had problems with how it was implemented typically the new logical model will differ from current the logical model while having additional functions, absolute function removal and inefficient flows recognized.

NEW PHYSICAL:

The new physical represents only the physical implementation of the new system.

4.2 Data flow

1) A Data Flow has only one direction of inflow between symbols. It may flow in both compasses between a process and a data store to display a pore before an update. The closing is typically indicated still by two different arrows since these be at different types. 2) A join in DFD means that the same data comes from any of two or added different processes data store or Gomorrah to a common position. 3) A data inflow can not go directly back to the same course it leads. There must be at least one different course that handles the data inflow and produces some different data inflow that returns the original data to the morning process. 4) A Data overflow to a data store means to modernize(cancel or change). 5) A data Flow from a data shop means to recover or apply.



DATABASE DETAIL

5. System Architecture

6. Requirement

6.1 Software requirement

- i. Laptop or PC
 - Android Studio
 - Azure Data Studio

6.2 Hardware requirement

- i. Laptop or PC
 - Windows 7 or higher
 - I3 processor system or higher
 - 8 GB RAM or higher
 - 100 GB ROM or higher

ii. Android Phone (6.0 and above)

6.3 Overview of technology used

Introduction to Android

Android Studio is the authorized Integrated Development Environment(IDE) for Android app evolution, rested on IntelliJ IDEA. On top of IntelliJ's strong law editor and inventor tools, Android Studio offers indeed more features that better your productivity when erecting Android apps, alike as • A flexible Gradle- predicated figure system • A fast and point-rich impersonator • A unified terrain where you can evolve for all Android bias • Instant Run to drive fluxes to your pouring app without making a new APK • law templates and GitHub integration to help you make common app features and moment sample law • wide testing tools and fabrics • fur tools to catch version, usability, account comity, and other challenges • C and NDK support • erected- in support for Google Cloud stage, making it easy to incorporate Google Cloud Messaging and App Engine.

7. Features

Load Balancing:

Since the system will be available only after the admin logs in the amount of load on the server will be limited to the period of admin access.

Easy Accessibility:

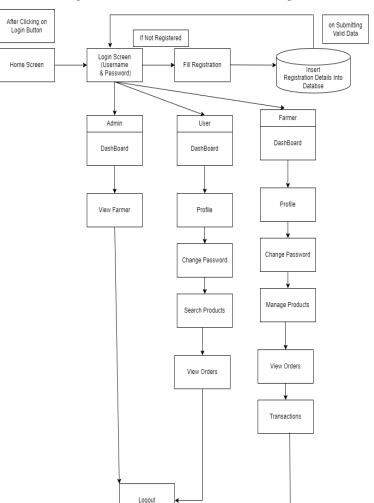
Records can be easily accessed and stored and other information respectively.

User-Friendly:

The website/application will give a very user-friendly approach for all users.

Efficient and reliable:

Maintaining the all-secured database on the server which will be accessible according to the user requirement without any maintenance cost will be very efficient as compared to storing all the customer data on the spreadsheet or



physically in the record books.

Easy maintenance:

Wool Transport (E-commerce) App is designed as an easy way. So, maintenance is also easy.

8. Conclusion

This was our arrangement of System Design for the coat high(E-commerce) App evolved in Java programming speech. The growth of this network takes a parcel of expenditure from us. We allow this system gave a lot of gratification to all of us. Though every task is noway said to be perfect in this development field indeed more enhancement may be possible in this exercise. We learned so multiplex effects and gained a lot of science about the development field. We hope this will substantiate rich to us.