CS4530 Final Project

Covey.Gotchi

Group 308: Alder, Dylan, Linwood, and Ula

our feature:

Tamagotchis!

In its current state, Covey.Town suffers from a lack of single-player gamification. To help solve this problem, we're introducing **Covey.Gotchi**, a custom implementation of the widely popular toy, Tamagotchi. Tamagotchis are small, retro, handheld digital pet consoles that involve caring for a virtual pet that uniquely require attention throughout your day-to-day routine, similar to a real one. **Our project supports a virtual pet simulator for users to raise and take care of pets throughout game areas.** This includes a list of interactive capabilities such as feeding, exercise, napping, petting, etc.

- Sprites following the players
- Adoption center
- Global map updates across clients

Modal for pet interaction

Our Technology Stack & Design

We implemented Covey.Gotchi within the existing Covey.Town codebase. After structuring a Pet object (`CoveyGotchiController`) and its attributes in the back-end, methods were created allow interactivity between the user and their pet. The methods to care for the pet are invoked upon pressing the buttons on the frontend modal (the little Tamagotchi console) which is composed of a **Phaser3** scene within a **React** component styled with **HTML/CSS**, and is displayed through the `TownMap`. Phaser3 was also used for implementing walking pet sprites and particle status effects that trail behind the player. We created a variety of new Commands that are emitted by the TownController as well as Client events for updating and managing state of our Covey.Gotchi. **Chakra Toast** notifications help guide the player to care for their stats are low, explain why the user cannot attempt certain behaviors, etc. A new Currency class to fund these interactions was also built, and the new InteractableArea shop on the map allows users to shop for the eggs that grant the player their very own new pet!

Future Work

In the future, we'd like to implement a variety of extension features; pet names, purchasable pet cosmetics, different snacks/meal options for feeding, rare "shiny" colorings of pets, and pet breeding are examples we're excited for. We also need to bugfix laggy pet rendering across multiple users, and create more thorough testing suites to ensure the strength of our code.

Demo and Source

Our demo site is available at
https://covey-gotchi-deployment.onrender.com/
and our code at
https://github.com/neu-cs4530/spring24-project-team-308.