Main Project

PROJECT TOPIC: *DairySync*

REQUIREMENT GATHERING

1. Project Overview?

The Dairy Management System, often referred to as "DairySync," is to optimize dairy society operations, enhance milk quality, and improve the overall dairy product distribution process. It is to meet the needs of dairy farmers, sellers, customers, and administrators, providing a unified platform to manage dairy related activities efficiently.
Recommend cattle to take appointment for consulting veterinarian based on the variations in milk quality parameters for disease detection and prescribe medicine.

2. To what extend the system is proposed for?

- User can pay and receive payment online.
- Provide availability notification.
- Analysis of monthly report
- Customers can order products online.
- Recommendation for sellers if any difference in milk quality.
- Consult doctor and recommend medicine
- User review, feedback and rating.

3. Specify the Viewers/Public which is to be involved in the System?

- Admin
- Sellers
- Customers
- Veterinarian

4. List the Modules included in your System?

(a) Registration – Will be done by Admin for Seller
(b) Login – Customer & Seller
(c) Admin –
    - Registration of seller, management of users, financial management, product details management
    - Checking quality of products and documenting.

- Processing requests from sellers and customers.
- Maintaining the database

Sellers and customers

- Home – view products , analysis chart
- Update personal details
- order details
- payment & Status
- notification Alerts -recommendations , complaint and feedback

(d) Logout
(e) Change Password
(f) About

Veterinarian

- Appointment management
- Disease detection
- Medicine prescription

5. Identify the users in your project?

1. Admin
2. Seller
3. Customer
4. Veterinarian

6. Who owns the system?

Dairy Society

7. System is related to which firm/industry/organization?

Dairy development society

8. Details of person that you have contacted for data collection?

Mr. Abraham Philip
Ayilukunnel house
Peruvanthanam
Dairy Farmer

HAS Coimbatore
Animal Welfare Society

9. Questionnaire to collect details about the project?

1. What are the essential functions in the system ?

There are many functionalities such as milk and milk products collection, cattle management, product distribution, making order, payment, analysis, and financial tracking.

2. How users know about the availability of products?

As a response to customer's request to a product or availability of new product will send an alert message to the users.

3. How famers can improve quality?

Comparing milk quality with others can find the variations in quality and consider as low or average quality milk. Then an automated message will send recommending the farmers that "your cattle may have the symptom/ deficiency of this. So provide some energy tonics or contact help from nearest veterinarian. With contact number". It will definitely help the farmers to improve milk quality and take care of cattle health.

4. How any issue in health of the cow can be solved?

Implement a cattle health tracking system with alerts for farmers and veterinarians. Include a communication channel for immediate assistance.

5. How payments are possible?

Payments from customers can be possible via offline and online through cardno. Also providing a qr code to make payment.Farmers can get income in bank accounts.

6. Is user training section possible?

Make training sections with resources like videos, documents, or contact help to educate users on the system usage and best practices.

7. How much secure is your system?

There is no compliance with data protections. Sensitive data is always secure. Assign unauthorised use if the user select any other role.

8. How financial and product status are visible to users?

In the dashboard a month wise analysis of product distribution and financial benefits are displayed as a chart. It can be visible to site viewers.

9. How to confirm payment?

Payment can be confirmed when customer receive the receipt of payment.

10. How to maintain the communication between the stakeholders?

A responsive feedback/ compliant/ contact help is available anytime. If users have anything mentioned the can be make use of these facilities. Call option is also available.

11. How customers find the products available at the nearest society?

All societies are mentioned in the system. Search option via society names and filter pptions are possible for easy access.

