FINAL YEAR Project

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Abstract

For our final year project, we were looking to create an industry stander application that would help farmers in day to day life. There has been a lot of talk in recent weeks about the escalating fodder crisis and the negative impact it is having on farmers and their livestock. For months, farmers have faced difficult farming conditions due to persistent cold and wet weather. Farmers usually purchase enough fodder, dried hay or feed given to cattle and livestock, to last until the spring when the grass begins to grow, and animals can begin to eat that instead. As a team we want to design a free web application where the user can enter data and store it, do out calculations for the fodder months. There is also AI section for keeping track of the herd in the calving months, tagging section for keeping track of new born animals, section for keeping track of the medicine used on the herd throughout the year. We have created this application with a client and server pulling data from databases. We created a three-tier application, using Mongo Db and Firebase as our Data Tier, NodeJS for our Logic Tier and Ionic 3 for our Presentation Tier. Adding specific features such as, adding Al, Tagging, Feed, Madison and creating a message board for farmers to group together and find solution's to problems there are encountering. it was our objectives by gearing our app specifically for farmers.

Authors

The authors of this project are Derrick Conway and Gary Mannion, Currently students studying Software Development in Galway-Mayo-Institute of Technology.

Acknowledgements

1 Introduction

When choosing our project we wanted to pick something that was relevant to current everyday life. We wanted a project that also highlighted our existing skills and allowed us to learn new skills and develop as part of a team. With this criteria in mind we started brain storming ideas for our project.

We eventually decided on a App called herd list, herd list would be a farming fodder app. We recognized the current fodder crisis throughout Ireland and thought it would benefit farmers and farmers alike to have a specific fodder app for the farming population. Currently farmers in Ireland can find themselves in difficult situations for up to 1 or 2 months before finding proper fodder for animals. This is quiet common for farmers and with our app they would only be able for to calculate fodder for the winter and spring months and keep track of tagging, medicine, AI.

Having a fodder app as our starting point we started to research other apps and websites in the farming category. The main one we focused on was the Heard Watch. Heard Watch would be the most popular farming app in Ireland and it provided us with a great deal of insight on what our app would need to have and also on what heard watch lacks for the farming market.

We wanted a app that had essentially the same functionality as Heard Watch but which was geared more towards the stress points of farming We did this by focusing on what stresses farmers the most, We also created a forum for farmers to get in touch with one another, to either get information from one another or to give information, These would compliment the normal functionality of a accommodation app such as, publish ads (either fodder or rent land), search lists, view ads or messages and land for rent and edit and delete your personal ads. This would also require log in and registration functionality.

After deliberating over the objective of our application, we then turned to what technology we would use. We wanted to use a array of technologies to show our capabilities but also gain more knowledge and become better programmers over all. We settled on a 3 tier structure containing a Ionic 3 presentation tier (front end), NodeJs logic tier (middleware) and Mongo/firebase database data tier (back end).

From what we hoped to achieve from creating this app was the knowledge of new technology, personal growth through team building and of course to produce something of substance and something we could be proud of.

2 Methodology