Numislist: A Coin Collecting, Sharing and Trading Platform

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Introduction

Numismatics, the hobby of coin collecting, endures as one of the oldest and most popular collecting hobbies, but unfortunately, it hasn't yet caught up with modern technology. Many collectors still turn to pen and paper to catalog their collections and coins they still need to complete sets. Existing electronic collection tracking solutions are woefully inadequate for many meticulous collectors, many of whom own thousands of coins.
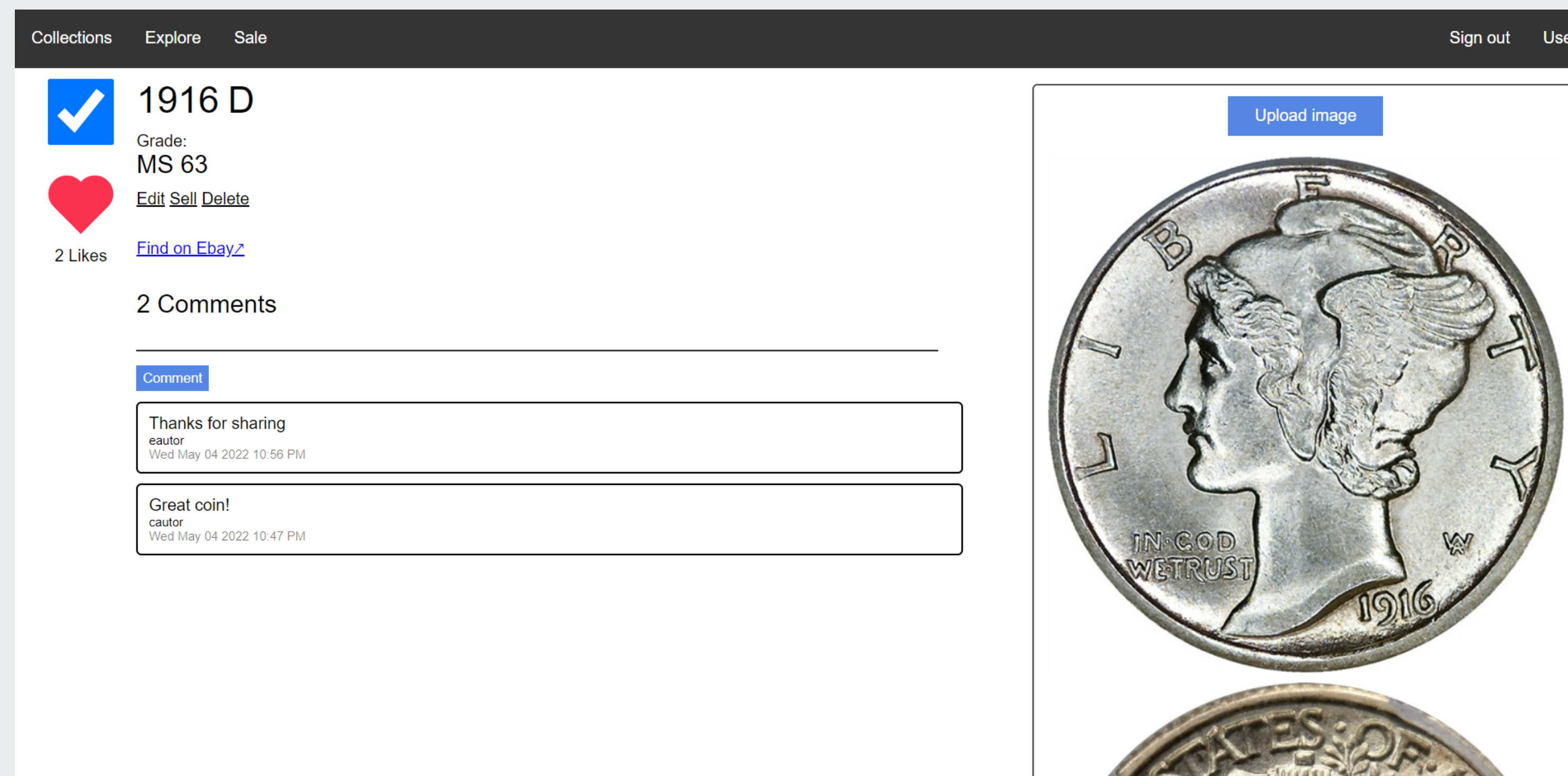
Motivation

