

CS4530 Final Project - Vehicles

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OUR FEATURE: VEHICLES

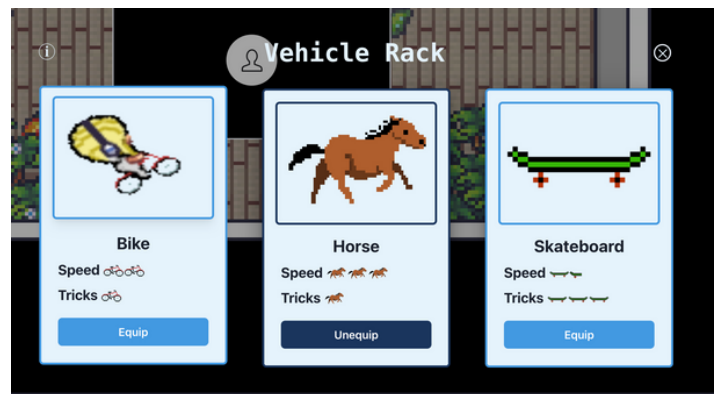
Our group thought that the movement in Covey.Town was clunky and slow so we decided to introduce the ability for players to equip 3 different types of vehicles at a specified rack: skateboards, bikes, and horses, all with different speeds. Not only did we want users to move around the map faster, but we also wanted to introduce a new activity tied to their vehicles. For this, we built a new vehicle trick game area, where users play a typing-based game and can see their player do tricks when they score points.



The vehicle trick word-typing game

FUTURE WORK

Since we implemented vehicles as an interface, future work could entail adding additional vehicles to Covey.Town to make it an even more enjoyable experience for users. It may be worth investigating more efficient ways to add trick animations than doing it by hand. Also, adding the ability for users to customize their vehicles (color, speed, etc.) would overall create a more unique experience, and would be beneficial to have in Covey.Town.



The vehicle rack

TECH STACK & DESIGN

We implemented our feature on top of the existing Covey.Town codebase. We utilized existing interfaces and classes since we represented our vehicle rack as a new type of `InteractableArea`, and our vehicle trick game as a new type of `Game` and `GameArea`. For our vehicles, we created a new `Vehicle` interface with speed multiplier and vehicle type fields. This was good design since this allowed flexibility in creating many different types of vehicles that players could equip. The speed multiplier was used to adjust the user's speed, and the vehicle type was used to map to different sprite objects to display on the map. Finally, we added a new vehicle field to `Player` and `PlayerController` to easily associate players with vehicles when they have them equipped.

DEMO & SOURCE



[DEMO SITE](#)



[SOURCE CODE](#)



SKATEBOARD



HORSE



BIKE