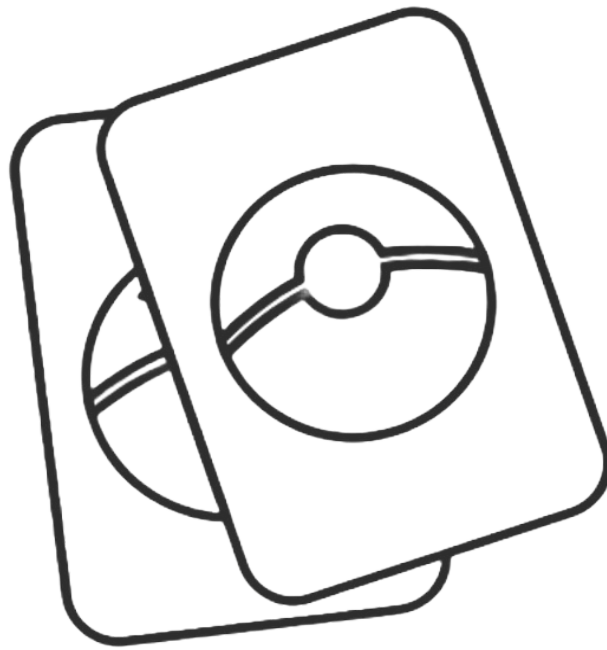


Pokebros

Software Requirements Specification



CSCE 247: Software Engineering

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1. Introduction

Purpose

Pokemon card collecting is a worldwide phenomenon for people of all ages. Since its inception, over 53 billion Pokemon cards have been sold. However, with more than 13,000 unique cards, keeping track of one's card collection can be an ordeal. We want to create a digital interface for Pokemon card collecting and exchange. Our app will allow for direct comparison of cards and their monetary values, exchange between users, and the number of cards one has in their collection compared to the number of total cards that exist. The primary intended audience of our app is collectors who are interested in participating in the secondary Pokemon card resale market. Our app will display relevant market metrics for each card, as well as facilitate exchange between individual users.

Source: <https://www.yourplaymat.com/blogs/tcg-players-blog/how-many-pokemon-cards-are-there>
Source: <https://corporate.pokemon.co.jp/en/aboutus/figures/>

Scope

This document will cover:


- The personas of potential users and stakeholders invested in this project.
- Any constraints that have been applied to this project.
- A competitive analysis outlining the purpose and competition in the Pokemon digital space.

2. Stakeholders

- Pokemon card collectors
 - Hobbyists
 - Competitive players
- Profit-seeking secondary market participants
- Curious Pokemon fans
- Already Existing Pokemon digital interfaces
 - Market Competition
 - Users

Personas

About



Kaylin Thompson

Age 25

Location Philadelphia, PA

Occupation Education




Status Single

Quotes

"The roots of education are bitter, but the fruit is sweet."

"The more that you read, the more things you will know. The more that you learn, the more places you'll go."

Brand logos



Bio

Lives in a small, single bedroom apartment in the city, and works at a school close by as an elementary school teacher. She loves to walk her dog to the local coffee shops around, and interacting with the people she meets there. She is an avid collector of coffee mugs, always looking for new ones when she goes out. After a long day, she goes back to her roots and reads a good book or puts on a good show on the TV.

Wants and needs

Finding new places to walk with her dog

Finishing work quickly in order to have free time

Something to collect that's not going to hurt her bank account

Frustrations

Spending too much time on a job with no future

Not having time to walk her dog in the day

When she is not taken seriously because of her age

Personality

Extraversion

Creativity

Independence

Ambition

Motivations

Incentive


Social

Growth

Fear

Kaylin Thompson is a twenty-five-year-old elementary school teacher. She has a young spirit and tries to stay in touch with her inner child. She might be interested in using this app as a hobbyist looking to keep track of her Pokemon card collection.

About



Preston Wellington

Age 29

Location Greenville, SC

Occupation Computer Science




Status Married

Quotes

"Simplicity, carried to the extreme, becomes elegance."

"Any fool can write code that a computer can understand. Good programmers write code that humans can understand."

Brand logos

Bio

Lives in a 2 story home with his wife and his toddler son. His passion is computer science and works for a large game company as their lead developer. His biggest project was working on an app that released on the App Store. In his little free time he loves to play old video games such as Pokemon or The Legend of Zelda. He doesn't have much of a social life due to his job, family, and hobby.

