

LIVESTOCK MANAGEMENT INFORMATION SYSTEM

PRESENTED BY :

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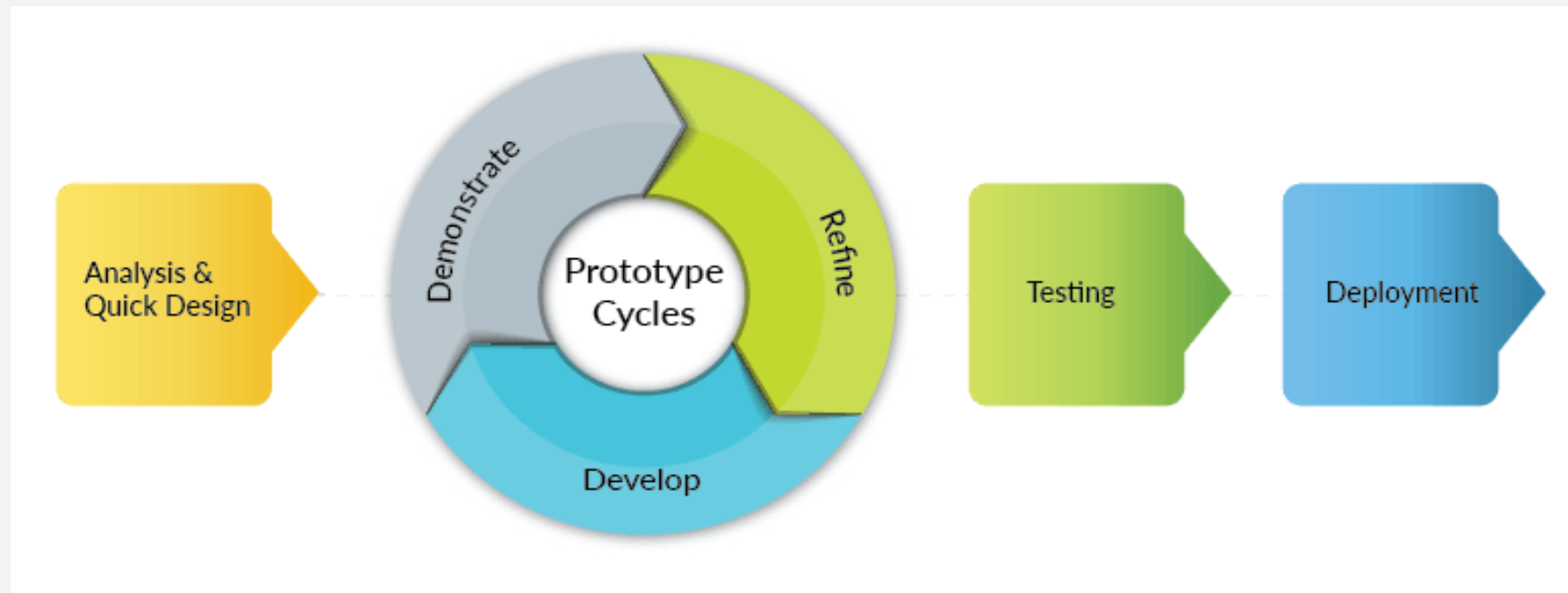
UNIVERSITI PUTRA MALAYSIA

INTRODUCTION

- The livestock industry is one of the most important drivers of the agriculture industry in Malaysia. It provides food in the form of useful protein to the population.
- The Livestock Management Information System (Livestock MIS) aims to increase the efficiency of livestock farming.

METHODOLOGY

RAPID APPLICATION DEVELOPMENT (RAD)



INTERVIEW USER

AGRICULTURE STUDENT FROM UNIVERSITY PUTRA MALAYSIA

- Name of user : Nurul Syafiqah Binti Norsam
- Student currently in the 4th year of studying Bachelor in Agriculture Science (Animal Science) at University Putra Malaysia
- Involved directly in the management of livestock in the UPM farms as part of her academic education in the form of classes and field work.
- Provided the user requirements for the Livestock Management System

INFORMATION GATHERED

- Sample Data
- Feed Formulation
- Expected Meat Carcass Formula
- Requirements Gatherings & Confirmation