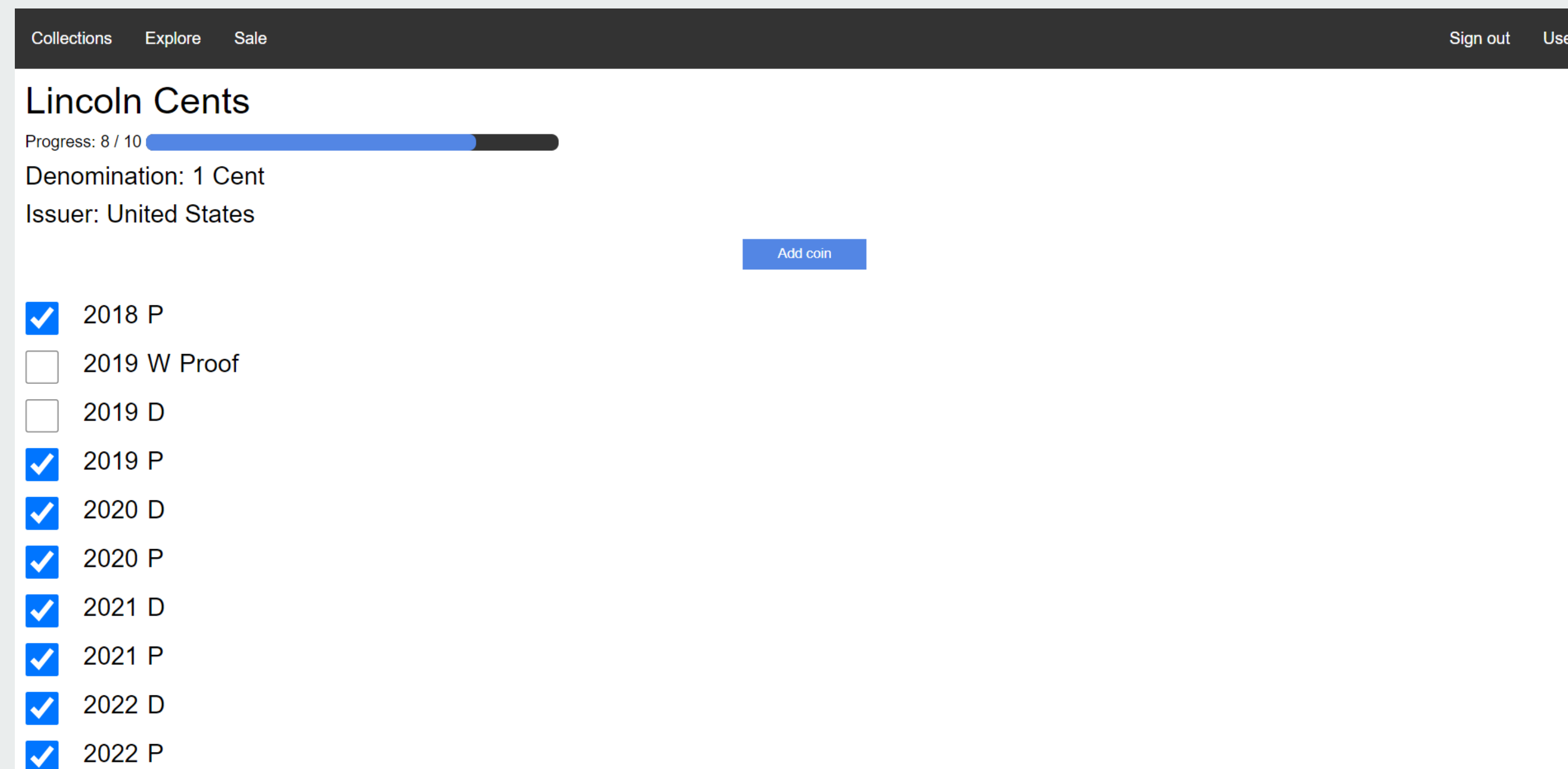Drawbacks of existing paper-based and digital coin collection approaches include:
- Inflexibility information storage
