

School of Computing

CA326 Year 3 Project Proposal Form

Project Title:

Pet Training App / Journal

Student 1 Name: Kevin Fasan
ID Number: 22379321
Student 2 Name: Nkemjika Onwumereh
ID Number: 22452576

Staff Member Consulted: Boualem Benatallah

Project Description (1-2 pages):

Our proposed project idea would be a pet journal app that would be used by pet owners to keep a log of their pets behaviours and other information. The owner would be able to input details about their pet. For example, let's say I own a dog, "Billy," I would be able to input all the details related to Billy. For instance, the name, age, weight, height, breed, medical issues, etc. I would also be able to keep a daily log of activities that occur throughout the day. For example 'My dog was erratic today, but he didn't eat much'. This feature would be beneficial to owners by having a log ready when they take their dog to the vets. It increases the accuracy of which the vet can diagnose the dog with a certain illness / issue should the dog ever fall sick.

We would also like to implement a feature using a LLM to answer questions from the owner in relation to their pet and its associated attributes. We would train this LLM on information online and test it against prompts to record each answer for its accuracy / truthfulness. For example, if the owner's dog is a French bulldog, and the owner asks, "Why does it look like something is wrong with Billy's right eye?" We would then feed the data from the owners pet. Hence the LLM has access to the dog's data and knows that Billy is a French bulldog, which is known for having a medical condition known as cherry eye. The LLM would then respond and inform the owner about cherry eye and other potential conditions. The owner is then able to make a more informed decision on what to do next.

Division of Work

Kevin Fasan - Frontend, Backend
Nkemjika Onwumereh - Database, LLM

Programming Tools

Backend - Python - Django

Frontend - JavaScript - React.js

Database - Firebase

LLM - Gemini / Chat GPT

Learning Challenges

The main challenge would be figuring out how to incorporate LLMs into our website / app with the use of API calls. We would also have to train the LLM to ensure that accurate answers are returned based on the information that it is fed by the user.

Hardware / Platform

PC / Linux

Special hardware / software requirements

N/A