FEASIBILITY STUDY – DAIRY DISTRIBUTION SYSTEM

Technical feasibility

A technical feasibility is the analysis of ability to successfully develop, implement and maintain a proposed project using current or available technology, skills and resources.
In the project " Dairy Management System " technology used are :
Frondend: React
Backend: python
Database: MongoDB
Additional Technology: Machine learning
These technologies are apt with the project requirements. Stakeholder has necessary skills to use these technologies to manage the project. If any issues occur with lack of skills will refer more resources. The system design will be scalable to manage the storage of data while data become more or less. Security measures like https protocol, data encryption etc are taken to protect sensitive data of users. Ensure authorized users such as admin, seller, customer are accessing the system. Implement a dedicated responsive tool for fast response. Conduct regular testing for finding vulnerabilities. The system should support same user experience in any environment and devices .
In future technology devices like IOT sensors can be integrated for automatic quality testing and machine learning can be implemented to make quick response to sellers helping improvement in quality of products.

- Do stakeholders have the expertise needed?

  Stakeholders include farmers, customers and Administrators. Expertise means demain knowledge in dairy products, cattle details, distribution etc.
  Farmers can seek appropriate training measures to familiar with the system.By giving recommendation message while lowering the quality of milk they can identify the health issue of the cattle and solve the issue. They could understand how to manage everything according to customer needs.
  Providing user friendly interface and training program creates easiness for the stakeholders.

- Are additional resources needed in the health system Including Infrastructure, skills-sets or job aids?

  Yes. Additional resources are needed for infrastructure, skill sets or job aids. The system requires additional implementation of necessary resources such as hardware, server capacity for system operation, network connectivity, security, backup etc..
  Skill set training includes additional training facilities for administrators and users (stakeholders).
  Job aids includes providing online support to the users when a problem in accessing the system occurs.

- Is the health system ready in terms of the technology required?

  Yes. The system is ready in terms of required technology. To check whether the technology are readily available and compatible with the projects requirement.
  Hardware and software are readily available and configured. The additional technology such as payment, recommendation and analytics can be integrated with existing technologies. Provides scalability ,security for financial support etc.

Economical feasibility

Economic feasibility determines if a project can make enough money to be worthwhile. It includes the project costs and compares them to potential profits to see if they are suitable investments. It figure out whether a project will succeed financially.
In the project, regular conduct of cost analysis is possible which include initial cost, return of investment, operating cost etc checks the sustainability status.

- Do the resources needed exist?

  Required resources are:
  Physical: server, network, storage, workspace
  Human: developer
  Technologies: hardware, software , additional tools and technologies
  Current resources are readily available within the workspace. Making proper plan, budgeting and resource management to ensure successful development and operation of the system. Adjust the resource allocations as necessary to satisfy the system needs.

- Will the proposed health service or Initiative lead to better use of resources to improve health outcomes, when compared with other options?

  Resource utilization, decision making, health monitoring and recommendations, cost analysis, feedback etc can make better use of system.
  Resource utilization includes the use of resource within the diary production and distribution process which involves product wastage management, inventory management etc. Decision making include early solving of issues of cattle by giving automatic recommendations and improve the quality of milk.
  Comparing new system with traditional process of dairy management and distribution makes improving the functionalities. Feedback facility help to identify the ability of stakeholders to manage the system.

Operational feasibility

Operational Feasibility refers to the ability of a proposed project or ventures to be successfully implemented and integrated into existing business process, systems and practices.
The project dairy distribution system has user friendly interface.so it can be operate easily by all the stakeholders. Evaluate feedback and make necessary improvements.

- Do existing health system procedures and protocols support the new service or intiative?

  The existing protocols and procedures can be align with the new system requirements.it is analysed that there is a compliance between the existing system and new system including milk collection, quality testing, inventory management, customer order etc. New system can be easily adaptable to enhance existing system which improves data accuracy. If any problem occurs in compatibility or integration it will consider by updating or modifying the requirements and including training and communication to stakeholders.

- How will key collaborators be involved?

  Key collaborators are dairy farmers/sellers, customers, system administrators. Farmers explain the benefits of new system include recommendation messages to farmers improve health of cattle
  Customers are informed about the new product and rate are added to the product list and payment process via online or offline make payment easy.
  Admin empower the system implementation, user account management, support to user.
  Regular communication will help in feedback from users and make inform all changes with them.