Software Development: Lab 9 - Kickstart Group Project

Due: Friday March 21st, 2025

Team Number:
014 - 1

Team Name:
GoPalz

Team Members (6):
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Application Name:
GoPal

Application Description:

Our application strives to gamify working out in a positive, impactful way using a small character that benefits from the users physical activity throughout the day. Our application links to statistics collected by your phone via the strava API such as miles walked, or user input such as time spent weightlifting, cycling, etc etc. When this information is linked to our application, the little character experiences upgrades to their appearance and mental health. In order to ensure user safety, this application will also inform the user if outdoor conditions are less than ideal. If the air quality is poor, if the weather is dangerous, the user will receive a pop up warning them of the conditions.

The character will experience a growth cycle based upon your physical activity. You can use this account to track your activity in such a way that you can go back and see what you have done in the past. You will be able to add comments into the application to help you hold to your health goals, and remember what you have done, and want to do in the future. In addition to personal benefit and gain from this app, there will be an option to interact with your friends and family. Your characters can meet and have fun with each other! These social media aspects would require a proper database, and some sort of login.

Brief: Our app gamifies workouts by linking your phone's activity data to a character that grows with your exercise. The app also provides safety alerts about weather and air quality. You can track your progress, set goals, and interact with friends and family.

Audience:

- Nostalgic folks
- Athletes looking for motivational tracking
- People who enjoy the granola lifestyle
- People who shop REI
- People who enjoy the farmers market/birkenstocks
- People who want to boost their enjoyment of exercise

Vision Statement:
To provide nostalgics with fun companions to support a user's exercise desires. GoPal is an exercise-tracking means to raise and develop a strong companion while improving oneself. Unlike Pokemon go, which emphasizes development of NPCs, GoPal prioritizes user health over all else

For students, who want motivation to be active. GoPal is an activity tracker that both wants to help you become active and to keep you active. Unlike strava or other activity trackers, our product will make activity more of a game rather than a task.

