

Beverage Booker Vision

Version Information

Version	Date	Description	Author
1.0	12/04/20	First version of the vision document for Beverage Booker Submitted for LCOM.	Jacob Kennedy
2.0	21/06/20	Appended document to remove reference to Table Booking and Event Booking as they no longer fit the scope of the project. Added a short description of the manager to the introduction. Submitted for LCAM.	Jacob Kennedy
3.0	15/07/20	Appended document to align more with the adjusted scope removing outdated terminology. Removed reference to a number of use cases such as discounts, search menu items, etc. Submitted for LCAM resubmission.	Jacob Kennedy
4.0	27/10/20	Updated Introduction to be aligned with what our project is. Updated most of User Environment/Interests, Product Overview, and other requirements to align with what our project has become rather than what it should encompass.	Jacob Kennedy

Introduction

Beverage Booker is a system that will be implemented to make university cafes more accessible by giving them an online presence. This system will support a mobile app for the customer in which they will make their own account, create orders, pay for said orders and be given a time

frame for the preparation of that order. The system will also encompass a mobile app for the staff members to manage the menu items which encompasses creating menu items, modifying them and deleting them, managing customer orders which includes adding them to the queue, marking items in them as complete and finally completing them to which the customer will be notified on their device about the completion of their order. The staff application will also have the ability of managing the inventory of each item.

Positioning

Problem Statement:

The problem of	Lack of online presence for university cafes.
affects	Cafe employees, cafe management, patrons.
The impact of which	Without an online presence there is less incentive to order at the cafe.
A successful solution	Create a mobile app that allows patrons to view menu items and order online and be given a rough time frame that the order will take to prepare. Give administrative access via an admin login so that a manager can go and update the menu.

Product Position Statement:

For	A university on campus cafe.
Who	Needs to create an online presence to allow patrons to order using a mobile app.
The (product name)	Beverage Booker
That	Allows patrons to order online and employees to prepare their order and update its status (not ready to ready).

Stakeholder Descriptions

Stakeholder Summary:

Name	Description	Responsibilities
Customer	Customers create accounts, place orders and receive items from the cafe.	Customers are the source of income for the cafe. They place their order and pay for it.
Baristas / Kitchen Staff	Operates equipment that has to do with preparing beverages and food items.	Baristas / kitchen staff prepare the beverages and food for an order placed by the customers.
Delivery Driver	Drivers vehicles to customer locations with their orders.	Delivery drivers handle the orders marked for delivery in which they will transport them to customer's locations.
Register Operators	Operates the registers of the cafe in which they must process money and interact with customers.	Operates registers, handles transactions of customers and handles face to face orders.
Cafe Manager/Admin	Operates the business end of the cafe, decides discounts, manages employees.	Manages cafe and employees. Handles paying employees. Handles complaints. Updates menu.

User Environment/Interest:

- Customers: There are possibly thousands of customers (e.g. CSU Bathurst has 2000 students), but only 5 to 10 are processed at any given time. In Customer Application they are allowed to create accounts, browse the menus for food and drinks, add/delete items from their cart, finalise orders and pay for that order.
- Baristas / Kitchen Staff: Baristas prepared the beverage part of orders placed by the customers. In the system they are allowed to update orders to signal if the order is complete or not, they also have the ability to check mark individual items within an order to allow tracking of items within an order. Kitchen staff are responsible for preparing the food items of the orders placed by the customers. In the Staff Application they are allowed to do the same as a barista which is updating items within an order as well as completing that order which will notify the customer of its completion.
- Delivery Driver: Delivery Drivers are responsible for taking orders that are to be delivered and transport them to the location of the customer. In the Staff Application

they have access to the deliveries lists to which they mark orders as delivered once they have given the customer their order.

- Register Operators: Register operators are responsible for processing face to face orders as well as handling money. They don't have direct interaction with the system but may show interest in that it makes it so they have to process less orders as people are using the app instead. This could also be beneficial for the cafe in that if the application is successful they may be able to have less register operators working.
- Manager: Managers handle the employees of the cafe. In the Staff Application they will be able to login as an admin and update the menu items. Such as change prices, add items, etc, they will also be able to manage the inventory of an item (how much stock they have of it - note: this is also done automatically whenever a customer orders items), the managers also have the ability to add and delete staff accounts - which also involved assigning accounts access levels e.g. Baristas / Kitchen Staff don't need access to add or delete staff accounts.

