# COVEYCREATURES

## FEATURE OVERVIEW

Our feature addresses a perceived current drawback in Covey.Town, where users lack the ability to purchase items and personalize their avatars due to the absence of a currency system, shops, and customizable options. By introducing a currency system and pet shop, users will be empowered to enhance their Covey.Town experience in many ways.

Users will have the ability to earn coins through playing games like Connect Four or Tic-Tac-Toe. The higher a user's win streak, the more coins they win per game. This creates an engaging element in the game platform that adds incentive for users to interact with others. In the pet shops, users can spend their earned coins to obtain virtual pets with different effects, speeds, and price ranges. They can buy as many pets as they want and walk around with one at a time.They can also sell their pets back to the shop for a discounted price. This allows for personalization options and enhances the overall customization of user avatars. All user data is persisted between logins.

## TECH STACK & DESIGN

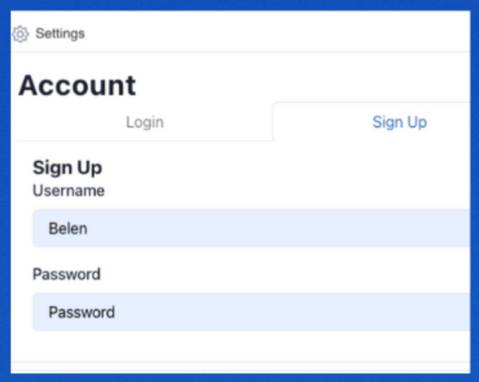
We implemented the covey creatures feature in the existing covey.town codebase. When a user wins games, the backend updates our Mongoose database then notify the frontend through the existing event emitter that they need to fetch updated information. When notified, the inventory and currency display - React components with Chakra UI styling - use an internal api we set up that relies on Express to get updated info. Each pet shop area is represented as an "object" in the tilemap, which can be easily manipulated using the map editor, "Tiled." These objects are dynamically constructed when the map is loaded, and rendered on the screen by Phaser. When a player enters a pet shop area, a message is displayed inviting them to buy or sell pets, which happens through a React/Chakra modal. The purchasing and selling is tracked with our internal api setup, which allows us to make frontend calls to our Mongoose database that exists in the backend. When a pet is walked, the backend is notified and the Phaser sprite in the frontend is dynamically updated.

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

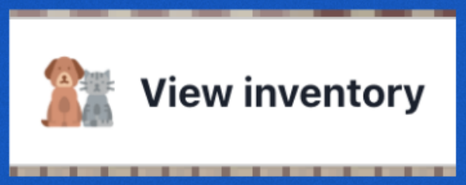
## FUTURE WORK

Some of the functionality we would like to add in the future include: adding more effects for pets, adding different ways to get them (through treats), adding a game in the pet shop that involves a user and their pet, being able to change a username or pet name, and being able to buy and sell other items besides pets. Due to time constraints, we were unable to implement these features, but we belive they would enhance our work.

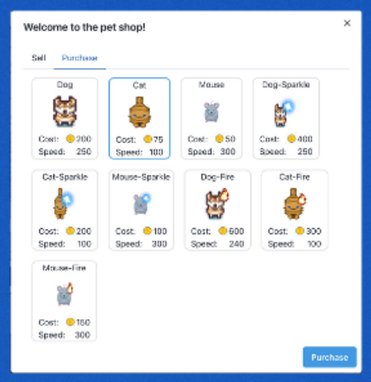
## IMAGES













### CS 4530 GROUP 505

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### SOURCE LINK

https://github.com/neu-cs4530/spring24-project-team-505

### DEMO LINK

https://spring24-project-team-505.onrender.com