Version Control:
https://github.com/ranegray/GoPal

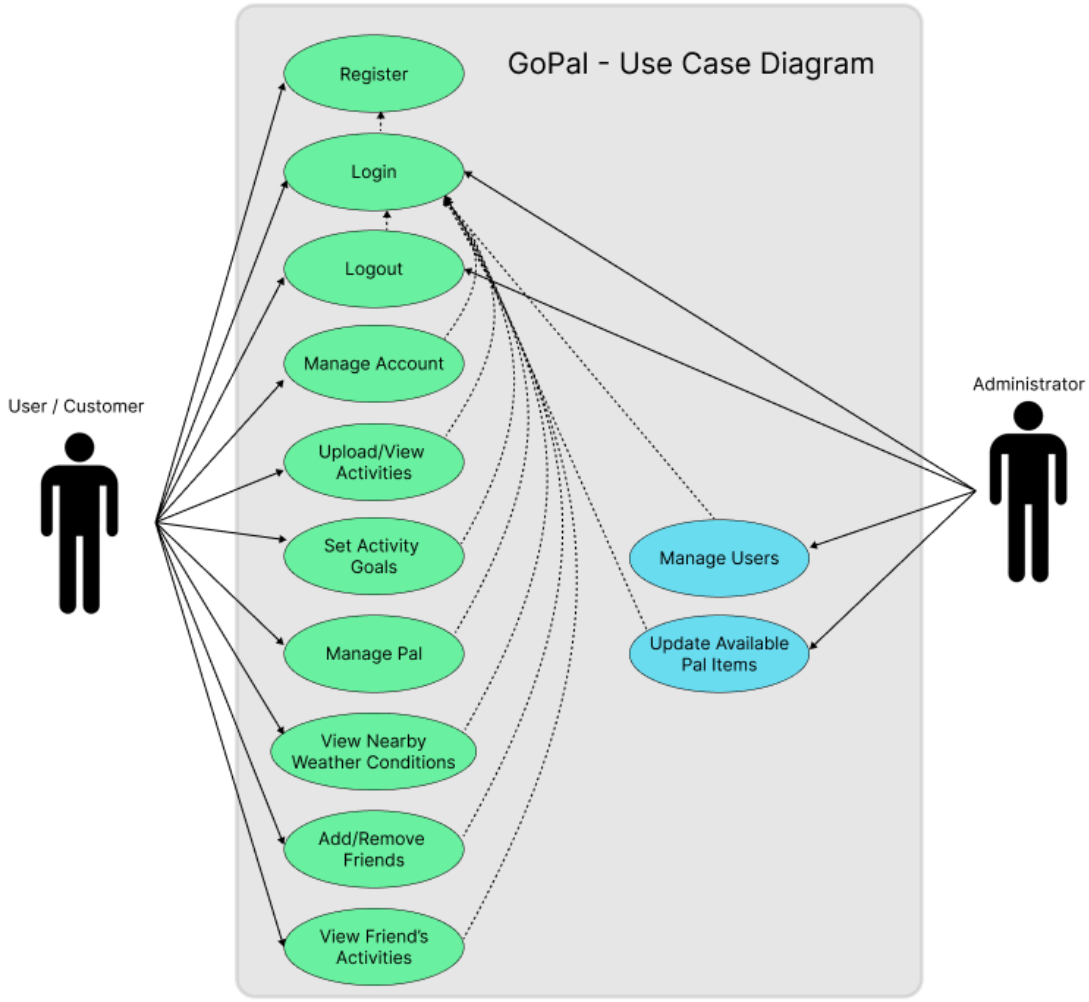
Development Methodology:
Agile

Communication Plan:
Discord

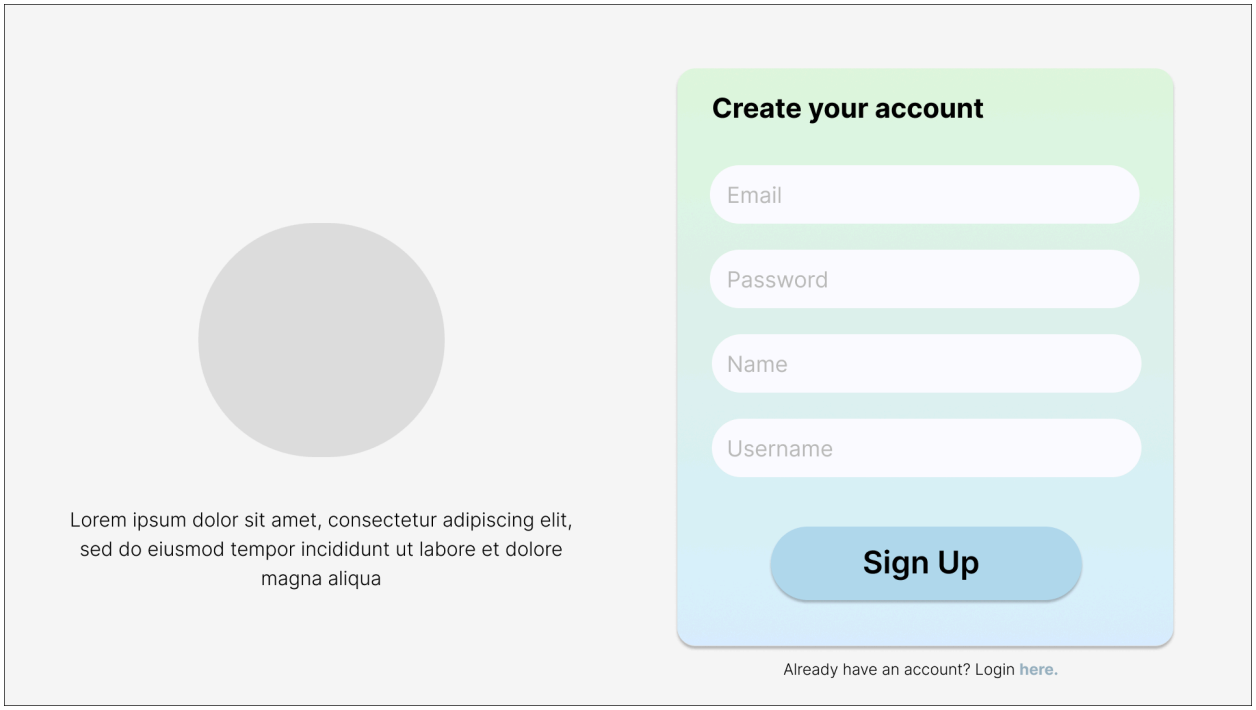
Meeting Plan:
We will be generally meeting during our Lab, and communicating via discord in order to make enhancements remotely according to our schedules.

