ENSF 607 - Term Project

What is the goal?

Our goal is to create a web application for the school of Veterinary Medicine at the University of Calgary to help manage their animals and process requests for delivering animals to teaching staff. This application will address the following 3 areas:

1. Manage animals
    a. Create animal profile
       Every animal can have different properties based on type but some properties are the same for example (Name, sex, age, RFID).
    b. Search animals
    c. Ongoing care process(Annual check and vaccination)

2. User Management
    a. Add users
    b. Access control
    c. Manage users(such as block and suspend)

3. Treatment process
    a. Design state diagram for treatment
    b. Define process with 4 states and 3 role

What problem does this project solve?

The School of Veterinary Medicine at the University of Calgary is maintaining and administering medical care to various types of animals. Some of the treatment and prevention measures offered by the school include administering vaccinations, treating injuries, and disease diagnosis and treatment. The school needs a solution to collect and integrate animal data and automate the prevention and treatment process.

Moreover, the faculty make use of these animals for their teaching and need a process to reserve and request the delivery of the animals for their classes. The faculty should be able to check the availability and health status of animals.

User stories

The first step in this project is to gather user requirements. Following the scrum, you must first start by defining user-stories for all functionalities:

All the users must log in to the web application.

Admins

- Can add users.
- Can edit users.
- Can block users.
- Can monitor an animal's status.
- Can review comments.

Animal care attendants

- Can take photos of animals and upload them.
- Can request treatment from technicians.
- Can change animals' status.
- Can update daily status and treatment.
- Can alert disease and problems (location).

Animal health technicians

- Can diagnose and prescribe for them.
- Can change animals' status.
- Can monitor animal status.

Teaching Technicians

- Can request an animal.
- Can add students.
- Can block and remove students.
- Can search and view animal profiles.
- Can take comments on animal profiles.

Students

- Can search and view animal profiles.
- Can take comments on animal profiles.

Non-functional requirements

- The application must be hosted on AWS
- The application must work in all modern browsers
- The application must be responsive (work well and look good on all screen sizes)
- The application must be able to support 100 simultaneous users
- Etc.

Process and Sprints

We are going to use scrum to manage this project. Our process will have the following steps:

1. Developing epics and user-stories
2. Designing the wire-frames
3. Designing the required API
4. Developing the
    a. Frontend: GUI based on the wire-frames
    b. Backend
5. Integrating the backend and frontend

We will complete these tasks over 5 sprints:

Sprint	**Deliverable Description**	**Due Date**
1	Developing epics and user-stories	October 15
2	Designing the wire-frames	October 22
3	Designing the required API	October 29
4	Developing the a. Frontend: GUI based on the wire-frames b. Backend	November 19
5	Integrating the backend and frontend	December 3