



PIXEL'S PET SHOP



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Our Feature

While Covey.town includes a map to explore full of interactive games, it lacks an incentive system for said games and customization of the user experience. As a part of our feature, games now award players coins upon winning. These coins can be spent at our pet shop area, run by Pixel the cat, to adopt a variety of pets. Users can then equip their pets in our inventory area. The most expensive pets come with unique accessories and faster speed boosts. Equipped pets follow their owner around the map, and will randomly react with one of five emotions when clicked on by any user.

Demo & Source

Demo Site: <https://spring24-project-206.onrender.com/>
Code: <https://github.com/neu-cs4530/spring24-project-206>

Our Technology Stack & Design

Our pet shop and inventory areas follow the pattern of other interactable areas in the existing Covey.town codebase, and were placed onto map as an "object" through Tiled, a map editor. The pet shop and inventory user interfaces are built using a React/Chakra modal to display when the user enters each respective area. Our databases in MongoDB store our pet catalog for the shop, players' pets, and players' currencies. We used the DAO model pattern and Mongoose to access and update this data through HTTP Axios request endpoints handled by Express. Once equipped, pets are placed onto the map as a Phaser sprite, and pet emotes are randomized and rendered upon clicking pet sprites. Pets and pet emotes follow a similar MVC pattern to players and emit socket.io events to sync all user clients. Our leaderboards were added to the existing React UI sidebar.

Our continuous integration pipeline runs an automated test suite on the frontend and backend components, and then deploys the site using Heroku and Render.

All assets were created by Jessica Shang.

Future Work

Future work could explore further pet interactions, such as pets reacting to other pets and players within a certain distance or reacting within the inventory UI. Animations could also be created for all pet sprites to make pet movement on the map smoother. Future work could also include decoupling accessories from pets so that an accessory could be equipped onto any pet rather than accessorized pets existing as separate catalog options. We could also explore other perks to equipping pets beyond speed boosts, such as advantages in games.



Pet Shop User Interface



Inventory User Interface



Pet Shop area and Inventory area



Interaction: Pet Emotes



Pet Sprites



Pet Emote Sprites