Weekly Meetings:
(TA) Thursday, 11:00 AM - 11:15 AM; face-to-face if possible, but can also join via Zoom.

Use Case Diagram:



Wireframes:


Create your account
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Password
Name
Username
Sign Up
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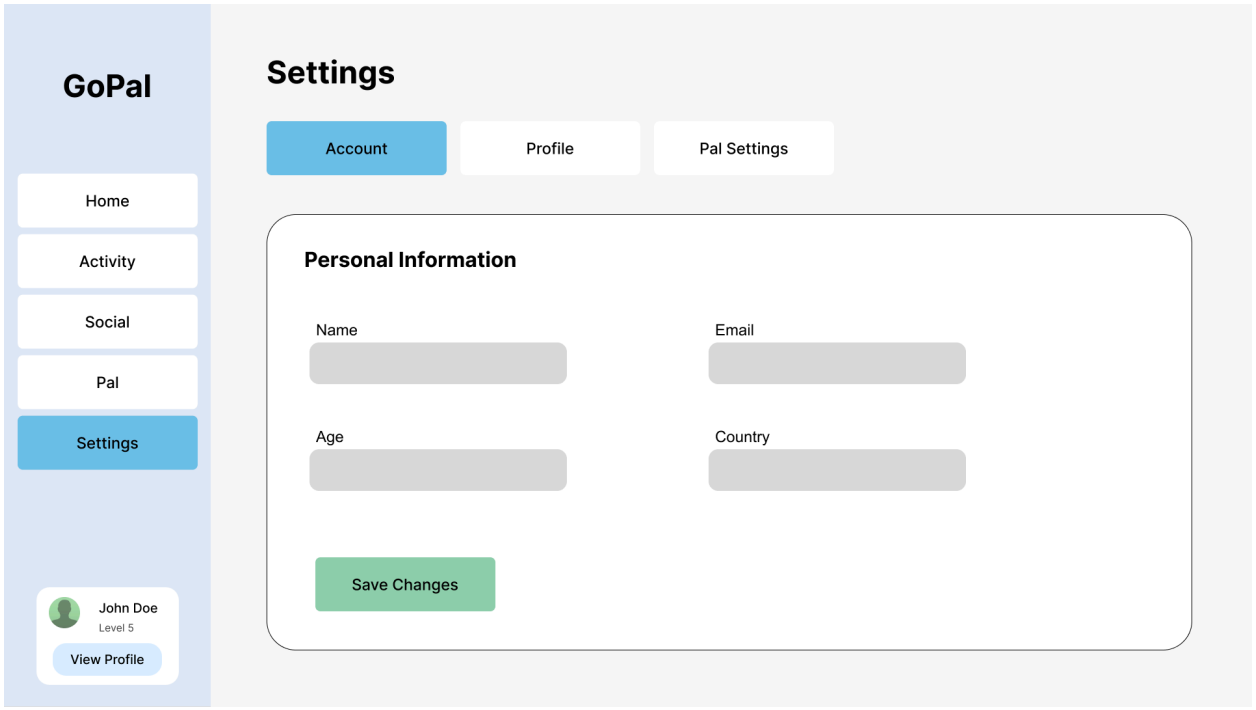
Already have an account? Login here.