- Time consuming to catalog
- Lack of social features and image storage
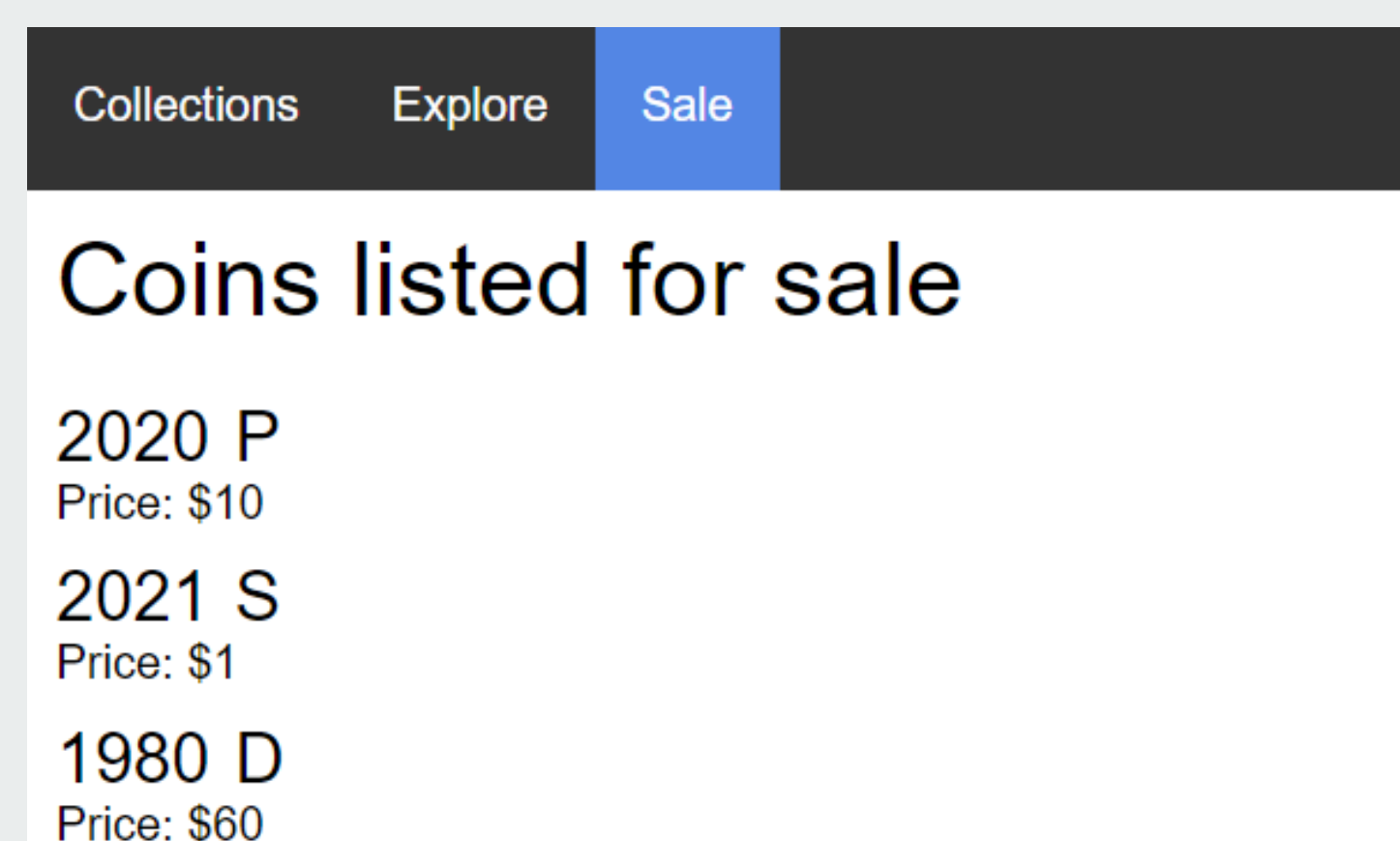- Tied to a single platform/device

