

Project Proposal

Group name: Angry Pepe

Group members:

- Apoorv Joshi - 814003553
- Joshua O'Brien - 816001354
- Masood Khan - 05788124

Project Name: Kill it

Project description:

This software will allow users to have a controlled environment for an animal farm of any size and a search and analysis database/ software of pests and diseases for farm animals locally and regionally.

The database would identify the type of disease the animal has, the different stages of the diseases as well as treatment options for the different stages of the diseases and where to find medication for said diseases.

The main objective of this project is to make a search and analysis software of pest and diseases of farm animals locally and regionally. The software made is going to be cross-platform software thus can run effectively in different environments enabling ease of use.

A person can search for various farm animal diseases with a search bar on the opened application. Once the user begins to input text into the search field, they are presented with a drop list of search suggestions. This restriction allows the user to narrow and choose the content for which they are searching for. The software searches and analyses the search and produces the outcome of the search.

The purpose of this software is aiding and arming the farmers with knowledge in identifying and mitigating the risk factors of pests and diseases of their livestock. This is extremely beneficial as they can make real time decisions based on the search outcome, thus reducing livestock losses due to spread of disease and securing their livelihood.

This software being made is a worthwhile, economically effective and reasonable endeavour. The data is easily stored in a cloud-based environment therefore eliminating the need for buying and operating storage infrastructure. Information is readily available and accessible to users. Redundancy of data is greatly reduced. It also allows multiple users to access data. Data integrity is preserved as it ensures accuracy and consistency of data.

Rationale for the project:

In years gone farmers would observe their livestock having lesions or behaving strangely. By the time they are able to get help to figure out the cause, already their livestock would have taken a toll as they were unable to quickly identify the disease the animal was afflicted with. With the increase in technology, farmers would be able to search, analyze and identify the type of disease as well as the treatment options available utilizing our software, Kill It. This software is able to work across multiple device platforms as well as the software being user friendly.

Business Benefits:

- The software being made would be a product able to work across multiple device platforms. This enables ease of use for the user as the software can work efficiently in different environments without the user being constricted to one specific platform.
- The data is easily stored in a cloud-based environment. This provides an economical advantage as it eliminates the need for buying, installing, operating and maintaining hardware storage infrastructure. Therefore, server failures that cause downtime would no longer be an issue as information becomes readily available and accessible to users and also allows multiple users to access data. Data integrity is preserved as it ensures accuracy and consistency of data.
- Farmers utilize and benefit from the software technology with the software being able to analyse and identify the disease if their animals become afflicted. The software can identify and show treatment options available for the disease and its various stages. This results with the farmer being able to make real time decisions, containing any contagious diseases thereby mitigating the possibilities of outbreak and securing their livelihood.

Stakeholders:

User stakeholders: (Who will be using the system?)

The targeted users include but are not limited to

- Agricultural industry

Non-user stakeholders: (Who will not be directly using the system but benefits from the system?)

User Environment: (Environment refers to the collection of hardware and software tools a system developer uses to build software systems.)

- Android Operating System Firmware Version Oreo 8.1.0 (API 27) and upwards
- iOS 12 and upwards
- Android Studio

Alternatives and Competition to your solution: (Are there ways the problem can be solved? Are there already products on the market that provide a solution? If yes what are they?)

There is a product called

Estimated Project Duration

The project will be developed using a plan-driven strategy and is expected to be completed within 12 weeks.

For each group member

Key skills (e.g. Databases, Web programming, etc.) –

Apoorv Joshi - System Architecture Designer, MySQL database designer

Masood Khan - Mobile Application Programmer, Database Manager

Joshua O'Brien - Web programming, Design and analysis

How each member contributes to the project

- Joshua: Design a user-friendly interface focused on maximizing usability and user experience
- Apoorv: Designing the system's architecture to accommodate the best user experience.
- Masood: Implementing the backend and testing.
- All members will contribute towards the research and documentation.

Statement of how you plan to work together (When you will meet, Collaboration tools you will use)

Twice every week on Wednesdays and Saturdays at face to face conferences. The use of online collaboration tools such as google docs and WhatsApp would be used to communicate on a regular day to day basis.