GoPal
Home
Activity
Social
Pal
Settings
John Doe
Level 5
View Profile
Settings
Account
Profile
Pal Settings
Personal Information
Name
Email
Age
Country
Save Changes

GoPal

- Home
- Activity
- Social
- Pal
- Settings

John Doe
Level 5
View Profile

Goals

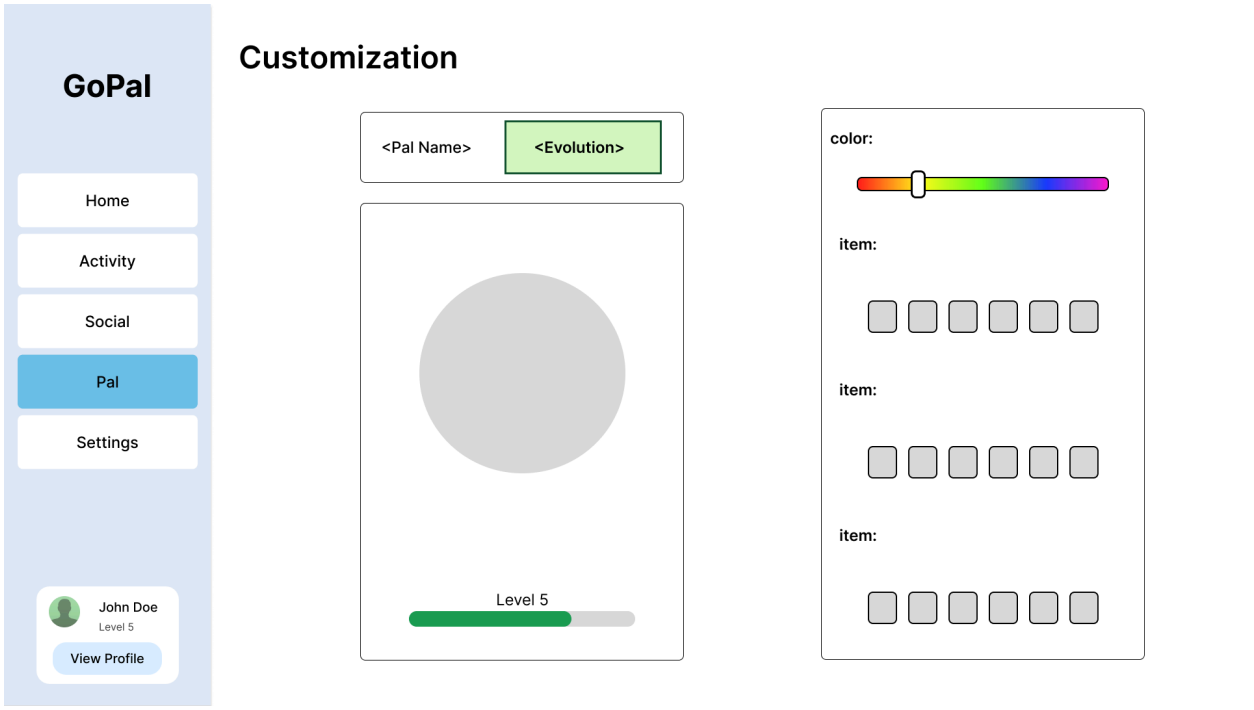
Weekly Goal
- Workout 3 times
- Run and Weightlift