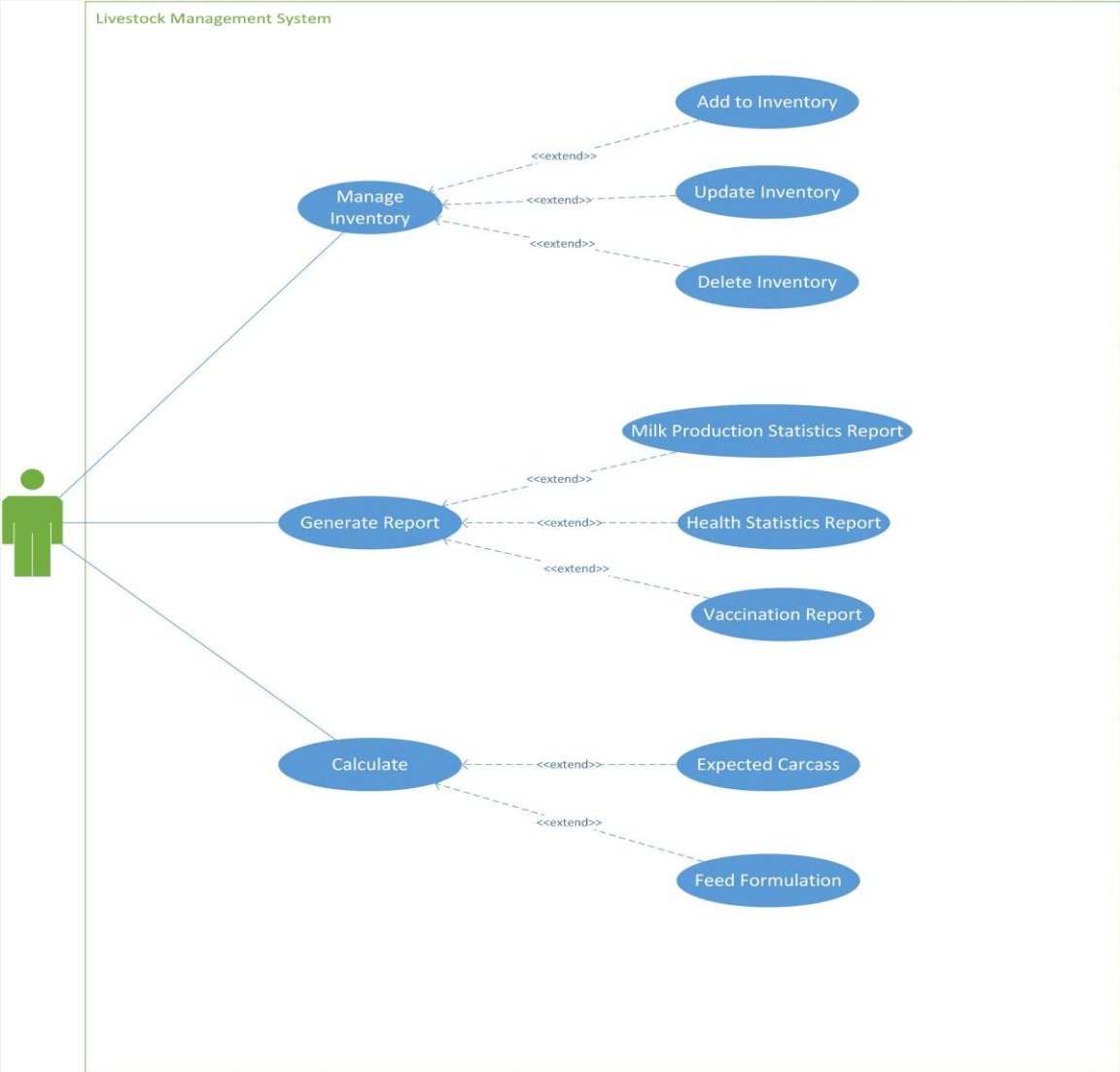
BACKGROUND STUDY

	Tambero.com	Farmwizard.co.uk	Cattlemax.com
Livestock Record	Yes	Yes	Yes
Produce report	Yes	Yes	Yes
Graphical Analysis	Yes	Yes	Yes
Weather forecast	Yes	No	No
Platform	Desktop with mobile version	Desktop with mobile version	Desktop and mobile application

FUNCTIONAL REQUIREMENTS

- Allow users to add, update, delete information regarding their livestock in the inventory.
- Allow users to produce a milk production statistics report.
- Allow users to produce a health statistics report.
- Allow users to produce a vaccination report.
- Allow users to calculate feed formulation for livestock.
- Allow users to calculate expected meat carcass.

