Software Product Technical Manual

Your Name and Team Members' Names

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1 Introduction

1.1 Purpose

This document serves as the comprehensive manual for the Software Product, detailing the design, database schema, and functionality to assist developers, testers, and users in understanding the system.

1.2 Scope

Include information about the scope of this manual, detailing the software product's intended functionalities and the audience for this document.

2 System Overview

Describe the overall design of the program, including a high-level architecture diagram and a description of the main components.

3 Database Design

3.1 Database Schema

3.2 Table Descriptions

3.2.1 Buildings Table

The Buildings table stores information about buildings in the game.

- **building_id**: Primary key identifying the building.
- **username_owner**: Username of the owner of the building.
- **farm_id**: Foreign key referencing the farm where the building is located.
- **building_type**: Type of the building.
- **level**: Level of the building (default is 1).
- **x, y**: Coordinates of the building on the map.

- **tile_rel_locations**: JSONB field storing relative tile locations of the building.
- **created_at**: Timestamp indicating when the building was created.

3.2.2 Market Table

The Market table stores dynamic pricing information for crops in the game.

- **crop_name**: Primary key representing the name of the crop.
- **current_price**: Current price of the crop.
- **current_quantity_crop**: Current quantity of the crop in the market.
- **prev_quantity_crop**: Previous quantity of the crop in the market.
- **last_update**: Timestamp indicating when the market data was last updated.

4 Functionality Description

4.1 Update Market Functionality

This functionality handles POST requests to insert market count data into the database. The server updates the market data for the specified crop based on the received JSON data.

4.2 Fetch Crop Price Functionality

This functionality handles GET requests to fetch the price of a crop from the market. The server queries the database to retrieve the price of the specified crop from the market.

5 Development and Implementation

Discuss how the project was developed and implemented, emphasizing the involvement of each team member in various phases such as coding, testing, and documentation.

6 Conclusion

Summarize the key points of the manual and the software product's capabilities.