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|  | 3Park |
| Project Vision Document | |
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**Revision History**

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# 1 Introduction

This document provides detailed information about our app 3Park. The document will explain why we will create this app, who are involved in it, and what features our app will contain. The document will also help clarify any questions and queries that stakeholders may ask. The speed of our project will be based on our success on what is listed below.

## Purpose

The purpose of this project vision document is to properly convey to our clients what must be created. This documentation will allow us to reference our requirements and ensure all are met during implementation.

## Scope

### In Scope

The purpose of this app is to find parking spots for students and visitors who are driving to Casa Loma campus at George Brown College. Upon opening the application, users will be prompted to login to an account either through Facebook or Google but it will not be required in order to use the application. Our application will include the ability to locate paid and non-paid parking spots around the Casa Loma campus. It will display this through the use of Google’s Map API contained in a simple, clean UI/UX from a top-down aerial view which will make it easy for users to scan areas. Upon map scans, we will have a dynamically updated list of available parking locations displayed based on the area of the map displayed on the user’s device. The users have the ability to search for streets in our application and then navigate to their desired location through the use of their own preferred navigation application on their device. The application will implement a history below the search bar of all past searches by the user. Furthermore, the application will allow users the ability to view allowable parking times during anytime of the day, display the parking information for the streets around the Casa Loma campus and save the location to a favourites section. The application will have a current location button that will center the map view to your current location based on the user’s device GPS. If users do not have access to a mobile data plan or wi-fi, they will be able to download offline maps and still be able to use the map without an internet connection.

Below are the listed in-scope this application is mainly focused on:

* *Free parking locator;*
  + Core functionality of the app is to locate free parking on city streets/lots.
* *Paid parking locator;* 
  + Also giving user the option to find a paid parking spot.
* *Navigation to spot;*
  + Opens default navigation application on user’s device.
* *Allowable parking times/days;* 
  + Simple view of allowable parking, as well as a detailed breakdown informing user of all available times to park.
* *Map view of parking;* 
  + Displays all parking in a top-down aerial view so the user easily can scan area.
* *Optional offline mode;*
  + Gives user the option to download map and data regarding parking locations. Requirement to connect to Wi-fi to download every X days to maintain up-to-date data.
* *Dynamically refreshes on map;*
  + User can scroll through map and all parking available automatically refreshes whenever a new area is revealed in map view.
* Favourite
  + User has option to save their favourite parking locations.
* User history;
  + User has parking search history populate under search field
* Optional login through Facebook /Google
  + Users can create a profile for this app by using either Facebook or Google

### Simple, clean UI/UX

* + Allows simplicity of the application for the user to enjoy.
* Current location;
  + When clicked, users are able to see parking around them.
* Search function locations for parking

### Out of Scope

The processes and system that are not affected or influenced by this document are accessibility parking spaces for handicap people because there are very little accessibility parking spaces around Casa Loma. Users will not be able to input data regarding parking locations as it may lead to abuse of municipally-owned parking spaces as well as misleading information to other users. The use of dynamic suggestive history based off user’s most frequent searches will also not be included due to time and technical constraints as well as it not being a necessary requirement for our application.

* Accessibility
  + There are very few accessible parking spaces near Casa Loma campus, making it a very niche and small demographic
* No suggestive history
  + Highlight previously visited locations
* User cannot input data regarding parking locations
  + Possibility to add feature in future only with moderator/admin validation

## Definitions, Acronyms, and Abbreviations

This subsection provides the definitions of all terms, acronyms, and abbreviations required to properly interpret the Project Visiondocument. This information may be provided by reference to the project’s Glossary

Admin = Administrator

App = Application

API = Application Programming Interface

UI = User Interface

UX = User Experience

## References

This subsection provides a complete list of all documents referenced elsewhere in the Project Vision**.** Identify each document by title, report number if applicable, date, and publishing organization. Specify the sources from which the references can be obtained. This information may be provided by reference to an appendix or to another document

|  |  |  |
| --- | --- | --- |
| Reference File Name | Version | Description |
| High Level Requirements | 0.1 | All of the most important requirements of the application. |
| Project Summary | 0.1 | Explains the application very briefly. |

# Positioning

## Business Opportunity

* Students or visitors will be able to find free parking and save money as a result.
* Save users time and be more efficient.

The vision for 3Park is for students and visitors to George Brown College Casa Loma campus to find more parking opportunities around the area but we are also showing where paid parking is as well in case of the the free parking spots are full. The reason why this is a major business opportunity for this application is because not a lot of students of George Brown College would want to pay $10 per day for parking (which is the current rate to park 6am-6pm weekdays). With this app, students and visitors are able to save $200 or more (many students park for 5 days per week) because they are able to find free parking around George Brown College. Furthermore, users are able to search/find parking spots to save time instead of wasting gas trying to find parking. This is also a major business opportunity because gas prices are going up and not a lot of people would like to waste gas trying to find parking spots.

## Problem Statement

This section provide a statement summarizing the problem being solved by this project. The following format may be used

|  |  |
| --- | --- |
| The Problem of | lack of free parking |
| affects | all driving students and visitors at the Casa Loma campus of George Brown College, |
| the impact of which is | financially straining a great many students that cannot afford to pay for parking at the current paid lots located at the campus. |
| a successful solution would be | an application to find free and paid parking near George Brown College |

**Table 1 Problem Statement**

## Product Position Statement

This is a product position statement communicates the intent of the application and the importance of the project to all concerned personnel

|  |  |
| --- | --- |
| For | students and visitors who are driving to Casa Loma campus |
| Who | are looking for free parking or paid alternatives. |
| 3Park | is a parking spot location app |
| That | saves the user time and money by not paying to park in the GBC Casa Loma campus parking lots |
| Unlike | Toronto Parking Lite |
| Our product | will offer the user many more features in a clean and more modern UI. |

**Table 2 Product Position Statement**

# Stakeholder and User Descriptions

This section provides a profile of the stakeholders and users involved in the project, and the key problems that they perceive to be addressed by the proposed solution. It does not describe their specific requests or requirements as these are captured in a separate stakeholder requests artifact. Instead, it provides the background and justification for why the requirements are needed.

