Card Collecting App

Team 20

Card Collector App

Features

- Track collected cards
- Sorting feature (By set, cost, etc)
- Custom binders
- Feature to show rarity of all cards that can be collected
- Offline battle, pokemon showdown animations maybe
- Social aspect ??
- Table Top Simulator layout

Database?

Need a database so user doesn't have to manually enter card info.

- https://pokemontcg.io/
  - Is it free? Can only fetch images and text
  - pokemon cards
- Could create our own DB worst case... JSON?
- https://developer.tcgplayer.com/
  - live market pricing of cards

Potential Hurdles

- Requesting access to the pokemon API to get access to the card rarities.
- Creating a pvp game out of the pokemon cards along with animations.
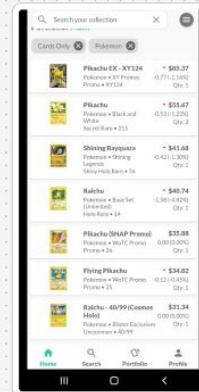- Conflicting time's make implementing features a lot slower.

Competition

- Pokemon TCG
- pokemon go
- Pokemon Showdown
- Collectr
- Dex
- CollX
- Pokemon TCG Pocket

Statement of Purpose

We are aiming to create an app for managing real Pokémon collections, with the appearance and interactions of a real card binder.

To do this, our app will be both collector and trader focused, having features useful to both demographics.

User Stories

User	Story (As a _ I want to _ so that I can _).
Flexer Felix	As a Pokemon card enthusiast I want to use this app so that I can flex my cards on my friends.
Reseller Ryan	As a reseller I want to see the prices of cards so that I can sell my cards for a lot of money.
Nostalgic Nancy	As a nostalgic card collector I want to see my cards displayed in all their glory so that I can cry happy tears.
Handsome Henry	As a pokemon trainer, I want to use this app so that I can see what other pokemon's are missing on my collection.
Professor Powell	As a gamer, I want something similar to clash royale
Collector Connor	As a collector of sets, I want to see the cards I have organized by set so that I can get a better sense of the cards I am missing.

alamy - HHD4G2

Reseller Ryan

I'm Reseller Ryan and I can easily sell my cards on eBay. However I'm overwhelmed by the size of my collection and have a hard time keeping track of the value of my 10000 cards that constantly fluctuate in value. I need this app to show me my most valuable cards at any point in time so I know what to sell next.

Casual Caleb

I'm Casual Caleb and my goal is to finish my Pokémon collection. Binders would usually work for me but looking through all my binders takes time and effort and I just prefer it to be online. I need this app to show me sets and my progress to completion.

Collector Connor

I'm Cowector Connew! I wuv Pokémon and have cowected cards since I was a wittew kid. I hode a wot of seminental vawew to cards and want to keep track of awww of my pwecious pwecious Pokémon cards, like my Pikachu!

I wanna sort and organize my favorite cards and have a wishlist function to mark cards I want to collect in the future so that I can show off and manage my awesome collection.

Photo: Evan Agostini

A New Pokémon Card Enthusiast – Yuki

I'm Yuki. I recently got into Pokémon cards after seeing some cool ones from friends. I don't have much experience but I'm really excited to build my own collection!

But…

I might get confused with all the cards that I haven't collected yet or the ones that I already have. So I could definitely use a simple collector app to help me stay on track :)

That said, I think I want an app that helps me organize my growing collection without getting overwhelmed. Ideally, it would be great if it tells me which cards are rare and gives me info like that!
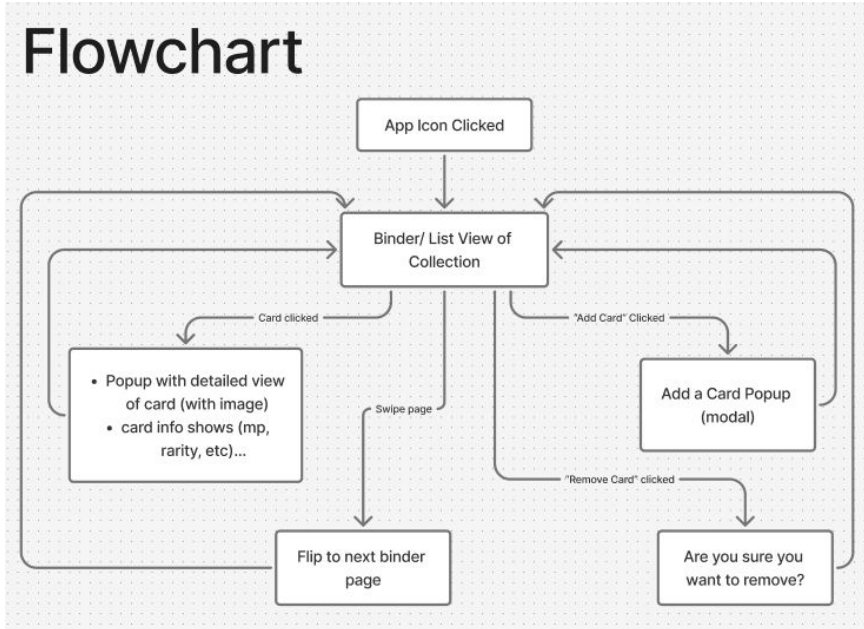
Risks / Rabbit Holes

