

# **Project Plan, Team Charter**

## **GBC Parking Reservation Application**

Industry Partner	
Primary Instructor	Anjana Shah
Team Member	Jin Kwan Kim
Team Member	Afsana Bilkis Ritu
Team Member	Geng Zhang
Team Member	Beatriz Morales

### Document Revision History

Revision #	Date

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## 1. Executive Summary

The following describes the project to be executed.

Objective	Creation of a parking reservation application where GBC students and professors can reserve a parking spot at the school. Additional features include notifications, payment, cancelling reservation, payment history, extending reservation, late fees and submission of comments
Corporate Goals Addressed	N/A
Planned Start Date	September 3rd, 2019
Planned End Date	March 27 <sup>th</sup> , 2020

## 2. Project Approvers, Reviews and Distribution List

Approvers, reviewers and distribution list

Project Role	Name	E-mail	Date
Project Lead	Beatriz Morales	Beatriz.Morales@georgebrown.ca	Oct. 5 <sup>th</sup> ,
Developer	Afsana Bilkis Ritu	AfsanaBilkis.Ritu@georgebrown.ca	Oct. 5 <sup>th</sup> ,
Developer	Jin kwan Kim	JinKwan.Kim@georgebrown.ca	Oct. 5 <sup>th</sup> ,
Developer	Geng Zhang	Geng.zhang@georgebrown.ca	Oct. 5 <sup>th</sup>

### 3. Scope

Define the sum total of all of its products and their requirements or features.

In Scope	Out of Scope
System processes	Wireframes

### 4. Deliverables:

This project will deliver the following.

Deliverable	Description
GBC Parking Reservation Application	Web based application that will include the aforementioned features.
Services	Through our products and services, we aim to effectively reduce the time spent by target users on parking issues.

### 5. Assumptions:

1. The project will include the mentioned functionalities
2. The project will serve its intended purpose which is to assist students and professors in reserving parking spaces

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3. The project will serve to improve the college's approval rating as students and professors will be happier with the option to reserve parking
  4. The project sponsor (college administration) will be involved in overseeing the projects start and end
  5. Required programming libraries and IDEs will be available to use
  6. End users will be able to test the application

## 6. Dependencies:

The following are the internal and external dependencies that will have to be acknowledged and addressed;

External dependencies:

1. Users: There must be users for the application to be functional.
2. Admin: There must be staff working at the lot so that they can be the system admin in charge of monitoring reservations and late fees.

Internal dependencies:

1. Server response time must be reasonably fast.
2. High compatibility with different environments. (such as browsers, operating systems, network connection status)

## 7. Risk Management

Potential Risk	Severity (H/M/L)	Likelihood (H/M/L)	Management Strategy
Competitive products appear on the market	Threat to market occupation and customer competition	L	Speed up development
The product	Failed product	The team's first	Team-building

does not meet the expected requirements		attempt, unknown	focus on the union of the team and common goal. Refer to project plan for details.
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## 8. Communication

### **Reporting**

The following reports will be produced;

Report	Audience	Frequency
Reviewing project details and broad discussion..	Project Lead, Developers	weekly
Splitting work among project members.	Project Lead, Developers	weekly

### **Meetings**

The following meetings/communication will be established;

Meeting	Purpose	Attendees	Frequency
10/1/2019	Discussing sprint 2	Beatriz,Jin,Geng,Afsana	weekly
10/3/2019	Working on sprint 2	Beatriz,Jin,Geng,Afsana	weekly

## 9. Task Listing (WBS- Work Breakdown Structure)

The following resource proposal template summarizes the resource hours committed to this project, upon final approval of this document.

Reference	Tasks	Duration	Dependency
A	Choose language and framework to use	1 day	
B	Create the database needed to store user information and adding users	3 days	F
C	Create mock ups of the web pages	2 weeks	D
D	Create rough sketches of web page design and layouts	3 days	
E	Adding payment to website	3 weeks	K
F	Picking a database to use for storing user information	1 day	A
G	Coding the map of the parking lot showing the available and unavailable spaces	3 weeks	L
H	Adding and coding the drop down menus for parking lot selection	5 days	N
I	Coding payment history	5 days	B
J	Coding the notifications function so users can receive notifications when their time is going to run out	2 weeks	E
K	Coding the time slot selection screen according to the parking spot picked	4 weeks	G
L	Coding the user login screen	2 days	B,C,V
M	Coding the admin login screen	2 days	C,B
N	Coding the user dashboard screen	5 days	L
O	Coding the admin dashboard screen	5 days	M
P	Coding the user comments submission screen	4 days	B,V
Q	Coding the cancel reservation screen	4 weeks	K
R	Coding extension of reservation screen	6 days	K
S	Coding late fees screen for admin	5 days	K,T
T	Coding admin list of users screen	1 week	V,K
U	Coding admin view comments screen	1 week	P
V	Coding user sign up page	3 days	A

