Problem Statement

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Abstract

This document contains an overview of the state-of-the-art management and administration software proposed as our capstone project and the expected features and functionality it will take. This document also highlights some preliminary estimations on viable technologies that can be used for this project. The document ends with an overview of stakeholders, motivations, and how the team may judge progress/success.

I. Problem Defninition

THE project submitted for the 2017-2018 capstone year, and the one selected by group 39, is currently titled ”Healthy Dogs.” The client leading the development team is Dr. Chinweike Eseonu, assistant professor in the MIME department. The development team will also be cooperating with members of the OSU veterinary hospital during the project. Note that not much is currently known about the project as Dr. Eseonu is currently not in the country, and in-depth discussion of the project will not take place until all members of the team can meet.

The project is centered around the animal patients at the OSU veterinary hospital, and the management of the OSU veterinary hospital. The hospital is currently using outdated software that is restrictive and does not allow hospital staff or owners of the animal patients much freedom or remote functionality. The purpose of the project is to create a new and effective system for the hospital, allowing staff to reduce administration and management errors, ease suffering more quickly, and reduce stress in both pet owners and staff. The project is envisioned to include a full management package that eases patient inflow and outflow, scheduling, internal and external communication, and visualizing hospital interactions. This project has not yet begun development, so the framework, language, and other finer details of the design have yet to be selected.

II. Proposed Solution

As a larger team, we have yet to meet to decide how this project will be implemented. Speaking individually, I think that we could use a Django Python framework to create a secure and unsecure website that interacts with whatever database the hospital is currently using. Should they also want to replace the current database, I will push for a mySQL database. A significant portion of this answer requires knowing what the hospital currently has, and what they want to keep around. Creating an entire hospital management system may be a bit too big for a capstone project, so it is likely that the hospital will need to keep some older things around. Another option instead of/in addition to the Django Python webpage is a server-side Jenkins instance running a pipeline. This will allow many users and allow tasks to be divided into small repetitive jobs that can be kicked off automatically.

III. Performance Metrics

It is vital that we meet with our client as soon as we can. This is a large project, and getting started early is paramount. We need to attempt to meet with our client by October 13th, and aim to meet with representatives from the hospital at the same time or soon after. I would also like to start some development before the quarter is over, to give the team a better shot at recovering from the winter break without procrastinating multiple weeks at the start. Ideally, once we have a solid understanding of our responsibilities after making the Requirements Document, we will be at least ready to develop immediately by winter break.

As for metrics on the performance as well, our main focus will be on the hospital. They understand their own needs and the needs of pet owners better than any of us can, so they will be our main source of feedback and criticism. If we can show them things are going to plan as outlined, or convinced them we have a good reason for diverting from the outline, we should be able to consider ourselves ”on track.”