# Part 1

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Livestock Monitoring System

The Livestock Monitoring System is designed to assist farmers in efficiently managing their cattle, sheep, and goats across different grazing camps. This system automates key aspects of livestock management, including animal tracking, vaccination schedules, and determining the optimal slaughter time based on weight and age.

Key Features:

***1. Animal Management:***

- Livestock is grouped based on age, allowing the system to recommend appropriate management actions for each group.

- The system records essential details such as the tag number, date of birth, and desired slaughter age for each animal, ensuring accurate tracking and decision-making.

***2. Grazing Camp Rotation:***

- *Cattle* are rotated to new grazing camps every three weeks to ensure optimal grazing conditions and minimize overgrazing.

- *Sheep and goats* are rotated every four weeks, following a similar rotational grazing strategy suited to their needs.

***3. Vaccination Tracking:***

- The system tracks *vaccination schedules*, alerting the farmer when livestock are due for vaccinations. This feature ensures the health and well-being of the animals.

***4. Slaughter Time Determination:***

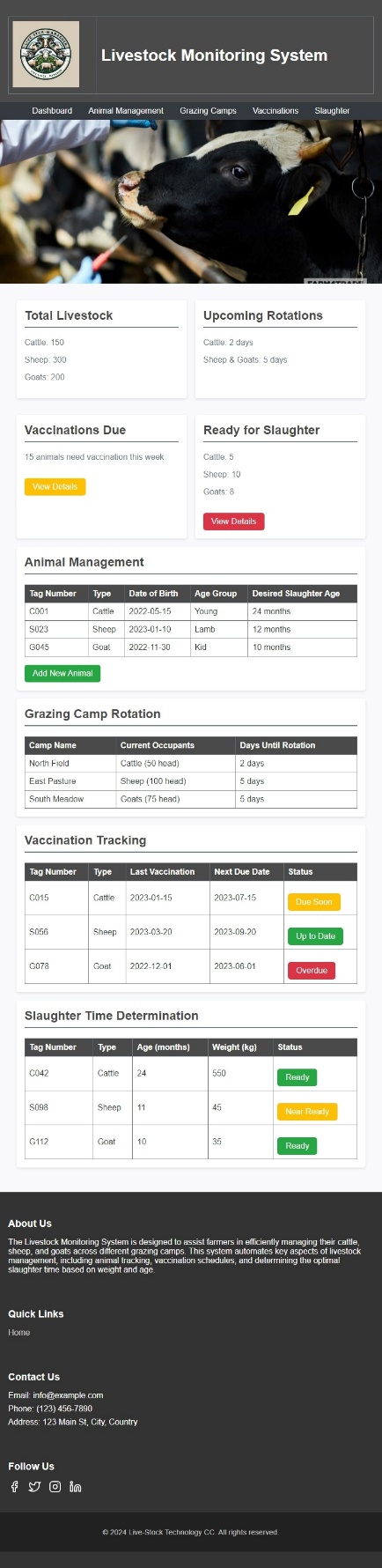
- *Based on the weight and age* of the livestock, the system helps farmers determine the optimal time for slaughter, ensuring that the animals are harvested at their peak value.

- The system also *calculates the total* number of cattle, sheep, and goats that are ready for slaughter, providing an efficient overview for planning and sales.

By leveraging this system, farmers can ensure efficient livestock management, improve productivity, and make data-driven decisions regarding the health and market readiness of their animals.

SITEMAP

PAGE DESIGN AND LAYOUT



Functionality

When a is adding an animal the farmer should as-well be able to choose the desired slotter time in the range of 14-18 month for cattle, for sheep 6-8 months and goats range 8-10 months.

Vaccination the farmer should choose the vaccine they what to give to the animal being added   
**Cattle**

1. **Clostridial Vaccines (e.g., Blackleg, Malignant Edema)**
   * **Timing:** At 2-4 months of age, with a booster 4-6 weeks later.
2. **Bovine Respiratory Disease Complex (e.g., IBR, BVD, PI3, BRSV)**
   * **Timing:** At 2-3 months of age, with a booster at weaning.
3. **Leptospirosis**
   * **Timing:** At 4-6 months of age, with annual boosters.

**Goats**

1. **CD-T (Clostridium perfringens types C and D and Tetanus)**
   * **Timing:** At 6-8 weeks of age, with a booster 3-4 weeks later.
2. **Caseous Lymphadenitis (CL)**
   * **Timing:** At 3 months of age, with annual boosters.
3. **Rabies**
   * **Timing:** At 3 months of age, with annual boosters.

**Sheep**

1. **CD-T (Clostridium perfringens types C and D and Tetanus)**
   * **Timing:** At 6-8 weeks of age, with a booster 3-4 weeks later.
2. **Campylobacter (Vibriosis)**
   * **Timing:** 30 days before breeding season.
3. **Chlamydia (Enzootic Abortion)**
   * **Timing:** 60 days before breeding season, with a booster 30 days later.

The system should calculate the slotter date and next vaccination date for each animal.

***. Grazing Camp Rotation:***

- *Cattle* are rotated to new grazing camps every three weeks to ensure optimal grazing conditions and minimize overgrazing.

- *Sheep and goats* are rotated every four weeks, following a similar rotational grazing strategy suited to their needs.