## 10. Gantt Chart

Attached as PDF.

## 11. Milestones

Major Activity or Milestone	Estimated Milestone Target date	Owner/Reviewer Team Members
Choose language and framework to use	11/28/19	Beatriz,Afsana,Jin,Geng
Create the database needed to store user information and add users	12/06/19	Beatriz,Afsana,Jin,Geng
Create mock ups of the web pages	11/22/19	Beatriz,Afsana,Jin,Geng
Create rough sketches of web page design and layout	11/08/19	Beatriz,Afsana,Jin,Geng
Adding payment to website	02/26/20	Beatriz,Afsana,Jin,Geng
Picking a database to use for storing user information	11/29/19	Beatriz,Afsana,Jin,Geng
Coding the map of the parking lot showing the available and unavailable spaces	01/08/20	Beatriz,Afsana,Jin,Geng
Adding and coding the drop down menus for parking lot selection	12/25/19	Beatriz,Afsana,Jin,Geng
Coding payment history	03/04/20	Beatriz,Afsana,Jin,Geng
Coding the notifications function so users can receive notifications when their time is running out	03/11/20	Beatriz,Afsana,Jin,Geng
Coding the time slot selection screen according to the parking slot picked	02/05/20	Beatriz,Afsana,Jin,Geng
Coding the user login screen	12/11/19	Beatriz,Afsana,Jin,Geng
Coding the admin login screen	12/11/19	Beatriz,Afsana,Jin,Geng
Coding the user dashboard screen	12/18/19	Beatriz,Afsana,Jin,Geng
Coding the admin dashboard screen	12/18/19	Beatriz,Afsana,Jin,Geng
Coding the user comments submission screen	12/12/19	Beatriz,Afsana,Jin,Geng
Coding the cancel reservation screen	03/04/20	Beatriz,Afsana,Jin,Geng
Coding extension of reservation screen	02/19/20	Beatriz,Afsana,Jin,Geng



Coding late fees screen for admin	02/26/20	Beatriz,Afsana,Jin,Geng
Coding admin list of users screen	02/12/20	Beatriz,Afsana,Jin,Geng
Coding admin view comments screen	12/19/19	Beatriz,Afsana,Jin,Geng
Coding user sign up page	12/03/19	Beatriz,Afsana,Jin,Geng

## 12. RAM – Responsibility Assignment Matrix

P=Primary S=Secondary

Project members	Beatriz	Jin	Geng	Afsana
role	Project leader	Developer	Developer	Developer
Choose language and framework to use	P	S	S	S
Create the database needed to store user information and adding users	S	P	S	S
Create mock ups of the web pages	S	S	S	P
Adding payment to website	S	S	P	S
Picking a database to use for storing user information	S	P	S	S
Coding the map of the parking lot showing the available and unavailable spaces	S	S	P	S
Adding and	P	S	S	S

coding the drop down menus for parking lot selection					
Coding payment history	S	P	S	S	
Coding the notifications function so users can receive notifications when their time is going to run out	S	S	S	P	
Coding the time slot selection screen according to the parking spot picked	S	P	S	S	
Coding the user login screen	S	S	P	S	
Coding the admin login screen	P	S	S	S	
Coding the user dashboard screen	S	S	P	S	
Coding the admin dashboard screen	S	S	P	S	
Coding the user comments submission screen	S	P	S	S	
Coding the cancel reservation	S	S	P	S	

screen					
Coding extension of reservation screen	P	S	S	S	
Coding late fees screen for admin	S	S	S	P	
Coding admin list of users screen	P	S	S	S	
Coding admin view comments screen	S	P	S	S	
Coding user sign up page	S	S	P	S	
Create rough sketches of web page design and layout	P	S	S	S	

### 13. Approval

The signatures below indicate their approval of the contents of this document.

