

# PopVault



Hannah Shane | Huntington University | CS 415 Database Management – Fall 2025 - Final Project

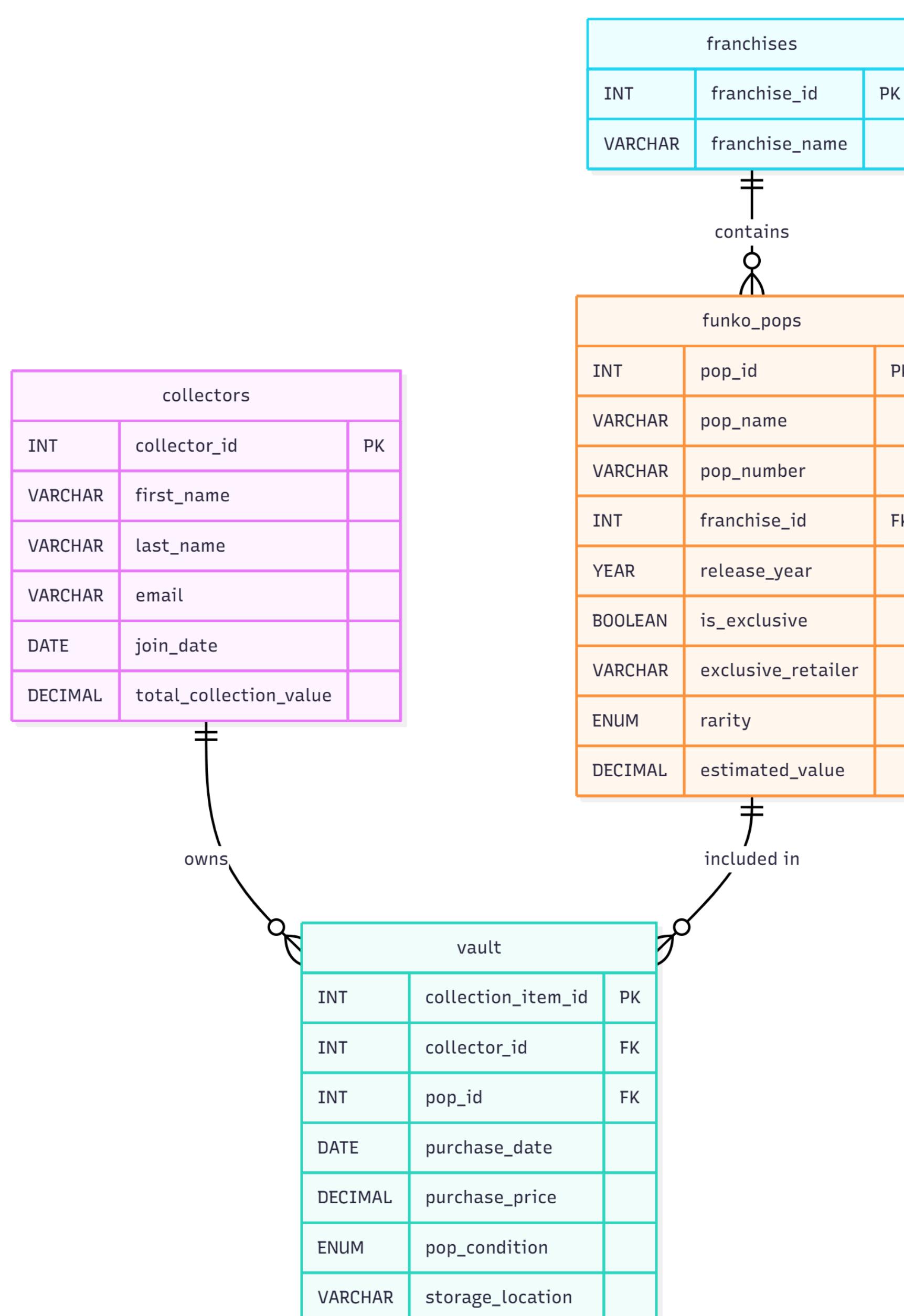
## Overview

- This is a personal database. It focuses on individual usage rather than a whole company.
- A user will create profile and add existing Funko Pops with purchase details and storage locations.
- When shopping the user can pull up their database and look at their vault.
- User can track total collection and value. Along with easy access to any Funko Pop.

## Design

- Separated franchises into own table to avoid repeating "Marvel" 100+ times (3NF)
- Vault table links collectors to pops - allows multiple people to own same pop without duplication
- Used ENUM types for categorical data (rarity, condition) to enforce data consistency and prevent typos. Takes less storage than VARCHAR.

