Vision and Scope Document

for

Collection$

Version 1.0 approved

Prepared by: Ronald Fairley

Jeremy Box

Lee Adlaf

Kuni Scissum

Team 2

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Revision History

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| **Name** | **Date** | **Reason For Changes** | **Version** |
| Original | 10/8/2013 | Original Documentation | 1.0.0 |
| Revision 1 | 10/22/2013 | Added scope for user authentication and vision for future development. | 1.0.1 |

# Business Requirements

## Background

Almost everything is collectable to someone, but it can be difficult to keep up with your collection. The Collection$ software application is a tool designed to improve your knowledge and organization of the things you enjoy in life.

## Business Opportunity

Since nearly everyone collects something, and the Collection$ software tool can adapt to nearly any type of collection, the customer base for this product will potentially include everyone who owns a smart phone. If you can afford a smart phone, you probably purchased the smart phone to help you enjoy a particular hobby, and this software tool is directly focused on that goal. This software tool will prove to be an argument for owning a smart phone, and desire for Collection$ software package will grow as its true potential is realized.

## Business Objectives and Success Criteria

Within three months of the initial release of the Android-based application, the next software roll-out will include a Collection$ software application that can run on tablets and laptops. Later releases will include both PC and Apple based devices as well as web applications. Being on the initial startup of this project will be advantageous in helping direct the rollout process and guiding developers and testers in the proper market direction.

Revenues for the product will be generated from a per-use subscription after an initial trial period.

## Customer or Market Needs

Collection$ customers will save valuable time and money by using this software package to track and digest their favorite hobby. It is easy to lose track of time while searching for information about a particular item that you have collected or are considering for purchase. Having Collection$ application on your smart phone will allow you to quickly identify your need for an item and help determine its value based on comparable market analysis.

## Business Risks

A major risk for this endeavor will be user acceptance of this application on their smartphone. This risk will be mitigated by having an initial free trial period to ensure a market base of happy customers who want to use the application. After customers install and confirm the application on their smartphones, the usefulness of the Collection$ application will have already proven itself and customers will be willing to pay a small fee to gain access to this powerful organizational tool. Keeping the monthly cost low should reduce the need for competing applications. It will be up to the business leaders and developers to follow customer feedback and make adjustments to meet customer needs.

At the core of this application is image recognition. This risk is currently in mitigation by software developers who plan to recognize an object from its photograph. If the application has difficulty recognizing an object, the user will have the option of entering characteristics that will help identify the object or set search criteria for a database search for an object.

The last major risk to discuss is availability to reference database material. This application will help maintain a user database which could possibly grow into a point of reference, but the initial concept will benefit from currently available data to help determine the rarity and value of an item. The plan is to use Amazon Turk services as an initial tool and possibly access Yahoo and Google references after identifying an object.

# Vision of the Solution

The long-term vision for Collection$ is to provide a collecting aid that is sufficient in fulfilling local customer’s needs, but is not limited by localization. Android is the platform of choice for the initial release; however, Collection$’s ability to accept other platforms is crucial to the long-term goals of this project. The current project focuses on a local customer population; however, the final product should not limit cultural adaptations. Once local customers experience the Collection$ environment, the program should be flexible enough to promote a global expansion that may provide the same experience throughout the world.

## Vision Statement

Keep it organized!

For anyone who has any number of personal collections that are in need of maintenance, Collection$ is a smartphone application that contains collector-specific tools. There are many time- or space-consuming methods for collection maintenance, but our project is computer based and contains tools for assisting users with object identification, collection maintenance, and collection-specific social networking.

Help us revolutionize the art of collecting, not only in your community, across the globe!

## Major Features

1. Assistance provided to the user through an object identification mechanism.
2. Construction and maintenance of a personal collection stored in a database.
3. Sharing a personal collection with other users.

## Assumptions and Dependencies

In the creation of Collection$’s vision, success will be dependent on two major assumptions. First, the object identification will be reliant on the Amazon Turk. Since this tool requires a pay-for-service, the object identification may turn out to be heavily reliant on the customer’s willingness to pay for the advanced feature. Second, the ability to interact with other users will be reliant on the application’s ability to adapt to multiple platforms and cultures. Since the long-term vision of this project is to achieve globalization, the application’s implementation into multiple different software platforms, hardware devices, languages, cultural standards, and other cultural complications will greatly affect this vision.

# Scope and Limitations

## Scope of Initial Release

The Initial release of Collection$ will contain several major features: The ability to create a collection and add items into it – by manual and semi-automated methods – and the ability to network with other collectors. Users will select a unique user ID that will provide the user authority to access and edit their personal collections. To ensure uniqueness, selected user IDs will be compared to an existing user ID database upon creation. When adding new items, the application will assist with object identification through the use of online services and databases. The networking aspect of the application will potentially create a buyer and seller environment within the application.

## Scope of Subsequent Releases

Future versions of Collection$ will include a software application that can run on tablets and desktops/laptops. This application will sync with the smartphone version and provide a platform for further additions and improvements.

Integrated 3D imaging to assist with three dimensional object identification (via machine identification) is also planned for a future release – possibly as an addition for the versions of the application running on more powerful platforms (ie. desktop, laptop).

Also, authentication for users will be explored more dynamically in subsequent versions. The future authentication mechanism will include a user password associated with the user name. The authentication mechanism will be accessible by the user at any time for updates or resets to their user password.

## Limitations and Exclusions

Total automated identification of every object in every type of collection can’t be promised. Collections vary wildly, and some may prove too unique for our application to be of much use to the user for identification purposes. However, the other aspects of the application would still prove valuable.

Some of the more intriguing features may be limited based on the costumer’s willingness to pay for their services. The two main features that may be limited due to monetary concerns are object identification and personal estimation by an expert.

# Business Context

## Stakeholder Profiles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stakeholder** | **Major Value** | **Attitudes** | **Major Interests** | **Constraints** |
| Private Collectors | Assist object identification | Willing to pay to find object information | Getting information about their collections | Will pay for service if cheap |
| Commercial (ie, a collector who wants to sell items) | Connects with other collectors | Increase market | Selling to private collectors | Handle money exchange |
| Institutions | Catalog collections | Like the system if it is high capacity capable | Keeps multiple collections organized | How quickly can items be added to collections |

## Project Priorities

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **Driver (state objective)** | **Constraint (state limits)** | **Degree of Freedom (state allowable range)** |
| Schedule | Release 0.1 to be available by 12/03. |  |  |
| Features |  |  | High priority features to be demonstrably functional at release |
| Quality |  |  | High priority features to be 90 to 95% user acceptance test passable. |
| Staff |  | Development team is 4 developers / testers |  |
| Cost |  | No budget for development | For application: free trial version, pay service after that |

## Operating Environment

For the first release of Collection$, the operating environment will be as a mobile application running on the android system. This environment is widely available and free tools exist to develop in it. The application will be accessible through a secure server login anywhere a user has their smartphone and an internet connection. All critical data will be transmitted to and stored on the applications servers in the cloud.