## One Page Proposal for Project

This project provides us with some information on the clinical parameters of the cow, it will provide some basic information to allow the stock keepers to assess their animals when they suspect disease in them. This gives stock keepers a basic idea of when to start the treatment and explain the further treatment that whether they should get a veterinary advice or not. I have chosen this dataset as I am fond of animals and care about them. I have made this dataset from taking reference of one of the very trustable websites of NADIS Animal Health Skills. This dataset consists of many categorical features. Even when I will work furthermore on this dataset, I would love to work on images which will derive that is the cow is having any symptoms which are unusual. This is not a large dataset but, I wanted to make one and was eager to learn about how to make a dataset and so I built this. As there are many stock keepers who are not able to afford the veterinary doctors and would prefer some very primary way to get an idea if the cow is sick or not. This application will help them just observe the symptoms and try to make a primary decision of whether they should consult about the symptoms to the veterinary doctor, or the cow will recover. There are many applications which predicts crop disease prediction; even during corona breakout in India, there was an application named "Aarogya Setu" which predicts whether the person is needs to test for Corona by answering some of the questions related to the symptoms. But I was willing to help the stock keepers for the primary symptomatic solutions and so I thought of working on this dataset.

The key features of this classifier are: -

**Breed Type** – Which breed does the cow belong to.

**Temperature** - the body temperature of the cattle. It is also inexpensive for stock keeper to keep. The regular body temperature of cow is around 38.5\*C but if it goes beyond 39.5\*C it may indicate that the cow is infectious or inflammatory.

**Respiratory Rate** - An adult cow's respiratory rate should be between 26-50 breathe in a minute.

**Body Condition Zero** - Body Condition Scoring is an objective way of visually monitoring the fat cover of a cow. It is assigned in the range of 1-5 with half and quarter for some accuracy.

Milk Production – Amount of milk produced by the cow.

**Walking Capacity** – Total steps for a cow in a day.

**Sleeping Duration** – Total number of hours the cow slept in a day.

Heart Rate - An adult cow has a heart rate ranging from 48 - 84 beats in a minute.

**Eating Duration** – Time she takes to eat in a day.

**Lying Down Duration** - A normal cow will spend 12-14 hours a day lying down and eat for 3-4 hours.

**Ruminating** - Around 6 hours chewing the cud each day.

**Rumen Fill** - If a cow is off her feed the rumen will appear as a sharp triangle as it is empty, the more the rumen fills, the more this space fills. There is a scoring system for rumen fill that vets may use the rumen is assigned a score from 1 to 5.

**Faecal Consistency** - This will vary with the cow's diet, but extremely firm faeces can be associated with metabolic problems and very liquid faeces can be associated with intestinal disease, particularly if it smells foul or contains blood. Black faeces can be a sign of bleeding in the stomach and represents digested blood. Fresh blood in faeces represents bleeding from the large intestine or may be trauma.

Link to get the Dataset: - Dataset Link