## ER Model



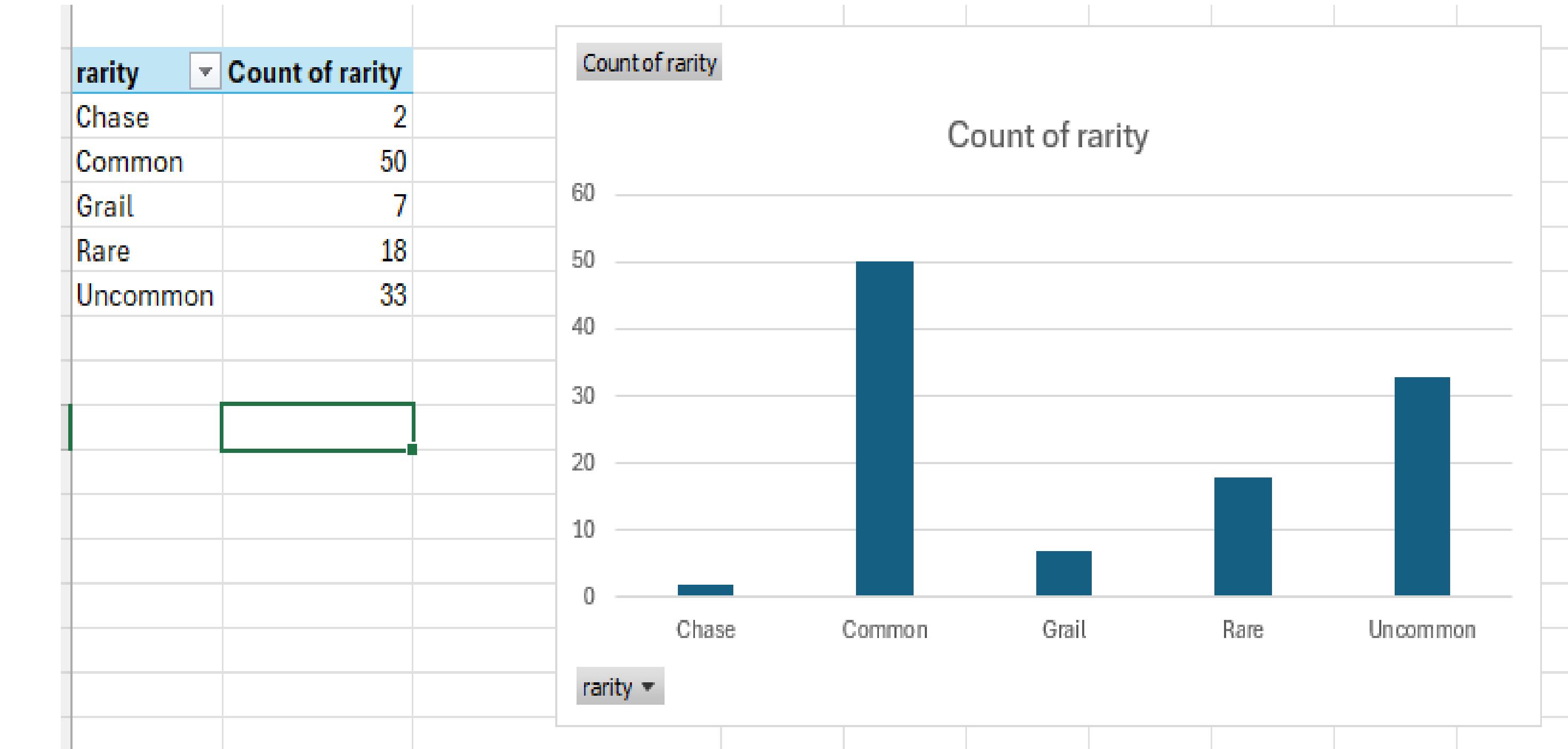
## Data

- Collectors table data: Includes first name, last name, email addresses, join dates ranging from 2018-2024
- Franchise table data: Holds popular entertainment franchises across multiple categories from real life to animated.
- Funko Pop table data: Each pop includes name, box number, release year (2010-2022), and estimated value. Also holds the rarity from common to grail.
- Vault table data: Includes purchase dates (2018-2024), purchase prices, condition ratings, and storage location.

## Queries

- Show all Marvel Funko Pops -**  
`SELECT pop_name, estimated_value  
FROM funko_pops  
WHERE franchise_id = 1;`
- Show all collectors -**  
`SELECT first_name, last_name FROM collectors;`
- Top 5 most expensive Funko Pops -**  
`SELECT pop_name, estimated_value  
FROM funko_pops  
ORDER BY estimated_value DESC  
LIMIT 5;`
- Find Funko Pops released in a specific year -**  
`SELECT pop_name, franchise_id, release_year  
FROM funko_pops  
WHERE release_year = 2020;`
- Find the top 5 oldest Funko Pops -**  
`SELECT pop_name, release_year, estimated_value  
FROM funko_pops  
ORDER BY release_year ASC  
LIMIT 5;`

## Reports



- Pivot table with the exact numbers of Funko Pop rarity.
- 75% of the catalog is accessible
- Understand rarity

## Future Work

- Connect mobile app to local MariaDB over Wi-Fi using computer's IP.
- Business Route: Partner with comic bookstores to offer an inventory management system.
- Adapt PopVault for retail use by tracking store inventory instead of personal collections.
- Resolves small/local owned comic store issues
- Example: Messy Inventory or Overordering/Underordering

## Works Cited