App Features

- Secure account access from any device
- Collection tracking with the ability to store multiple collections
- Copy other public collections as a template or create your own from scratch
- Build collections and catalog coins with ease
- Track attributes such as: date, mint mark, attributes, special notes, or grade
- Upload and display images of your coins
- Sale page shows coins listed for sale
- Direct message to make an offer on coins for sale
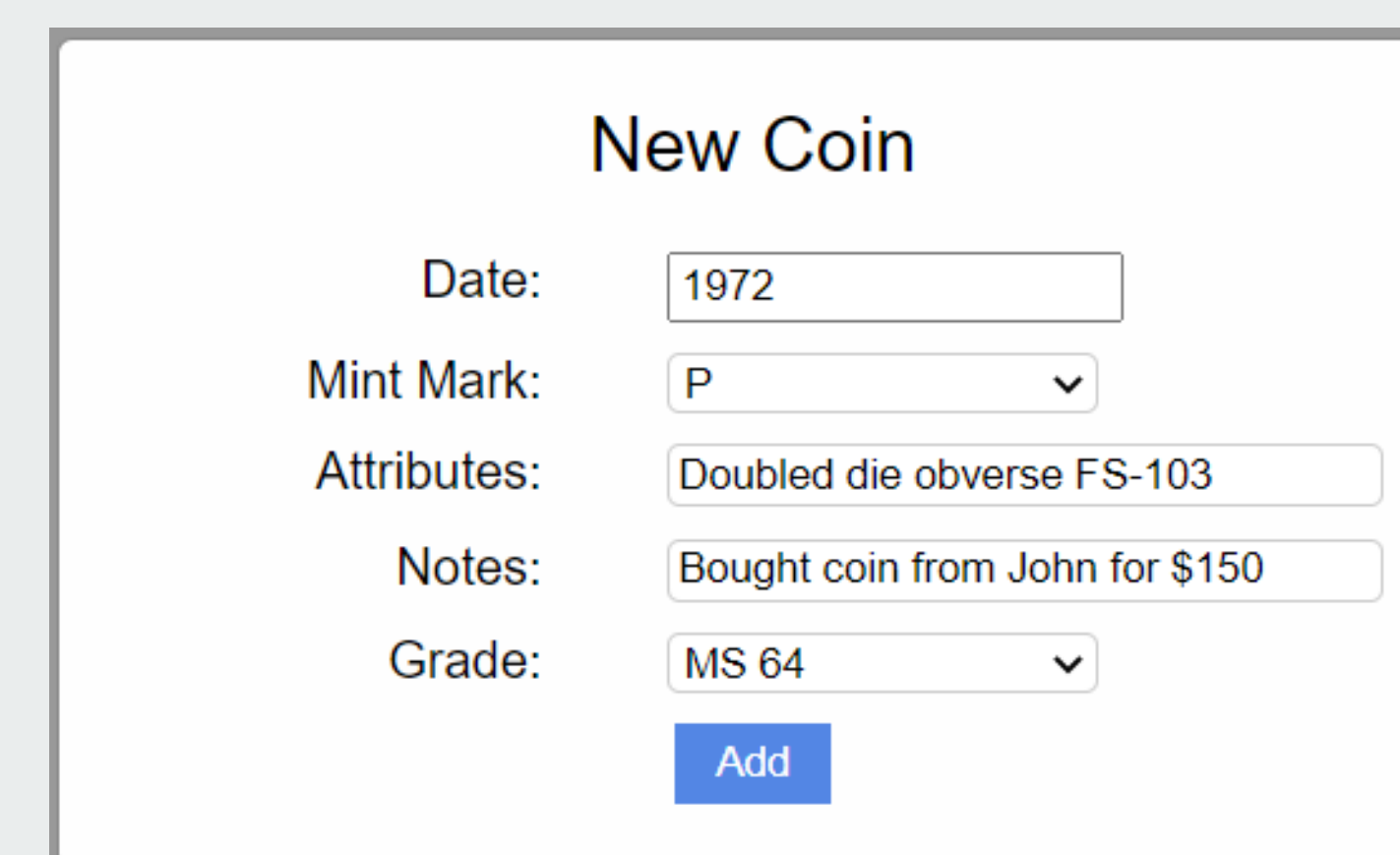- Like and comment on publicly listed coins

Coin page

Collection page

Sale page

Modal for adding coins

Technology Used

- Security: Spring security with JSON web tokens and Ember simple auth
- Database: MySQL
- Back end: Java Spring Boot
- Front end: Ember JS
  - Raw HTML
  - Raw CSS

Future Directions

Future objectives for this project include:
- Improve application security and error resilience
- Add a feature to show collection progress history using existing stored timestamps
- Add search filters for coins in explore, sale, and collections pages by date range, mint mark, denomination, and grade
- Deploy and publicly host Numislist so collectors can utilize it

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