- Inputting card information
    - Manually inputting cards might be challenging since there is about 17,000 total cards
    - May have to rely heavily on API (may not be up to date)

- Implementing visuals for cards may be harder than in it looks
    - How to implement menus/ popups?
    - The logic for flipping pages could be hard to organize in code

- Making it responsive for mobile could be a big challenge
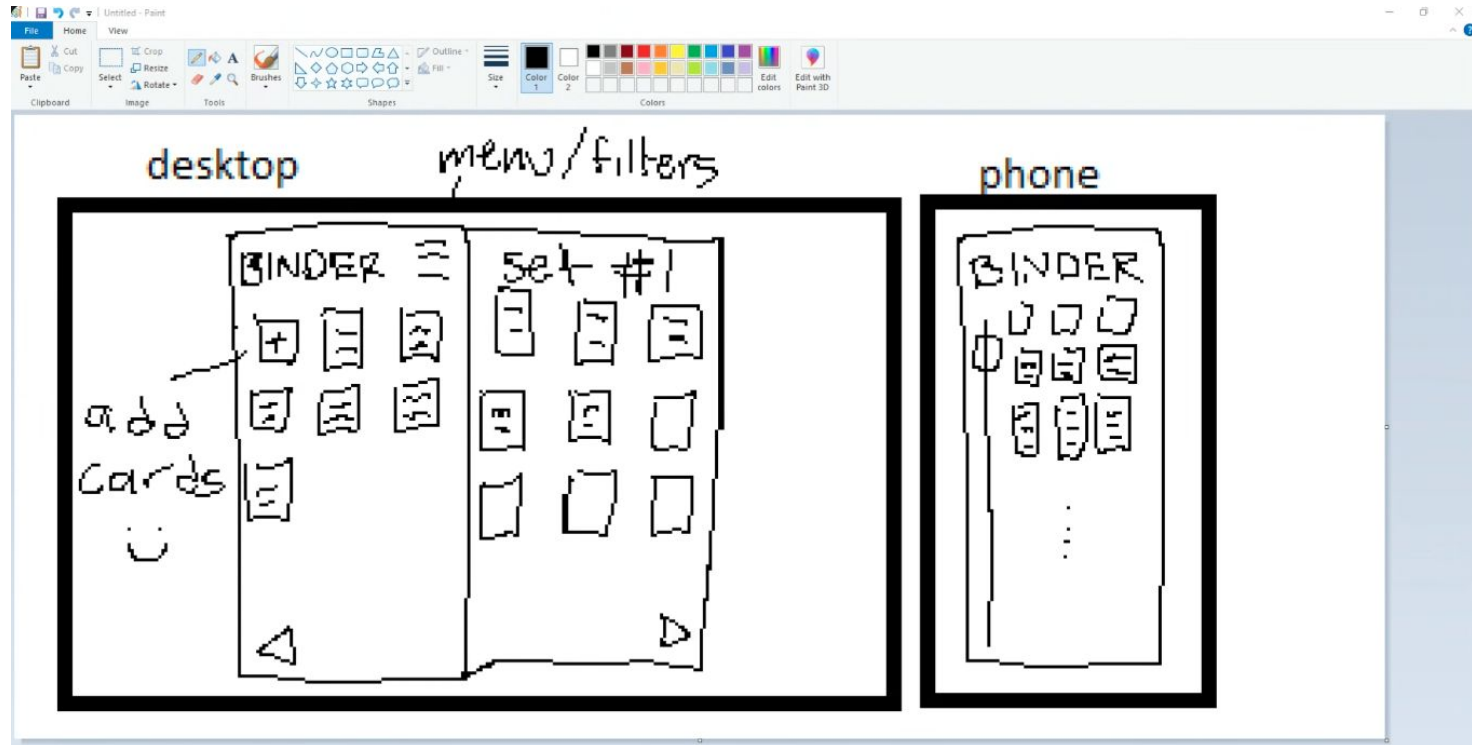   - Finger swipes, hold to right click, etc.

System Diagram

Flowchart

App Icon Clicked

Binder/ List View of Collection

Card clicked → Popup with detailed view of card (with image) • card info shows (mp, rarity, etc)...

Swipe page → Flip to next binder page

"Add Card" Clicked → Add a Card Popup (modal)

"Remove Card" clicked → Are you sure you want to remove?

Minimum necessary interactions to implement app.

- After this implemented, can weigh and begin next features

Wireframe

Dream Features

Virtual Pack Opening

- Choose from various sets to open packs
- Each card has a certain rarity
- Fill out a virtual "Pokédex"
- Art inspect functionality

Physical Camera Scan

- Use phone camera to scan physical cards
- Add capability to read text and art from card
- Add grading (PSA, BGS, etc.) if included

Other card types/brands

- Extend functionality beyond Pokémon
- Sports cards (NBA, MLB, NFL, etc.)
- Game cards (Magic: The Gathering, Yu-Gi-Oh, etc.)