

# CSI3140 Project Winter 2022

Name TBD

## Student Information

Rocio Ferreiro Rico - 300271563

Mohamed Farah - 300147409

## Project outline

### Vision

The purpose of this project is to create a platform that can allow users to collect, buy and potentially sell collectibles.

### Introduction

This project has been inspired by the growing trend of NFTs. While the digital collectibles in the app are not real NFTs (not stored on a blockchain), they follow the idea that they are units of data in a form of digital ledger. The collectibles will be either a picture in PNG format, or a 3D model.

### Target User

- People that want to buy digital collectibles and collect them.

### Design

This web application will have a total of 4 pages users can use to interact with it.

- First page (Main menu) contains information about upcoming/current drops. Each drop is a limited amount of digital collectibles that are available to buy at an exact timeframe. A drop is over when it is sold out. It includes a search bar to find specific drops.
- Second page (Drop) can be accessed when clicking a collectible. It gives specific information such as the remaining time for the drop, the ability to view the collectible in high detail, the price in coins, the rarity (common, uncommon, rare, ultra-rare) and the quantity. There is a Buy Now button that is greyed out until the drop is live. Once bought, the user will be notified if the purchase is successful or not.
- Third page (Profile) can be opened from the top right corner of any page. The corner has a slider that has menus such as profile and market. If the user is logged in. It shows profile information such as the username, email address, and the collectibles owned. If a user clicks a collectible, they have the option to share it. They have the option to log out

from that page.

**Scope Extension Idea:** Users can add bio information to their profile, and can be viewed by everyone.

- **Scope Extension Idea:** Fourth page (Market), shows a list of collectibles that are in sale by users. Once bought by another user, they receive the collectible. A market listing can be canceled. The market is accessed from the corner of any page. There is a search bar and a filter to list items from a price range, sort by price, rarity, etc.

## Implementation

In this section some aspects about the implementation are listed.

- The admin running the server has the option to add a drop with the necessary details from the console.

**Scope Extension Idea:** Ban a user, increase user coins.

- The Google OAuth 2.0 API will be used to validate user authentication.
- The Wikipedia API will be used to provide information about the collectibles and their fandom.
- PostgreSQL will be used as a database. The database will collect information about the users, drops and collectibles.