Vision and Scope Document

for

Bonifacio Global City (BGC) Bus Passenger Information System: Bus Tap

Version 1.0 approved

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Bus Tap

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Revision History

Name	Date	Reason For Changes	Version

1. Business Requirements

Bus Tap is an application that would help to solve concerns by BGC Bus passengers regarding their trip. Helping the passengers to improve their overall trip is the application's top priority. By using this application, users would be more knowledgeable regarding the condition of their trip. Giving them enough guide on what is happening around as passengers ride the bus. Moreover, this application would be also beneficial as well for the administrators of the BGS Bus. By imposing and allowing users to use the application, they would track each passenger and would have proper knowledge about user's concerns and problems. This will make answering and giving solutions to problems fast.

1.1. Background

The Bus Tap is both a web-based application and a mobile-based application that will provide commuters with information regarding the Bonifacio Global City (BGC) Bus. It will provide a map indicating all the routes and stops of the BGC Bus, and several points of interests around BGC. The app will also provide detailed itineraries to the user from an origin to a destination they input in the app, indicating the closest bus stop, available bus routes, fare, and estimated travel time. The application will also display the operating schedule of the different bus routes of the BGC Bus, and the arrival and departure times of every bus at every bus stop. It will also display the real-time location of the buses. For each bus stop, it will display the number of minutes until the next bus arrives. Furthermore, riding the BGC Bus requires Beep Card for payment, since it is a major requirement one feature of the app is about checking the remaining balance of the beep card. Checking the card's balance would allow passenger to be knowledgeable regarding their fare. However, there is no final assessment if this feature would push through.

1.2. Business Opportunity

This project would not aim to compete against related and existing application, instead, this project would focus on improving the quality of service those existing application possess. Bus Tap Application would add innovation to existing programs like moovit, sakay.ph, and TripBarker. Those application already out in the market, but as the group saw problems, the group aimed to produce an application that would not only improve those application but also on improving the life of every passengers especially commuters riding the BGC Bus. This application would cater all passengers of the BGC Bus by giving them services that cannot be seen and use with those three-related application mentioned.

1.3. Business Objectives and Success Criteria

Using this application would be beneficial to the bus company by increasing its revenue with the help of the reservation feature, moreover, it may allow the bus company to maintain interaction between the company and its passengers and lastly, it would allow the company to know if the bus company's services satisfy their passenger's need. As for the additional revenue, there is a possibility that they can have additional money. If the bus company agree to use the application, the reservation feature can help them a lot because reserving a trip may incur additional charges for the passenger because of assurance of the trip and may avoid going to long queue lines.

Furthermore, knowing if the passengers were satisfied or not would also be beneficial for the bus company since they would know where to improve and where to focus more based on what the passengers encountered during the whole duration of the trip.

1.4. Customer or Market Needs

The major features of the project were based from people who ride the BGC Bus regularly. Passengers knowing very well how BGC Bus operates cited main concerns, and from there, the key features were proposed. According to the passengers, the three primary problems they mostly encountered were about the inaccurate schedules, long queue lines and lack of knowledge about the congestion inside the bus. Based from their concerns, the group came up to an idea that would somehow help the passengers to be knowledgeable about the current situation they may face as they ride the bus.

By assessing the problems, features like detailed itineraries for giving the passengers about the real estimated and arrival time, reservation feature that would help to eliminate long queue lines before riding the bus, and congestion status and prediction that would allow users to be knowledgeable about the current condition of the bus, were proposed that would mainly aim to help passengers of BGC Bus be comfortable and less-worry about their trip.

1.5. Business Risks

The scope of the project would be on the Bonifacio Global City in Taguig. Knowing the place, one concern that the group encountered and considers a hindrance in making the application available is the state of internet connection. The app would need the location features and WIFI connection of phones, and in BGC there are certain areas that signal is a main problem. This factor was put on consideration since this may serve as a big problem for the user because they may find a hard time to use the app or worse they would not be able to use the app because of this problem.

2. Vision of the Solution

The goal of this project is that to predict or go beyond knowing what is happening in the current moment, to provide a better accessibility of what will happen in the future development of the city. And to manage future demand, target specific goals and predict revenue strategy along with the innovation of its city. Optimize marketing campaigns and mobile behavior to increase passenger responses, feedback and comments of the passenger for a better interface.

2.1. Vision Statement

The Bus Tap mobile application will be important to improve the accessibility of the passenger in the city. Allowing transparency between the passenger and the bus company. And improving the quality of service of the BGC Bus company by giving passengers knowledge and more comfortability about their travel.

2.2. Major Features

- Modernized User Interface
  -Designed to be responsive and accessible, the Bus Tap application interface is easy to navigate on both desktop and mobile devices.
- Notifications
  -Users can receive automatic alerts on updates and news, forum posts and also send private messages to the developer.