Wants and needs

Time to spend with his wife and son

Making great programs that solve problems

Finding games to play that he enjoys

Frustrations

Not having time to spend with his family due to work

When people don't get work done by the deadline

Being put in sudden social situations

Personality

Extraversion

Creativity

Independence

Ambition

Motivations

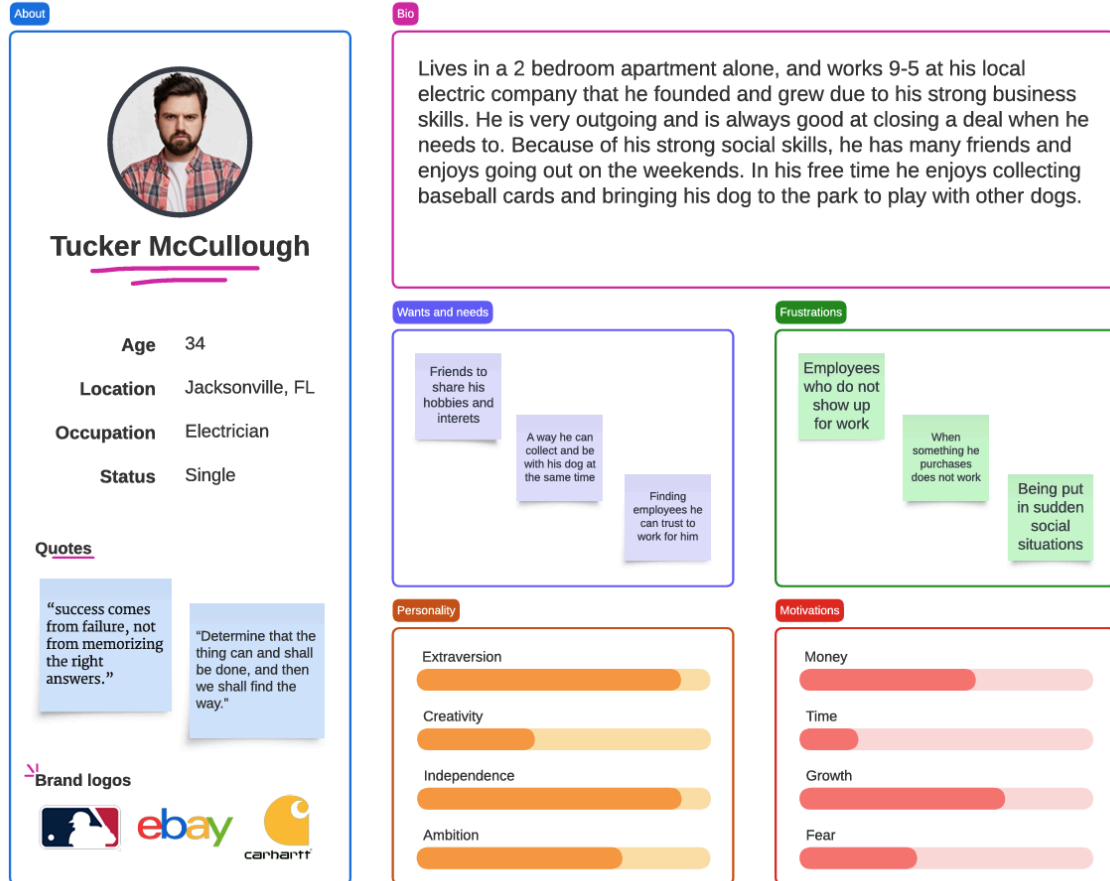
Money

Time

Growth

Fear

Preston Wellington is a twenty-nine-year-old young professional. He spends a lot of time alone and has an interest in passively reselling Pokemon cards to make a profit. As a developer interested in solution-oriented programs, he would be interested in using this app to keep track of his card collection along with finding up-to-date information on the market value and interest of his specific cards.



Tucker McCullough is a thirty-four-year-old electrician. He is more of a hobbyist user who has retained an interest in Pokemon from childhood. He has a casual card collection which he likes to use to impress his friends and show off. He likes to spend time reading about Pokemon online if he has spare time at work. He would be interested in using this app to keep track of his collection and easily see which cards he is missing.

3. Constraints

Time Constraints

- This project is to be completed within the semester

Monetary Constraints

- This project's development has been allocated a budget of \$0.

