CS 396 Final Project Proposal: Virtual Pet Web App

By Aissata Diallo, Jessica Li, Taejune Yoon, and Yagmur Aytemiz

Executive Summary

The app will allow users to care for a digital pet, tracking its growth and well-being through various interactive features. As we will consider both usability and accessibility in our design, the app will be a mobile-first approach, resulting in a consistent experience across multiple devices.

Project Background

By creating a platform where users can actively engage and monitor their pets, creating a similar real-life pet experience, we aim to create a platform that appeals to users who seek engaging activities that create responsibility and emotional connections.

Present a Solution

We propose a web app that allows for users to care for a virtual pet. The app will track various statistics of the virtual pet, including growth stages, health (hunger/thirst and exercise) as well as happiness. The core functionality will include:

Core MVP Features

Given our bandwidth and our team's timeline, we will focus on three main pet tracking features:

1. Pet Stats Tracking:
    - Growth Stage: Monitor the pet's progression through defined stages.
    - Hunger/Thirst Level: Track hunger and allow users to feed their pet.
    - Health: Tracks exercise frequency and allows users to give their pet exercise
    - Happiness Level: Record happiness and allow the user to have interactions to boost it.

Such features were chosen because they succinctly reflect different yet key components of a pet's well-being.

2. Growth Stages:
    - Hatchling: The initial stage, needing constant care–needs frequent refills of food and care.
    - Child: The pet becomes more independent but still needs regular attention–needs slightly less refills of food and care, but needs a medium amount of exercise.
    - Teen: Increased activity and playfulness; requires more interactive care–needs more exercise in comparison to the Child stage.
    - Adult: Fully grown with unique interactions; pets can play mini-games–food, care, and exercise are more settled.

- Senior: Slower and more fragile; requires special attention and care–exercise decreases, but needing care increases.

3. Persistent State:
   - Use local storage or cookies to maintain pet stats across page refreshes. Here we will store pet data like growth stages, health, hunger/thirst levels, and happiness.

4. Responsive Design:
   - Layouts optimized for desktop, tablet, and mobile devices using a mobile-first approach.
   - Will utilize bright/fun colors to increase user interest and engagement
   - Will have all the stats in one area, a "profile" for the corresponding pet. Stats will be shown on sliders to visually exhibit how much of each stat the pet has

Deliverables & Goals

- Deliverables:
  - A functional web app prototype with the core features outlined.
  - Documentation detailing app functionality and design.
  - User interface mockups for desktop, tablet, and mobile layouts.

Goals:

- Ensure accessibility compliance for a diverse user base.

Technology Stack:

- HTML, CSS, JavaScript for front-end development.
- Local storage or cookies for state persistence.

Conclusion

Our team is committed to creating a delightful, interactive experience that brings a sense of companionship and care to every user. By focusing on essential features that foster engagement, build responsibility and consider user accessibility, we aim to create an app that's not just enjoyable but meaningful. We're passionate about designing a user-friendly, accessible platform that connects people of all ages to their virtual pets in a fun and enriching way. Through our combined skills and dedication, we're excited to bring this virtual pet experience to life, one that users can enjoy and connect with on any device, anywhere.