Project Role	Name	Signature	Date
Project Lead	Beatriz Morales	Beatriz Morales	10/6/2019
Backend Developer	Afsana Bilkis Ritu	Afsana Bilkis Ritu	10/6/2019
Designer	Jin Kwan Kim	Jin Kwan Kim	10/6/2019
Developer	Geng Zhang	Geng Zhang	10/6/2019

## **TEAM CHARTER**

### **1. Purpose**

This team has been formed to complete the Capstone Assignment as part of Capstone 1 and Capstone 2 course. Our main objective is to master the course material related to this project and to demonstrate that mastery through our final report and presentation. We are also committed to working effectively as a team by communicating in a timely and effective manner regarding this project. An important aspect of working as a team for us is to support all team members, to leave no one behind.

Strengths:

In analysing the team's skill set, we determined some strengths that can be used to complete the project successfully:

Interpersonal skills:

We use a web application as a central repository to store the files pertaining to the project, as well as we also use a communication app to communicate with each other. When development begins we will be using GitHub to store the code.

Knowledge/Skills:

Our team is diversified in skills, with some members being strong in some languages and others in mark up, like HTML.

Development needs:

Implementing payment skills:

We require knowledge on implementing payment on a website. We will solve this problem by reading on how to do it and implementing it.

### **2. Background**

The project will introduce a web application that will allow GBC students and professors to reserve a parking spot at one of the three available lots.

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The application will have additional functionalities such as notifications, payment, cancelling a reservation, payment history, extending a reservation, payment of late fees and submission of comments. The application will be available to all GBC students and professors using their GBC number. Team members will act as developers, as well as project managers throughout the duration of the project. The team will develop the application and will also use project management software to create WBS, Gantt Chart and other useful charts to aid in project planning. Team members will also make decisions pertaining to the project such as how much time should be allocated to tasks and will take responsibility for their tasks in the project. The users of the application will be all GBC students and professors using their GBC number.

### **3. Scope**

The scope of the project will be the development of a web based application system that users can log into and reserve a parking spot plus the aforementioned functionalities. The mission of this project is to create a fully functional web application that performs according to the project requirements. Team members will have their individual roles, such as developer and project lead, that will work together to achieve the project's goal. The high level goals that the team must accomplish in order for this project to be a success is 1. Create a successful project plan/charter 2. Create a detailed WBS 3. Responsibility matrix 4. Create a product/sprint backlog.

### **4. Team composition**

Project lead: Beatriz  
 Developer: Afsana, Jin, Geng  
 Process monitor: Afsana  
 Recorder: Beatriz  
 Time Keeper: Jin

Roles are fixed unless change is needed

Time commitment :from September 23 2019-march 27 2020

### **5. Team empowerment**

As this is a school project pertaining to a course each team member is empowered to act as project managers, which involves bringing forth

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ideas and making decisions that will shape the course of the project. With approval from Professor Anjana, the team will use whichever languages/frameworks that they deem appropriate to complete the project.

## **6. Team operations**

### **Decision making procedure:**

Open a dialogue with the entire team and seek every member's opinion. Use existing project documentation and facts to generate solutions. Once the discussion is concluded ask each team member if they have any outstanding issues with anything that was discussed. Strive for consensus, meaning everyone in the team can support the decision made despite it not being their ideal outcome.

### **Handling Absence**

In the event that a team member is unable to attend meetings or submit work on time the team member must let the team know in advance through the team's primary communication app. The team will decide how to best divide the task.

### **Communication/Code repository**

The team will utilize a communications app to communicate regarding the project. The team will use GitHub as the code repository.

## **7. Team Performance Assessment**

Some key areas of performance needed for team success is effective communication, attendance of team meetings and participation of meetings. Being able to communicate effectively is essential to a successful team. Responding promptly to messages and informing team members when a task cannot be completed on time.

At the end of every meeting we will discuss where we are at in terms of the project WBS. The reason we will use the WBS as the measure of our success is because all of the required tasks are listed there, so it can serve as a checklist of what needs to be done.

## **8. Signature Page**

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Team Lead: Beatriz Morales  
Developer: Afsana Bilkis Ritu  
Developer: Jin Kwan Kim  
Developer: Geng Zhang