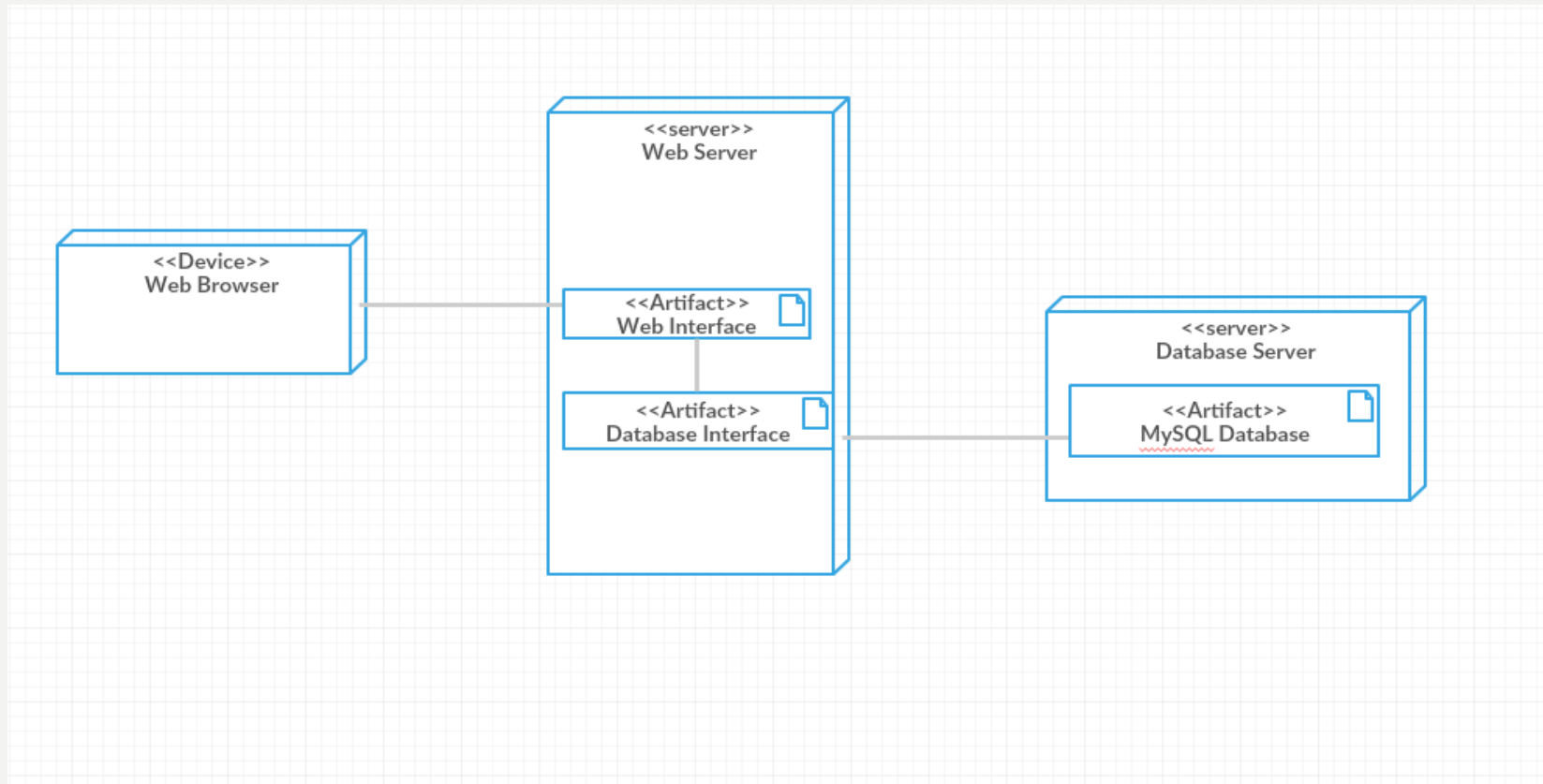
USE CASE DIAGRAM



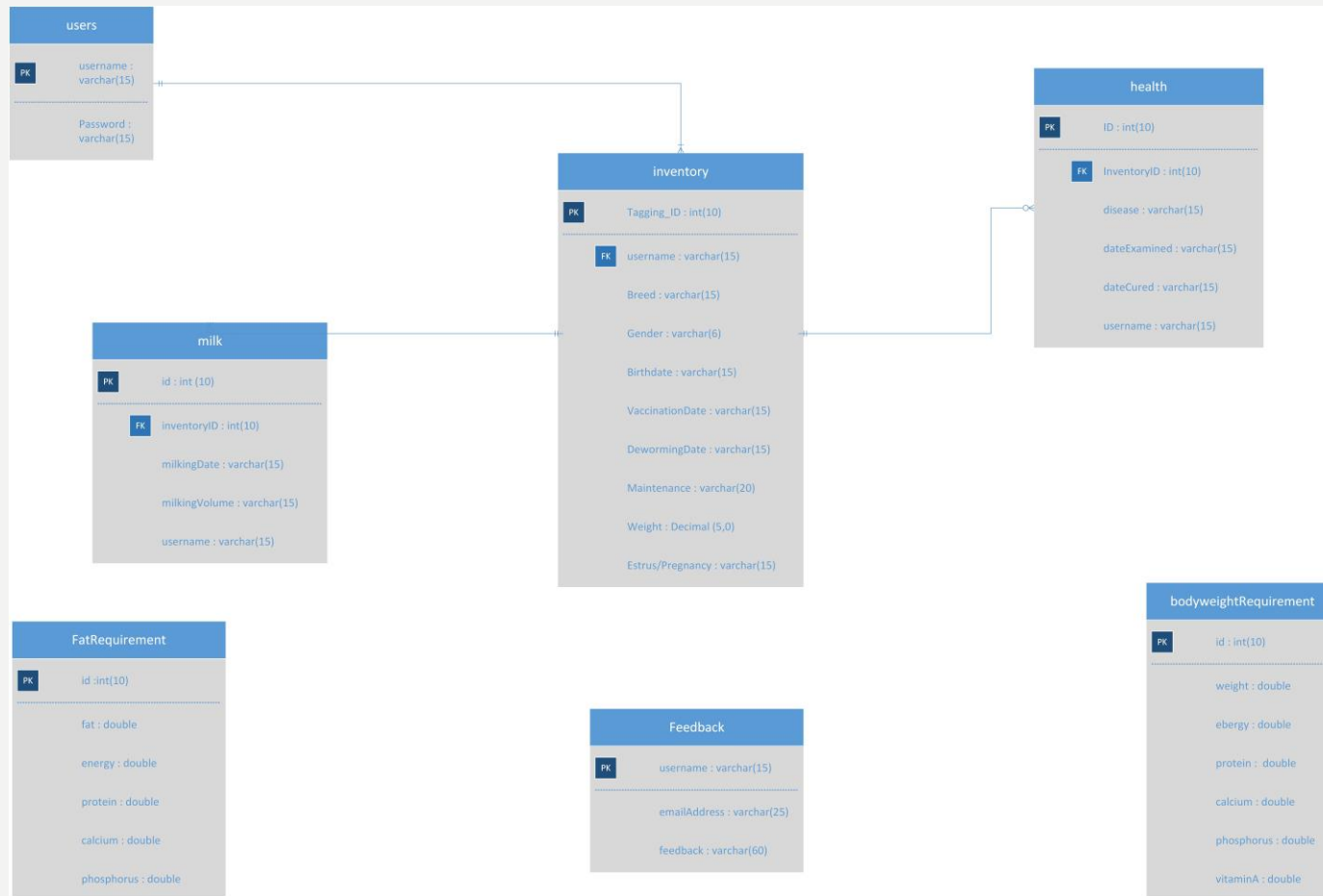
SOFTWARE ARCHITECTURE

Client-Server Architecture

Deployment Diagram :