## Stakeholder Summary

Since there are a number of stakeholders with an interest in the development and not all of them are end users.

|  |  |  |
| --- | --- | --- |
| Stakeholder Name | Represents | Role |
| Marketing Management | * How we should market the mobile app to the target audience. * What we should include in the app to generate more revenue. | The role of the marketing stakeholder is to make suggestions on how the game will be represented on the global scale. He/She will not be engaged with any of the app mechanics. His/her job is to solely think about how the app will be advertised and how to generate more revenue to the business. |
| Backend Developer | * How the data will be stored onto the app from the user. | The backend developer role is to store the information that is created from the user and stores it. |
| Frontend developer | * Creates very simple UI and UX * Responsive Designs * Maintains the application | The front end developer creates the user interface and represents the face of the app. |
| Database Administrator | * Handles Datasets * Manages revisions and updates databases | The database administrator manages the datasets, handles the revisions and updates during the development process and after public release. |

**Table 3 Stakeholder Summary**

## User Summary

|  |  |  |  |
| --- | --- | --- | --- |
| User Name(s) | Description | Responsibilities | Stakeholder |
| Albert Nguyen  Lenny Ramroop  Jeremy Yang  Keefe Chan  Justin Rolnick | The Administrator maintains and fixes any bugs in the backend of the system. | The responsibility is to receive any reported bugs or misuse of the app from the moderator(s) to be handled accordingly. | Administrator |
| Albert Nguyen  Lenny Ramroop | The Backend developer is the heart of the app. They are the ones who created the app from scratch. | The responsibility of the Developer is to create the best app. It is also their responsibility to test the app and fix any bugs prior to the launch date. | Backend Developer |
| Jeremy Yang | The Database Administrator must be able to update any information that is provided by the End Users, Backend Developer and also the APIs of Toronto. | Oversees and maintain databases | Database Administrator |
| Keefe Chan  Justin Rolnick | The Frontend Developer is the UI/UX designer who will make the app user friendly. | Develop wireframes and organize how the app guides the user through to find parking spots. | Frontend Developer |
| GBC students/visitors | End users are the individuals who downloads the app for use. | The responsibility of the End user(s) are to use the app. | End Users |
| Keefe Chan  Justin Rolnick | They are the ones who helps the End Users with any issues or question they might have regarding the app. | The responsibilities of the moderator is to watch over the finished product and to help all possible end users with the app. Lastly, it is their job to verify and update information that is always being provided to the app. | Moderator |

**Table 4 User Summary**

# Stakeholder Requirements

|  |  |  |
| --- | --- | --- |
| ID | Requirement | Stakeholder |
| HLR01 - Finding free parking | User searches and results are returned. | Backend Developer  Database Administrator |
| HLR02 - Finding paid parking | User searches and results are returned. | Backend Developer  Database Administrator |
| HLR03 - Navigation | We will achieve this requirement by using Google Map’s API. | Backend Developer  Frontend Developer  Database Administrator |
| HLR04 - Viable parking times | Call on server to display parking area information. | Primary Developer  Database Administrator |
| HLR05 - Optional offline | We will input downloadable content that can be used offline | Primary Developer  Secondary Developer |
| HLR06 - Dynamic map listings | Make a search area button | Backend Developer  Frontend Developer |
| HLR07 - Favourites | We will code a heart button that will add chosen location to their favorite tab (stored in server) | Frontend Developer  Backend Developer  Database Administrator |
| HLR08 - History | History will be saved through their device and will be listed under the search field (stored in server) | Backend Developer  Database Administrator |
| HLR09 - Facebook/google login | Use Google and Facebook login API | Backend Developer  Database Administrator |
| HLR10 - Search function | By using the search field we will use the google map API to help locate the parking area. | Backend Developer  Database Administrator |

**Table 5 Stakeholder Requirements**

# System Features

|  |  |  |
| --- | --- | --- |
| ID | Feature | Stakeholder Requirement ID |
| 01 | Free parking locator | HLR01 |
| 02 | Paid parking locator | HLR02 |
| 03 | Navigation | HLR03 |
| 04 | Viable parking times | HLR04 |
| 05 | Optional offline | HLR05 |
| 06 | Dynamic map listing | HLR06 |
| 07 | Favourites | HLR07 |
| 08 | History | HLR08 |
| 09 | Facebook/google | HLR09 |
| 10 | Search function | HLR10 |

**Table 6 System Features**

# Assumptions

* People who are in need of accessibility parking will not be using this app.
* The APIs and datasets are updated automatically for Toronto.
  + Toronto updates their API and database when new streets or parking spots are available.
  + There is no “night time “ mode for when parking spots are not available.

# Constraints

3Park will rely on external datasets and APIs from the following sources:

* City of Toronto Data Catalogue
  + <https://www1.toronto.ca/wps/portal/contentonly?vgnextoid=1a66e03bb8d1e310VgnVCM10000071d60f89RCRD>
* Google Maps API
  + <https://developers.google.com/maps/>
* Server
  + if we rent a server we are depending on our provider to maintain the server.