- News Portal
  - Users can view new coming the administrator of BGC. Allowing users to read and be notified about the local happening related to BGC Bus and Bonifacio Global City.
- Reservation Feature
  - Would allow user to reserve trip and avoid going to long queue lines.
- Congestion analysis
  - This would help the passengers to know the current state of passengers inside the bus.
- User Satisfaction Module
  - Users can cite concerns and problems encountered while on the trip. This will make addressing problems, concerns and questions to the managers and administrator easy and convenient.
- Detailed reporting and logs
  -View and generate reports on ratings and reviews at the experience of one's passenger.

2.3. Assumptions and Dependencies

The app can give users step-by-step directions from origin to direction, with estimated travel time and fare and can display a map indicating all bus routes, including stops and nearby landmarks for each bus route *and also* can display nearby locations of beep™ card loading stations on the map. The app can display bus arrival times and departure times *with a combination* display of how many minutes until the next bus arrives at the bus stop *where passengers* can check the remaining balance on their beep™ card.

Using it to predict trends and behavior patterns and to make predictions about the future that can go beyond learning what happened and why in to discovering insights about the future. Use of predictions to predict the number of passengers for any given day are provided to maximize occupancy and decrease waiting time. The application enables organizations to function more efficiently.

The goal is to go beyond knowing what has happened to provide a better assessment of what will happen in future development.

3. Scope and Limitations

The Application (Bus Tap) would be available on web and android devices. The web based application would be available and will be used more by the administrator. The web based feature would allow the administrator to update necessary information and news that would be sent and viewed by all passengers going to use the application. On other side, it would be also available on android devices because of the NFC (Near Field Communication) feature is available more on android devices. However, this feature remains uncertain upon developing the application because no formal agreement between the group and the Beep Card Company if it would be allowed. But features like detailed itinerary, reservation feature, news feature, user satisfaction module will be available upon the release of the application. But as for the location, the maps would be limited only to all routes which BGC Bus is available and operating. It would be available only to places like Makati, Taguig and some areas of Sta. Rosa Laguna. Additionally, WIFI connection and location feature may require for some features to work effectively.

3.1. Scope of Initial Release

Upon the release of the first version of the application, detailed itinerary, reservation feature, news feature and user satisfaction module would be available for all users. For the detailed itinerary, it would be beneficial for all commuters riding the BGC Bus. By using detailed itinerary's feature, it would help all passengers of the BGC Bus to navigate their way around BGC and help commutes as they ride the bus. As for this feature, maps would be available, bus stops can be viewed, estimated departure and arrival time will be shown to all users using the application.

For the News feature of the application, this will serve as the announcement page for the users. This feature would allow users to view news coming from the administrator side. This will make spreading of news as well as interaction to passengers fast and reliable.

The app would also include a reservation feature that will make reserving for trips convenient. This feature would be beneficial for both the bus company and all passengers. The Bus company can get additional income because of the extra fare when they imposed this method. On the other, passengers will save more time to fall in lines and queue lines would be eliminated.

Last feature that would be present during the initial release is the user satisfaction module. This will make addressing questions, concerns and problems fast. This feature would allow management to see if passengers are satisfied with their services.

3.2. Scope of Subsequent Releases

As mentioned in the scope and limitations, the NFC feature is not yet sure if it would be implemented. It would not be ready as for the initial release since Beep Card Company does not approve the request made by the group to integrate beep card to the application. But the development team hopes that during later releases it would be readily available since it would help commuters especially BGC Bus passengers.

3.3. Limitations and Exclusions

- The feature of checking load would not be available upon the first release. But other than that no other feature would be excluded in the release of the system.

4. Business Context

4.1. Stakeholder Profiles

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
executives	increased revenue	See application as a way to increase revenue	Time to use strategies to market and gain more passengers.	None identified.
administrators	fewer errors in work	Expect high usability and expect reliability in maintaining data.	Experts in maintaining confidential data like credentials and forecasts.	Must be able to solve all administrator problems.
passengers	Users of the application	Looking for more quality in terms of the company's service.	Ability to achieve good services	Need to have internet connection and android device to use the application.

4.2. Project Priorities

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule	release 1.0 needs to be available before the end of April 2018		
Features		Must work smoothly on any android device	90% of the available features must be available upon the first release.
Quality		All security standards must be available for all secured credentials.	
Staff		Maximum team size is 4. 1 project manager and 3 project developers	
Cost			Must follow with in the groups prescribe budget.

4.3. Operating Environment

- Data would be captured through the web application database
- Data being stored would be provided by the BGC Bus company

- *Gathering of data from the database must be readily available.*
- *Some feature would be accessible around BGC area only.*
- *The system must work every day, and ensure to accommodate all user.*
- *Securing data of all users including admin, managers, and passenger is a top priority.*