CPSC 304 Project Cover Page

Project Name: Seed Germ - A gardening management tool

Milestone #: ___1_____

Date: ___24th Sep, 2024_____

Group Number: ____14_____

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

1. Project Description

1a. Domain of the application

The domain of the Seed Germ application is garden management and agricultural production, with a focus on optimizing the workflow and efficiency of community gardens. The application is designed to address the specific needs of garden management for communities such as the Roots on the Roof club at UBC. It encompasses areas such as plant cultivation, inventory management, task planning, and production tracking.

1b. Modeled aspects of the domain

The Seed Germ application models several key aspects of garden management to streamline and enhance the operations of Roots on the Roof at UBC. The database is designed to manage various plant-related events (e.g., watering, pruning, harvesting), track the growth stages of plants from seed to harvest, and handle inventory control, including the tracking of seeds, plants, and suppliers. It also supports production tracking by assigning unique IDs to plants and batches, enabling detailed lifecycle tracking. For example, our client wants to track the growth conditions at each stage, along with factors like time of year, fertilizer used, and batch information, so they can determine the best way to cultivate their plants. The application addresses real-life challenges such as the need for a more efficient task management system, better data entry workflows, easier analysis of gardening data, and the automation of customized planting processes, ultimately helping the garden reach its full production potential.

2. Database specifications

What functionality will the database provide? I.e., what kinds of things will people using the database be able to do :

People will use this database for plant and inventory management. Users will be able to track the growth stages of plants, manage inventory details like seed suppliers and purchase dates, and maintain a historical record of plant lifecycle events. The database will also allow

users to log production data, such as instructions and observations at different stages, and associate these with specific plants or batches. Additionally, users can view detailed timelines for each batch, including all associated events, and attach notes or observations to ensure thorough documentation of the gardening process.

3. Application platform

a. The department-provided Oracle will be used as our database.

b. The expected application technology stack is JavaScript (Node.js + React).

ER diagram