GROUP 2 PROJECT PROPOSAL

Kennedy Richardson, Angelo LaGreca iii

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OVERVIEW

1. Project Background and Description

In the agricultural industry, accurate tracking of product throughout the plants lifecycle is imperative not only for inventory management purposes, but also for complying with industry standards and back tracking any complications that may arise during consumer purchase and consumption. Our system will aid in accurate, reliable, and efficient collection and storage of all data relevant to a plants chain of custody, from seed to shipping.

2. Project Scope

Required Features:

Plant/batch objects with appropriate properties to accommodate all unique business requirements and industry standards

Tracking throughout products lifecycle

An efficient system for adding plants to batches, and tracking batches testing and shipment status(in house, shipped out)

A system to track and record the results of out-sourced lab testing

Graphic UIs containing useful information for employees

Printable status and history reports for specific business needs

May need to accommodate some unforeseen complications related to QA testing

3. High-level Database Architecture

The application will require at a minimum a table for businesses implementing the software, and related tables for business addresses and the application's primary users. This users table will need to accommodate regular users as well as management and owners, and will need to differentiate between them. There will also need to be a table for products, both finished products and products still in the cultivation process. Exactly how the plant/products life cycle will be divided into separate tables will be dependent upon further research and communication with the users of the application. The application will likely also need a table for orders, as this will be necessary for back-tracking any problems associated with product after it has left the primary businesses possession, as well as relatively accurate inventory management. The status and results of lab tests will also need to be tracked in the system, this may require its own table, or be built into products tables, depending on how detailed this information will need to be. This will be determined through further communication with the applications users during the development process.

4. Users

The users of this application will be owners, managers, and agricultural employees of the business's employing the application. The main users will be the agricultural employees, and as such this application will be geared toward simplifying the recording and storing of data associated with the plants during the cultivation process.

5. Technologies That will Be Used

The project will likely employ php and mySQL, additionally utilizing the cakePHP framework. Also, AWS may be used to create and use QR barcodes to further simplify and speed up usage of the application for agricultural workers.