SOFTWARE ENGINEERING

CSC 4350 Spring 2018

Group Name: Renegon Bits

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Planning and Scheduling

Outline Plan:

For our product, we will create a database that accepts images and stores recorded information about individual animals reported by users. In order to populate the database, we will create a system that allows users to upload images and accepts forms with information from the user that will fill attributes about the animal in the database. We will create a pleasant user interface that will enable the user to populate the database with data. In addition, we will create a system that will allow recognized organizations, such as local pet shelters, to make posts to advertise animals from shelters.

This product will require a server to host the database. In addition, we will require either an app or a windowed software system that will act as the user interface for the product. We will also use the Facebook API to allow for users to comment and make posts about the animals referenced in the system. Because it is a purely software product, our product does not have any hardware resource requirements.

The most serious challenge we see is allowing users to identify animals quickly and efficiently and query the database for specific animals. A risk for this project that we have already encountered is having the idea fail. We had an idea before this and realized that we could not expand on ideas that already existed. We had to start from scratch and create a new idea which put us behind schedule and made us move more quickly to catch up. Another risk is that the scope of our project may be too large. We may have to scale back our project and start with only local shelters, small communities, and small amounts of data. Then, over time, the software will grow, and we could add support for larger areas, interact with more shelters and identify animals in more regions.

Scheduling:

Reporting and Monitoring:

Updates will be provided halfway through the duration of the task. Then, they more updates will be given based on status and completion of the task.

Tasks:

Task	Effort	Duration	Dependencies	People
User Database/Record System (T1)	7 person-days	7 days	None	Brian Cabigon
Animal Database/Record System (T2)	7 person-days	7 days	None	Braxton McLean
Form Submission System (T3)	8 person-days	4 days	T2, T6	Braxton McLean Brain Cabigon
Data Display (T4)	10 person-days	10 days	T1, T2, T6	Chris Scott
Facebook Integration (T5)	14 person-days	7 days	T1, T2, T6	Nishant Sinha Jason Herrera
User Authentication System (T6)	6 person-days	3 days	T1	Chris Scott Jason Herrera
Post System (T7)	10 person-days	10 days	None	Nishant Sinha
Animal Care/Providers Support (T8)	7 person-days	7 days	T2, T6	Jason Herrera

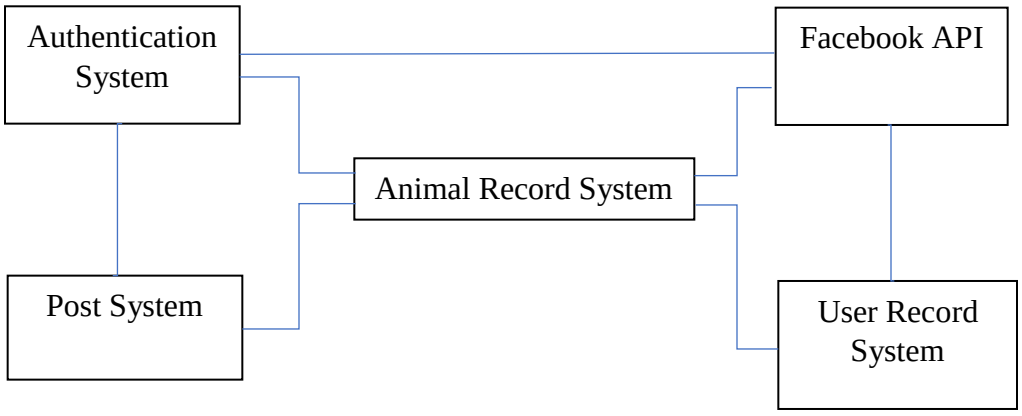
Problem Statement

Our product is a database system that will allow users to provide data about animals in the community that may be stray. In addition, it will allow shelters and other recognized organizations to provide data about animals in the shelters. In addition, users will be able to receive data from the database about certain animals. The product is intended for community members concerned about stray animals in their areas. The animal shelters in the area are also able to make advertisements for animals in the shelters.

This product is intended to decrease the amount of unidentifiable stray animals in the community and help promote the adoption of animals from shelters. Our team has not identified any alternatives to this product which is a large reason this product should be developed. There is also a possibility of inviting advertisers to make the project profitable for our team while it helps the community at the same time.

Almost everything about our approach is novel because there aren't alternatives now, but what makes it special is the ability for people in the community and animal shelters to communicate directly through the data each sends. This system not terribly complicated as it only needs servers for the database and some sort of user interface to work, so it is in the realm of feasibility. What makes this project interesting is the possibility of Facebook integration and the post system that will allow users to share information with others about animals that they have seen.

High Level Context Diagram



Uses Cases

1. The ability to upload an image to our database along with a response form attached that stores information provided by the user. (Cross-posting to Facebook as an additional, non-requirement want, they're just our best userbase)

2. The ability to call that information from our database and display it, along with the tags and user-provided info (free response forms should not be included for safety/risk-mitigation reasons, but should be stored for recognized organizations to look through)

3. The ability for recognized organizations to make posts to a feed, advertising/showing off animals from shelters

End-user:

1. The user shall be able to enter their account information (including username and password) to login to the application

2. The user shall be able to upload a picture, as well as tagging information and description on the contents of the picture for it to be viewed later (hereby called Posts)

3. The user shall be able to view other Posts made by other users, filtered by geolocation (hereby called Feed)

4. The user shall be able to gather and share a direct link to Posts viewable by other users

Animal Care/Providers:

1. The group shall be able to perform all actions users may perform

2. The group shall be able to collect a datasheet (or another data expression table) of Posts in their defined geolocation work area

3. The group shall be able to access via API Post details for use in database processing of their own design

Appendix

Project Description Video:

GitHub:

Screenshot

Slack:

Logs

https://github.com/JasonHerrera/Software-Engineering-Project/blob/master/Renegon%20Bits%20Slack%20export%20Feb%2010%202018.zip

Screenshot