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**DAVAO DEL NORTE STATE COLLEGE**

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**Institute of Computing**

**IT223 – Advance Database Systems**

**PROJECT PROPOSAL**

**Title:**

**AgriTrade – Smart Farming Inventory & Selling System**

**Proponents:**

**Kent Diether Geraldo – Project Leader**

**Kyla Jalique – UI/UX Designer**

**Pearl Grace Ibañez – Frontend Developer**

**Wendyl Ziv Arellano – Backend Developer**

**Project Description:**

AgriTrade is a web-based Inventory and Selling System designed for farmers and landowners to efficiently record their harvested goods (e.g., cacao beans, coconuts, mangoes, vegetables) and manage contracts with companies for supplying agricultural products. The system helps farmers track their stock, process sales, and monitor supply agreements in a user-friendly interface.

**General Objectives**:

To develop an Inventory and Selling System that enables farmers and landowners to manage their harvested goods, track sales, and create supply contracts with companies while ensuring accurate stock management and smooth transactions.

**Specific Objectives**:

1. **Harvest Inventory Management –** Allow users to record harvested goods, categorize them, and track stock levels with alerts for low inventory.
2. **Contract & Selling Management –** Enable farmers to create contracts with companies, specifying product types, quantities, pricing, and delivery schedules.
3. **Automated Stock Updates –** Ensure inventory is updated automatically when sales or deliveries are completed using MySQL transactions to maintain data integrity.
4. **Financial & Sales Reports –** Provide real-time sales reports, profit analysis, and contract status tracking using MySQL Views and Stored Procedures for better decision-making.

**Scope and Limitations:**

**Scope:**

* Farmers and landowners can **record harvested goods** in the inventory.
* Users can **create contracts** with companies for supplying goods.
* The system **automatically updates stock** when sales or deliveries occur.
* Users can generate **financial and inventory reports** for better farm management.
* Secure **role-based access** for Admin (Farmer), Staff, and Company Buyers.

**Limitations:**

* The system **does not handle payment transactions** (e.g., bank transfers, GCash). Payments must be processed outside the system.
* **Logistics and delivery tracking** are not included; users must manually update delivery statuses.
* The system **does not include an e-commerce marketplace;** it focuses only on inventory and contract-based selling.
* **No AI-based demand forecasting;** farmers must manually analyze sales trends based on reports.