Monthly Goal
- Improve mile time
- Hit squat PR

Yearly Goal
- Run December 5k
- Improve cardiovascular health

Your Week at a Glance

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday


GoPal
Home
Activity
Social
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John Doe
Level 5
View Profile
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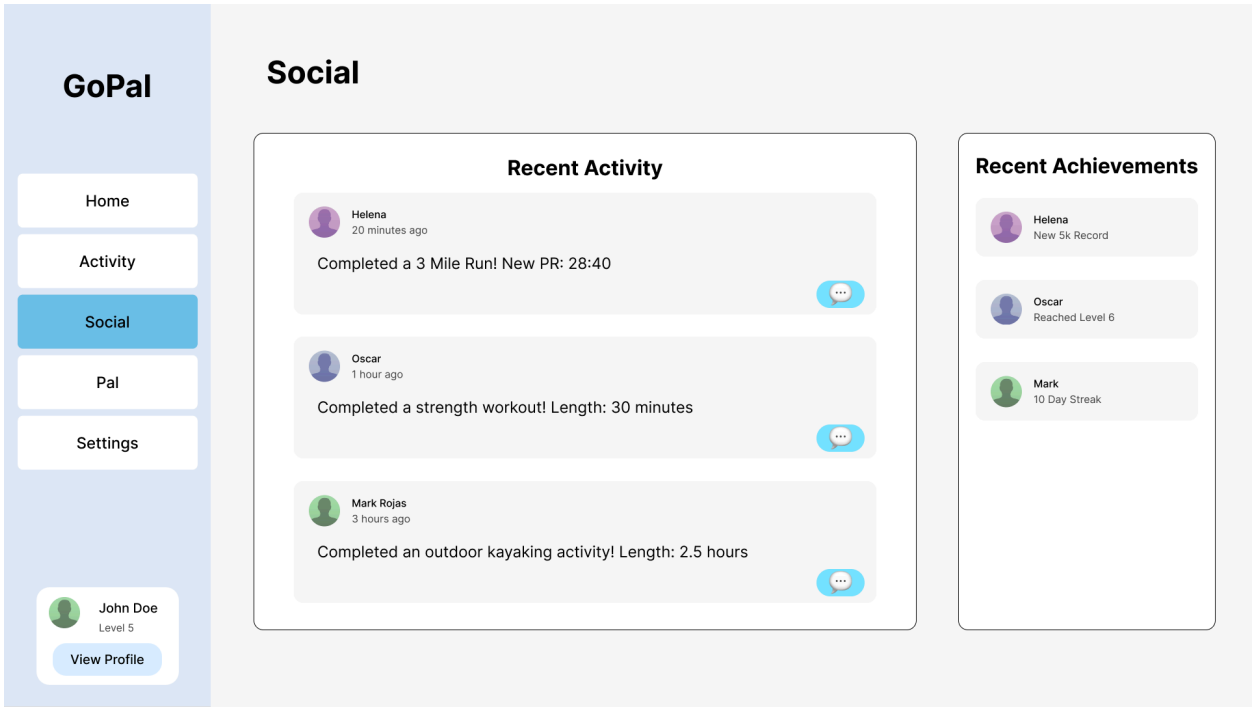
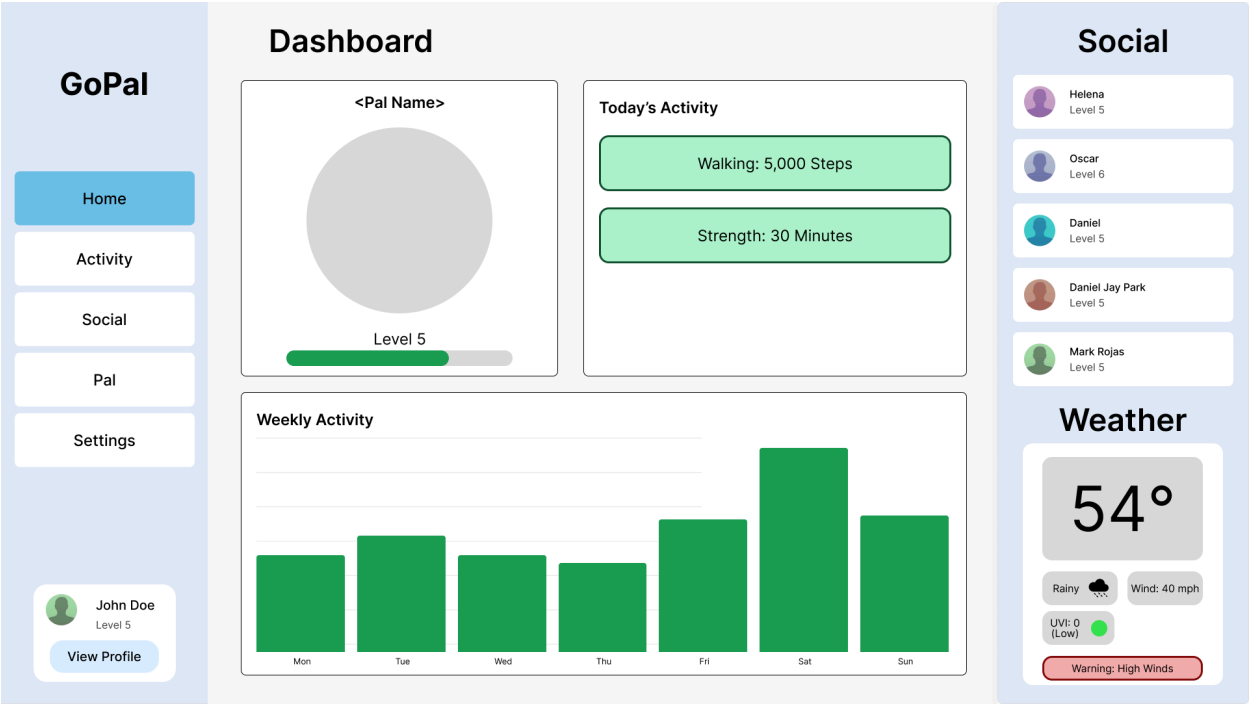
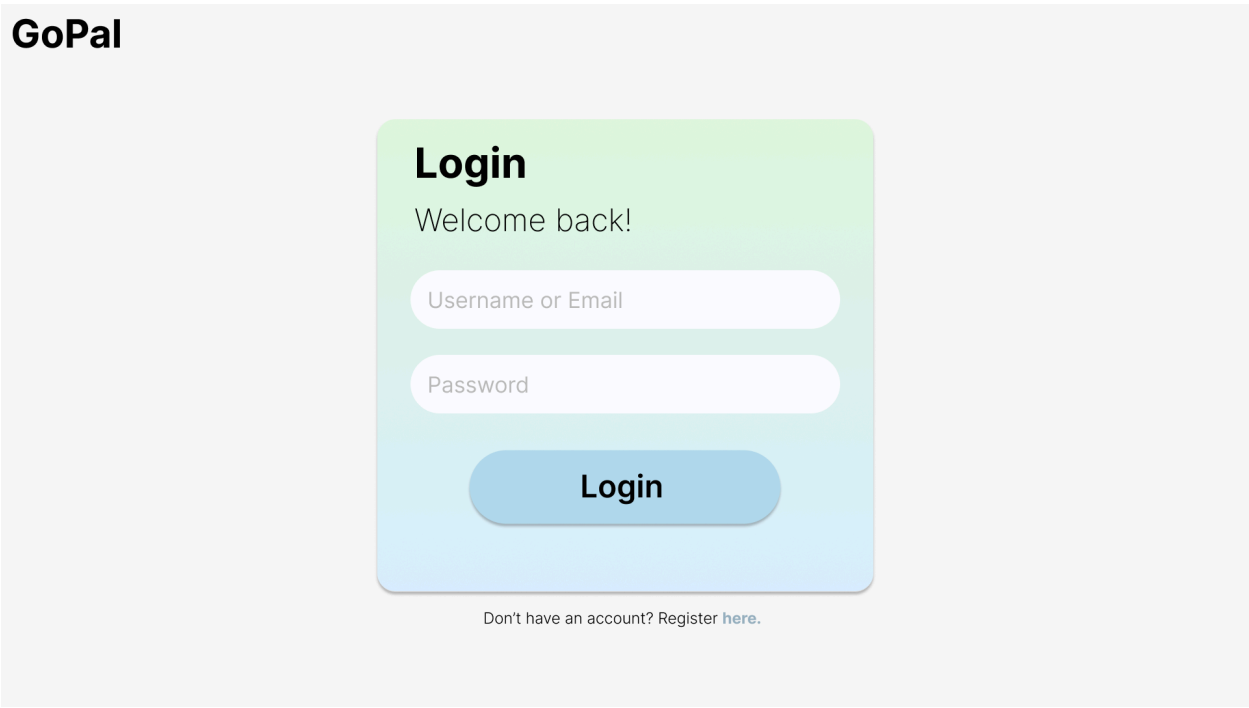
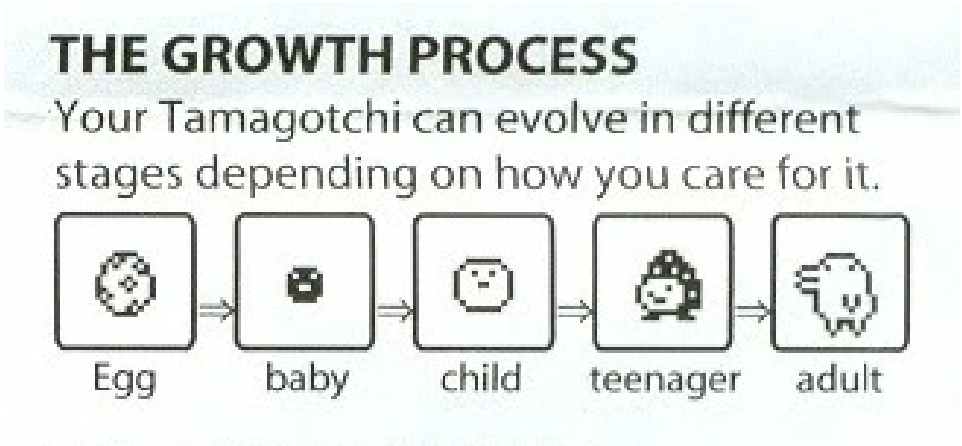