DATABASE DESIGN



IMPLEMENTATION

Hardware

- Personal computer (windows 10)
- 64 –bit processor

Software Technology


- XAMPP
- APACHE
- MYSQL
- PHP
- HTML
- CSS
- Adobe Dreamweaver CS6

RESULTS AND DISCUSSION

MAIN PAGE

E-LIVESTOCK

[INVENTORY](#) [FEED FORMULATION](#) [INVENTORY REPORT](#) [EXPECTED CARCASSES](#) [SUPPORT](#) [SIGN OUT](#)




LIVESTOCK MANAGER

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WELCOME TO THE LIVESTOCK MANAGEMENT SYSTEM!



A software for the sole purpose of livestock management. Manage your farm efficiently with the variety of features provided by us. This software has several features that include inventory management, calculating feed formulation, calculating expected carcasses, generate milk production report analysis, generate livestock health report analysis, and generate vaccination report. Managing the livestock in your farm would have never been easier!

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LIVESTOCK INVENTORY

Add new livestock to inventory

Add to Inventory

Tagging ID	Breed
1000	
11041	Aurora
14017	Dairy Shorthorn
14072	Guernsey
45075	Reddish Friesian
48738	Aurora
47080	Blue
95014	Brown Swiss

Edit Inventory Profile

ENTER DETAILS

Tagging ID:

Breed:

Vaccination Date:

De-worming Date:

Body Maintenance:

Body Weight (KG):

Extra/Pregnancy diagnosis date:

Insert details in form and submit this form to add inventory

LIVESTOCK FEED FORMULATION

FEED FORMULATION FOR THIS LIVESTOCK

Weight (KG): 350

Fat Percentage : 3

Total Feed Needed : 14 KG = Concentrate : 8.4 KG & Forage : 5.6 KG

Nutrient requirement of the feed :

ENERGY (Mcal)	PROTEIN (g)	PHOSPHORUS (g)	CALCIUM (g)	VITAMIN A 1000 IU
15.15	459.8	13.97	18.15	27

EXPECTED CARCASS

EXPECTED CARCASS CALCULATOR

required field

Carcass weight (KG):

Live weight (KG):

Insert values into this form and press the calculate button to calculate the expected carcass

Dressing Percentage: 95.48225266587

LIVESTOCK REPORTS

[View Milk Statistics](#)

MILK PRODUCTION INVENTORY

TAGGING ID	MILKING DATE	MILKING VOLUME
32345	2016-12-23	15
34267	2016-12-09	17
98144	2016-12-16	21
65736	2016-12-05	16
3000	2016-12-01	19
40679	2016-12-16	16
34267	2016-12-23	20

[Add New Milk Inventory](#) [Print Table](#)

[View Statistics](#)

HEALTH INVENTORY

TAGGING ID	DISEASE	DATE EXAMINED	DATE CURED
3000	Milk fever	2016-12-07	
34267	Diarrhea	2016-12-16	2016-12-31
65736	Mastitis	2016-12-15	
98144	Ketosis	2016-12-17	2016-12-31
40679	Retained Placenta	2016-12-16	2016-12-31
3000	Retained Placenta	2016-12-22	2016-12-31
65736	Ketosis	2016-12-16	2016-12-31

[Add New Feedback to Health Inventory](#) [Print Table](#)

VACCINATION SUMMARY

TAGGING ID	LATEST VACCINATION DATE
32345	2016-12-15
34267	2016-12-30
34672	2016-12-06
40679	2016-10-30
65736	2016-12-16
67330	2016-12-06
80123	2016-12-15
98144	2016-12-14

[Print Table](#)

STATISTICAL REPORTS



CONCLUSION

- This system is developed to assist farmers in managing their livestock and improving productivity
- The development of the livestock MIS is aimed as a more simple, user-friendly system for the farmers to be able to manage their livestock for productivity and monitoring purposes
- However, there are many improvements and enhancements that can be made in order to improve the Livestock MIS as a whole for future work.

CONCLUSION

Future Work

- User interface could be designed to become more user-friendly especially for new users to the system.
- New functionalities should be added to add variety to the system
- System must be ready to host increasing number of users.
- More graph analysis representation should be added to the system