

COVEY.PHOTO

CS4530 Final Project

Group 303

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Our Feature

Covey.Town lacks a shareable and non-temporary form of self expression for its players. Players can only interact if both users are logged into the town at the same time and there is no uniqueness to each character, which makes it impossible for players to interact with each other on the basis of common interests or styles.

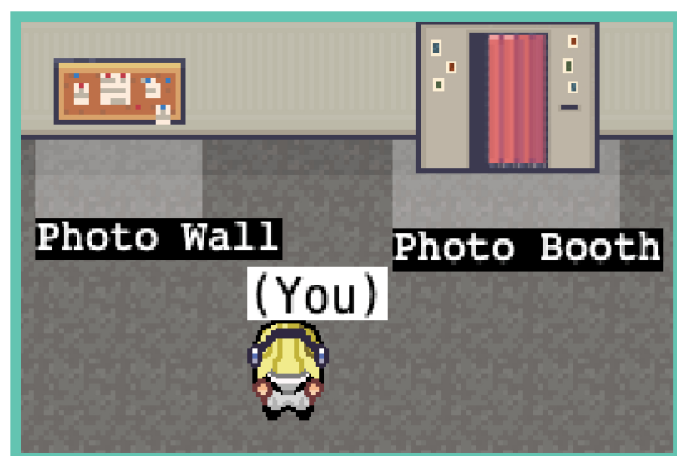
To solve this, we designed Covey.Photo, a virtual photobooth. When a player joins the Photo Studio in the town, they are able to view themselves in a photo preview screen, customize their outfit/background, and take a picture by themselves or with others. If there are multiple players in the studio, the first player to enter is assigned as the "photo owner" and is in control of the background and taking the photograph, but all players can choose their own props for their character, which is labeled in the preview image. Once the picture is taken, it is posted to a Photo Wall, where it can be viewed, liked, or commented on by other players. When a player's photographs are posted or engaged with, they receive a digital currency that can be used to buy more props in the studio and grow their collection!



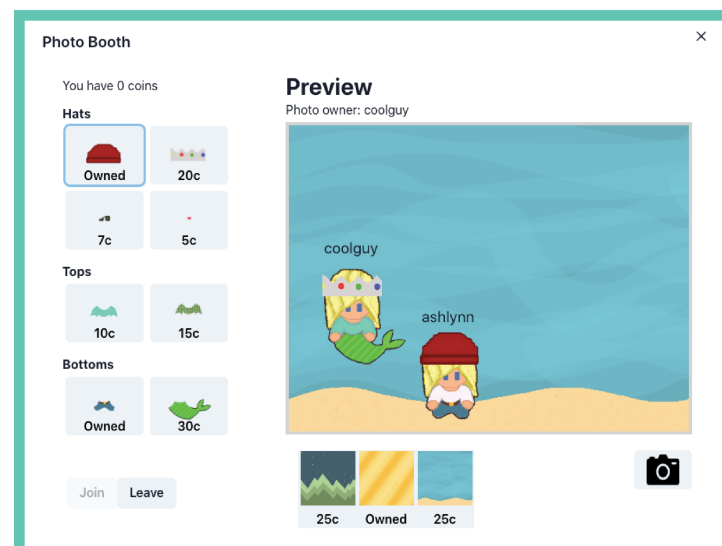
Demo and Souce

Demo site: <https://spring24-project-team-303.onrender.com/>

Code: <https://github.com/neu-cs4530/spring24-project-team-303>



A player can interact with the Photo Booth and Photo Wall inside of the town.



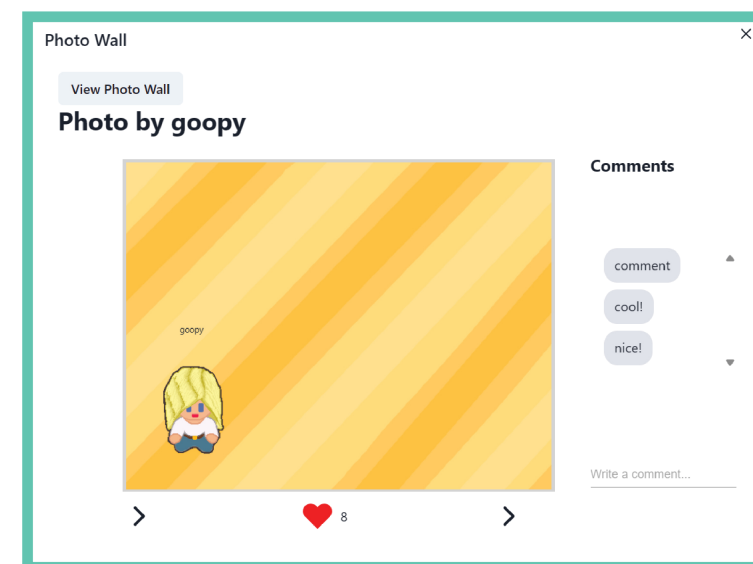
In the studio, they can add props and a background and take a photo with their friends!

Technology Stack and Design

We implemented Covey.Photo's studio and wall features as new InteractableAreas: PhotoBoothWall and PhotoBoothStudio, following the MVC architecture of other interactable areas in the town, and displayed the areas as objects within the existing Covey.Town tilemap. When a player enters the studio or wall area, they will see a React/Chakra modal popup containing buttons that can be used to take a photo or interact with an existing photo, which sends commands to our backend through the PhotoBoothWall/PhotoBoothStudio controllers. We created a DBClient and a Postgres database to store information about each photograph when it is taken and store each player's login, currency, and prop inventory. We then use this stored information to construct our photographs in the wall and maintain state for players between sessions. Our pipeline runs an automated Jest test suite on the frontend and backend components and deploys the site using Heroku and Netlify.

Future Work

While we were able to implement our minimum viable product and desirable features, there are a few modifications that we would have liked to implement to make our photo booth more user friendly, such as a purchase confirmation popup and a wider variety of prop options. We also wanted to add a trading tool to trade outfits with other players and hoped to allow players to wear their props at all times in the town, which would help with our goal of increased interaction.



In the photo wall, they can view photos by other players and interact with them!