GoPal
Home
Activity
Social
Pal
Settings
John Doe
Level 5
View Profile
Social
Recent Activity
Helena
20 minutes ago
Completed a 3 Mile Run! New PR: 28:40
Oscar
1 hour ago
Completed a strength workout! Length: 30 minutes
Mark Rojas
3 hours ago
Completed an outdoor kayaking activity! Length: 2.5 hours
Recent Achievements
Helena
New 5k Record
Oscar
Reached Level 6
Mark
10 Day Streak





APIs:
OpenWeather API - https://openweathermap.org/api
Geolocation Web API - https://developer.mozilla.org/en-US/docs/Web/API/Geolocation_API
Strava API - https://developers.strava.com/docs/getting-started/



https://tamagotchi.fandom.com/wiki/Tamagotchi_Life_Cycle

Original Previous Idea:

Personalized guide for runs/hikes/outdoor exercise. This project would focus on providing unique insight to `enjoyers of the outdoors based on environmental factors that aren't always included in more popular apps.

For example, poor air quality can impact physical performance and leave individual's feeling sick for the next several days, so we could consider implementing a feature that warns athletes when the AQI is bad and suggests modifications/areas with less pollution (for example, "high risk" areas might be places like main roads/highways, so we could suggest alternative routes that avoid these places).

Other possible features might be: Using info from something like Walk Score to determine how pedestrian-friendly certain neighborhoods are, comparing marathon location altitude with current altitude and recommending ways to train for a large difference, and/or using Strava API for more detailed guidance. Ideally this would be useful for walking/biking/hiking/etc, not just running.