

Department of Computer Science University of Management and Technology

Course Name:	Software Engineering
Section:	V4
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Assignment No.	01
Project Title	Dairy Farm Management System

Here's a organized reaction to each area as it will be connected to **Dairy Farm**

Management System:

1. Project Description

This area portrays the Dairy Cultivate Administration Framework (DFMS), a program item planned to streamline and improve the operations of dairy ranches, covering animals administration, drain generation, asset allotment, and deals forms.

1.1 Motivations

The essential inspiration behind this venture is to progress the productivity and efficiency of dairy ranches by presenting a framework that mechanizes manual forms, diminishes labor costs, and gives superior experiences into cultivate operations. The framework points to assist dairy ranchers make data-driven choices and eventually increment benefit.

1.2 Project Overview

The Dairy Cultivate Administration Framework (DFMS) will give dairy agriculturists with a computerized stage to oversee different angles of their operations. This incorporates:

- Problems or Overview Statement:
- The DFMS will address the complexities of overseeing a dairy cultivate by centralizing information on animals wellbeing, drain generation, stock, and money related records.
- Customers:
- Dairy cultivate proprietors and supervisors who are looking for effective arrangements to track and oversee their cultivate operations.
- Goals:
- To provide a user-friendly framework that makes a difference dairy cultivate proprietors progress efficiency, guarantee creature wellbeing, and oversee assets successfully.
- System Functions:
- Animals following, drain generation records, stock and bolster administration, deals and charging, wellbeing checking, and budgetary detailing.
- System Attributes:
- Simple to utilize, dependable, versatile, secure, and able to create nitty gritty reports on all angles of cultivate operations.

1.3 Problem Statement

Dairy ranches confront challenges in effectively overseeing animals, observing drain generation, taking care of bolster stock, and keeping up precise money related records. Current manual strategies are time-consuming, inclined to error, and need the information bits of knowledge required for decision-making. The Dairy Cultivate Administration Framework points to supply an coordinates arrangement to streamline these forms, move forward creature welfare, and increment cultivate benefit.

1.4 Objectives

The targets of the Dairy Cultivate Administration Framework incorporate:

- Real-time following and observing of animals wellbeing and efficiency.
- Precise and robotized record-keeping for drain generation.
- Effective stock administration for bolster and supplies.
- Streamlined deals and charging forms for dairy items.
- Expository apparatuses for data-driven decision-making and cultivate productivity examination.

2. Domain Analysis

2.1 Customer

The essential client for the Dairy Cultivate Administration Framework is dairy cultivate proprietors and supervisors. These clients look for a framework to assist them oversee day-to-day operations productively, screen animals wellbeing, track drain generation, and keep track of nourish stock.

2.2 Stakeholders

Stakeholder	Role in System	
Dairy Farm Manager	Oversees all farm activities and uses the system for comprehensive farm management.	
Veterinarian	Monitors livestock health and uses the system for health records and animal welfare reports.	
Sales Manager	Manages sales records and invoicing for milk and other products using the system's sales module.	
Farm Workers	Use the system to log daily tasks, feeding schedules, and other operational details.	
Farm Owner	Tracks farm profitability, livestock productivity, and overall farm performance through reports.	

2.3 Affected Groups with Social or Economic Impact

- Farm Workers:
- Decreased manual printed material, which leads to expanded proficiency and work fulfillment.
- Veterinarians:
- Less demanding get to to animals wellbeing information for moved forward creature welfare.
- Sales Staff:
- Rearranged charging forms for speedier and more effective client benefit.
- Farm Owner:
- Data-driven experiences to create superior budgetary and operational choices, which makes strides cultivate productivity.

2.4 Dependencies / External Systems

The Dairy Cultivate Administration Framework depends on the taking after outside frameworks for full usefulness:

- Weather API:
- To alter nourish and water administration based on climate conditions.
- Animal Health Monitoring System:
- Integration with wearable wellbeing trackers for animals to screen crucial signs and action.
- Financial Accounting Software:
- Integration with bookkeeping computer program for mechanized monetary detailing and investigation.

2.5 Reference Documents

2.5.1 Related Projects

- FarmTracks:
- An existing dairy cultivate administration software observed from farmtracks.com, giving halfway documentation on stock and animals administration.
- AgriSafe Administration Framework:
- A administration framework for animals wellbeing created by XYZ. No documentation was accessible, but the framework was watched at agrisafe.com.
- DairyData:
- Term paper distributed within the Diary of Dairy Science that examines computerized following of drain generation and creature wellbeing.

2.5.2 Feature Comparison

Comparison Features	Farm tracks	AgriSafe
Livestock Health Tracking	Partially covered	Covered With Basic Features
Milk Production Management	Covered but not automated	Not covered
Inventory and Feed Management	Covered	Not covered