

P04: Dairy Farm Management System



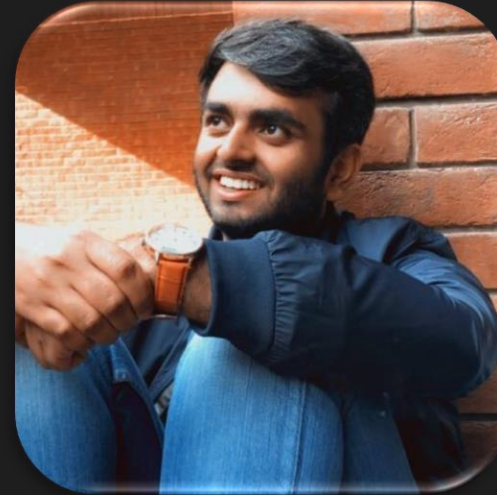
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Outline



Project Overview



Security Threats
and Risks



Potential Losses



Controls



Tools Selection

Project Overview

- In attempts to modernize the dairy industry in Pakistan, which is one of the greatest producers and consumers of milk and other dairy products in the region, our proposed and developed system will present a solution to better manage the dairy farms and optimize sales and help in better record keeping.
- **Key Features**
 - Multi Tenant System: Multiple Dairy Farm Owners will be able to set up their accounts
 - Easy Record Keeping
 - Door to Door Service via Online channel for customers
 - Easy Management
 - Greater outreach for farm owners
 - Sales Optimizations
 - Easy Logistical Management

Security Threats and Risks

- A02:2021 – Cryptographic Failures
- A03:2021 – Injection Attacks
- A07:2021 – Identification and Authentication Failures

Potential Losses

- Injection
 - Loss of Data
- Cryptographic Failures
 - Loss of Sensitive Data leading to Loss of Business and Bad reputation
- Identification and Authentication Failures
 - Loss of Integrity

Controls

- Input Validation to deal with Injection Attacks
- Data Classification, Data Encryption to deal with Cryptography failures
- Multi Factor Authentication and User Roles to deal with Identification and Authentication Failures

The mentioned controls are preventive/protective in nature.

Tools Selection

Static and Dynamic Security Scanning

- Static Application Security Testing (SAST)

- White Box Testing
- We have complete information about the system
- Examine Source Code (Static) to detect and report weaknesses



- Dynamic Application Security Testing (DAST)

- Black Box Testing
- Examine Application in Running State
- run on operating code to detect issues with
 - Interfaces
 - Requests
 - Responses




```
1  exit('Thank you!')
```