Week 5

Pitch Deck and Pitching

Problem

Agricultural yields experience significant variability due to seasonal changes, the changes cause food insecurity and economic instability for farmers. Many studies have focused just mainly in factors affecting yields, forgetting about the complex interplay of climate, ecological and management variables. This gives limited development of effective strategies for yield utilization specifically in climate changes, where the weather pattern is very unpredictable hence, makes agricultural planning difficult.

Solution;

The study of this platform will help people understand seasonal trends in agricultural yields even during the changing environmental conditions. The knowledge gained will be important for improving agricultural practices and having resilient and sustainable agriculture even in the future. This platform of study will help everyone in the society not just myself; it will also help in providing a stable economy.

Product

To guarantee that each critical feature of the app was correctly in place for the user experience. I followed with a robust source of testing through manual input to scenario, debug logging and validating hashing whether on the reset password screen, I keenly tested edge cases for incomplete fields, minimum password, length, matching fields. I used some samples to through out the project to ensure thing run smoothly. Improvements made were to develop a centralized toast to return for whole implementation(to easily set up

for reuse), pull and secure up some of the input logical validation and all better modularized outby making parts and functions.

Target Market

The study of this platform is mainly aimed for farmers especially those in the rural areas who are not able to reach their market due to lack of market issues. The knowledge gained will be important for improving agricultural practices and having resilient and sustainable agriculture even in the future. This platform of study will help everyone in the society not just myself; it will also help in providing a stable economy.

Business Model

This section introduces the system’s modelling approach, which uses user-selected regions to recommend suitable crops and ideal soil pH based on seasonal trends. It includes UI models for user interaction and logic models that handle data processing, making the app both user-friendly and agriculturally intelligent.

There exists the User interface models, the sign up form which will allow a farmer to fill in their details so that they can start using the system. The login page where the farmer will enter his/her login credentials to access the system, and the main dashboard where the

farmer or the investor will get to after a successful log in and will contain the primary controls for the system like weather condition of future, marketable crop to be planted in that area or region.

Conclusion;

In developing this application called analysis of seasonal trends in agricultural yields, were able to go from defining the problem of an analysed seasonal trends all in chapter one to three through laying out the system model and implementing some of the basic logic in application. The app encompasses secure authentication, simple by looking in our UI layouts, geocoding, and real time data analysis. I integrated Jakarta Mails SMTP for emailing to ensure i have a proper backend control of operation through SQLite database using asynchronous function. There were challenges for instance getting the

proper data analysis and setting up the functionality of the up. These challenges have helped me build a proper functioning app.