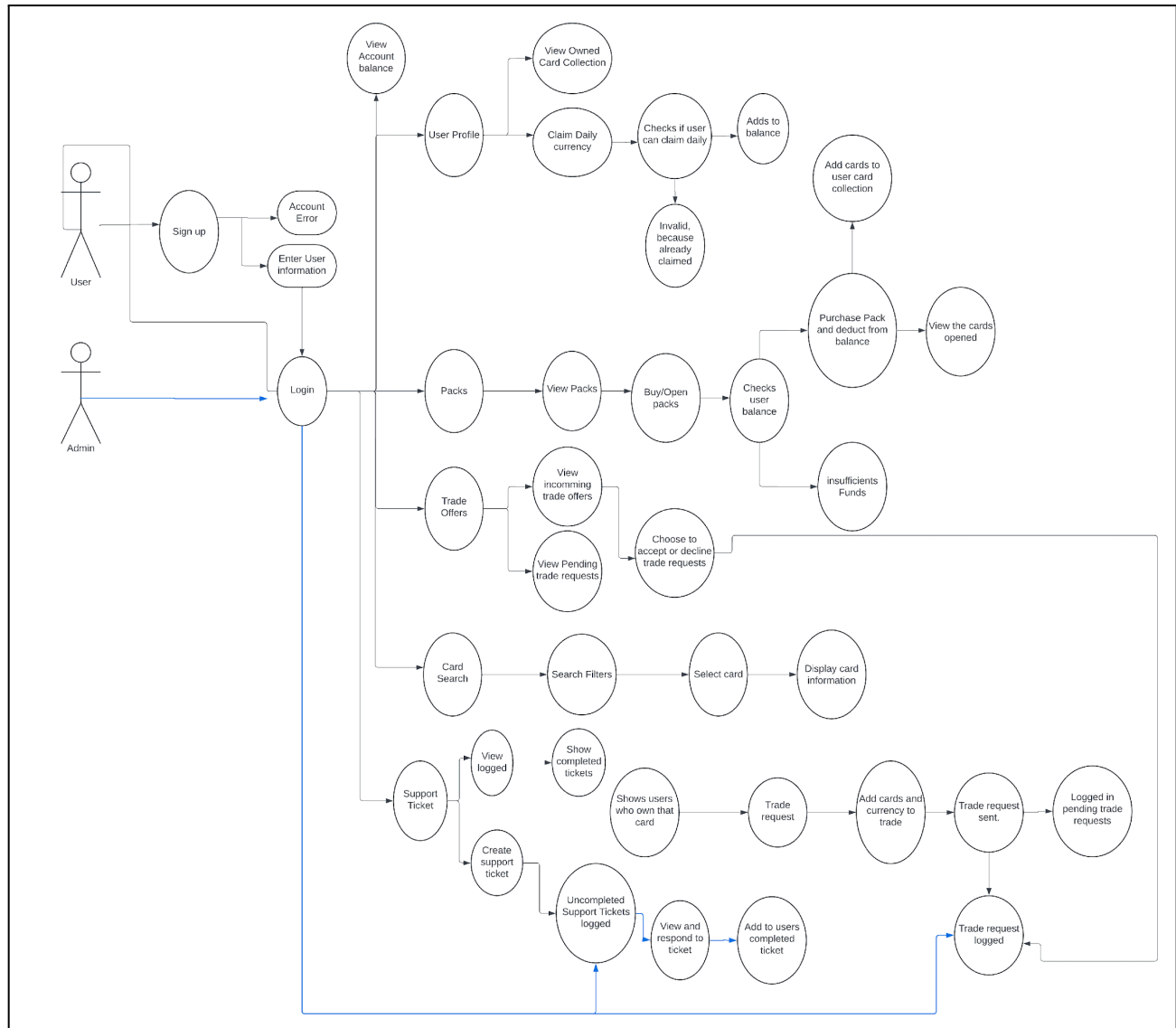
Technical Constraints

- The code must be done in Java, and maintain consistency.
- The website must be accessible offer a responsive design, and provide seamless accessibility on various devices including PCs, laptops, and mobile devices.
- Code should prioritize readability and maintainability, with comprehensive comments and documentation.
- Security protocols must be implemented to protect users.

4. Overall Description

This app must be accessible to those who wish to collect Pokémon cards. Users should be able to access this platform from their mobile devices and computers. Users should also be able to create their accounts to keep up with their cards and to view and look at other people's cards. This website will feature a virtual space where users can buy, sell, and trade their Pokémon cards with each other. Each card will be categorized by rarity, allowing users to sort and filter the collection based on their needs.

5. Business Use Cases



6. Functional Requirements

[Requirements Spreadsheet](#)

7. Non-Functional Requirements

Design Feature

- Available on mobile devices

Look and Feel Requirements

- The user interface of the system shall be implemented in a way for the beginner

users need to be able to interpret what they are looking at.

Usability Requirements

- The system shall be used by users with a very basic knowledge of what a pokemon card is and the interface of their device

Performance Requirements

- The system shall be able to run on any device that is connected to the internet.

Maintainability and support requirements

- The system shall be able to run on Windows, Linux, and Mac systems.

Security requirements

- The user's information shall be stored securely.
- The system shall comply with all state and local laws.

9. Competitive Analysis

	TCGplayer
Strengths	<p>Easy to use and navigate through the interface. The app is designed in a marketplace style making it easy for users to post cards for sale as well as buy cards. The app is integrative as it displays to the buyer the estimated market price of the card alongside the seller's price of the card. In addition, it also gives the buyer a list of prices the card has sold for in the past.</p> <p>The app allows users to upload and store their Pokémon playing cards online in the collection section. This gives users access to their collection of cards, without having to have the physical card on hand.</p> <p>Another strength of this app is that for users selling playing cards, it is as simple as taking a picture of the physical Pokémon card.</p>
Weaknesses	<p>One downfall of this app is when searching users expect that when they enter a particular card title, the app should display only relevant cards within the Pokémon section. However, the current search feature often presents users with results outside of Pokémon. Which can be frustrating when users are trying to optimize the search to find specific cards desired.</p> <p>Additionally, the app does not accurately assess the current condition of the Pokémon cards. By not showing the actual card that is being listed for sale sellers and buyers may not get the full potential of what the card is worth.</p>
Audience/Focus	<p>The target audience for this app is individuals who are collectors, players, and sellers. The app was designed for individuals wanting to buy, sell, and trade Pokémon cards. The app allows users to connect with a large range of other card collectors which builds a community for individuals to join.</p> <p>Additionally, the app focuses on displaying the true value of the playing cards and being transparent to the buyer and the seller of the playing card.</p>

	Ebay
Strengths	<p>The website allows users to easily filter their search options by buying format, condition, and delivery options. The site additionally has a sort of filter that allows users to change how the results of the search are displayed.</p> <p>The website allows for the user to contact and speak with the buyer directly allowing any questions or concerns to be answered.</p> <p>Additionally, eBay has buyer and seller protections in place to ensure a smooth transfer of the product and ensures to the buyer that the item paid for is what was shown in the listing.</p>
Weaknesses	<p>Since the website is a marketplace that sells a wide range of products, it makes the users who are trying to buy and sell Pokémon cards spend more time traveling to the correct page and filtering through the list of available products.</p> <p>Additionally, sellers can set products to be auctioned. This is a weakness as auctioned products result in buyers paying above market value for the playing card in some instances.</p>
Audience/Focus	<p>The audience for the website is a large range of users, as the site sells various products that all attract different users. The website focuses on the consumers by giving them a wide range of tools to help refine searches and select from new, used, and certified pre-owned.</p>

	Pokechange
Strengths	<p>This website offers users a unique way to input all their owned Pokémon cards, indicating whether they are willing to trade or buy them. Allows them to create a digital collection.</p> <p>It features a competitive search engine that can be sorted through different generations and can also find each type of Pokémon rarity.</p> <p>The site rewards clients with longer-standing relationships with the company by promoting them and giving their cards recognition.</p>
Weaknesses	<p>Buying and selling on this website isn't guaranteed to yield protected and authentic results. New sellers will have a harder time entering this market because points and reputations influence buying, selling, and trading decisions.</p> <p>The general feel and layout of the website tends to be outdated and confusing. For someone simply looking to buy or sell cards, it is challenging to navigate and find the desired cards, especially because the website blocks access to the search engine until an account is created.</p>
Audience/Focus	<p>Appeals to collectors and consumers who are interested in selling and buying Pokémon cards.</p> <p>For seasoned collectors who are trying to find specific cards, the advanced search engine makes it easier for them to find exactly which card they want.</p>

Summary

	Strengths	Weaknesses	Focus
TCGplayer	+ simple +Efficient +Users collection database +Integrative +Market price of product +Previous selling prices	- Range of various playing cards - No accurate product representation - Product Searching	Collectors of various playing cards
eBay	+Large database +Easy to filter searches +Product insurance +Seller's contact information	- General marketplace (not Pokémon oriented) - Auctioned prices -No Market price -No previous sales prices	General shopping marketplace
Pokechange	+unique user collected database +advanced search options +recognizes collections	- Lack of protection - Reputation-based system - confusing, outdated interface - requires an account for search	Dedicated to collectors and traders of Pokémon cards

After conducting this competitive analysis, we've gained valuable insights into the strengths and weaknesses of similar card marketplaces. Our platform will leverage these insights by building on the strengths and avoiding the common pitfalls. We'll prioritize a user-friendly interface like TCGplayer's while ensuring accurate representation and verification of Pokémon card authenticity. Because our application will focus exclusively on Pokémon cards, we'll provide features that foster a dedicated and engaged community. Moreover, we'll incorporate innovative collection management tools, expanding on what TCGplayer and Pokechange offer. Users will be able to easily track their cards and monitor value changes through an intuitive and efficient system.