Product Overview

Needs and Features:

Need	Priority	Features	Planned Release
Ordering mechanism	1	menu items, cart, address information, checkout (payment info), order confirmation, order completion notification.	Mid-November/ End of Project
Queuing mechanism	2	Orders, order's items. Accessible by staff who are management, baristas or kitchen staff.	Mid-November/ End of Project
Cart mechanism	3	Menu items, quantity, details e.g. sugar, decaf etc.	Mid-November/ End of Project
Menu mechanism	4	Menu items.	Mid-November/ End of Project
Staff mechanism	5	An application for staff, add / update / delete menu items, update inventory, mark orders delivered, check mark items	Mid-November/ End of Project

		completed and complete orders, add / delete staff accounts.	
Account mechanism	6	A sign in / register function for customers in the Customer Application, first name, last name, email and password. A sign in for staff in the Staff Application which requires a staff ID.	Mid-November/ End of Project

Other Product Requirements

Functional requirement No.	Functional Requirement Description
Customer FR 1	A user should be able to access the system via the Customer Application.
Customer FR 2	A user should be able to browse the menus (Food and Drink). This is part of the Menu mechanism.
Customer FR 3	A user should be able to view a cart where their selected items should be displayed. This is part of the Cart mechanism.
Customer FR 4	A user should be able to update the quantity from within the cart. This should be part of the Cart mechanism.
Customer FR 5	A user should be able to remove single items from the cart. This is part of the Cart mechanism.
Customer FR 6	A user should be able to clear the cart of all items with one button. This is part of the Cart mechanism.
Customer FR 7	A user should be able to create or sign into an account (sign out also). This is part of the Account mechanism.
Customer FR 8	A user should be able to select between pick-up or delivery. This is part of the Ordering mechanism.
Customer FR 9	A user, if pick-up was selected should be able to enter their payment details in straight after selecting pick-up. Alternatively, a user who selected delivery should be able to enter their address information in followed by payment details. This is part of the

	Ordering mechanism.
Customer FR 10	A user should be able to pay for the items in the cart. This is part of the Ordering mechanism.
Customer FR 11	A user should be able to see an estimate in regard to the amount of time their order will take to prepare. This is part of the Queuing mechanism.
Customer FR 12	A user, after their order has been marked as completed, should get a notification on their phone to relay this information. This is part of the Queuing mechanism.
Barista/Kitchen staff FR 13	A barista or member of kitchen staff should be able to view orders and update the status of that order. E.g. customer 1 ordered drink barista updates order to signal that that drink is prepared. This is part of the Queuing mechanism and Staff mechanism.
Delivery Driver FR 14	A delivery driver should be able to view and complete deliveries. This is part of the Queuing mechanism and Staff mechanism.
Cafe Manager FR 15	A manager should be able to access the system to which they can add, delete and edit the menu items. This is part of the Staff mechanism in which the manager should have administrative access to do this. They will do this via an admin login within the Staff Application which is based off their staff ID.
Cafe Manager FR 16	A manager should be able to manually alter the inventory of an item. This is part of the Staff mechanism.
Cafe Manager FR 17	A manager should be able to view, add and delete staff accounts. This is part of the Staff mechanism.

Non-Functional Requirements	Description/Justification	Priority	Planned Release
Usability	The purpose of this system is to provide an alternative means of placing an order at a cafe. In order to achieve this the system must be usable by customers on mobile. A high priority as the applications (Customer and Staff) need to be of high usability.	1	Mid-November/ End of Project

Availability	The Customer Application should realistically only be accessible within the time frame that the cafe is open, this would probably be 7 AM - 4 PM. The Staff Application should be available 24/7 as the Managers should be able to alter information at any time.	2	Mid-November/ End of Project
Security	Personal data should be kept securely using encryption. Security is of high priority as the user's of both Customer and Staff applications will have logins. Payment is also handled by the customer application thus heightening the priority of security.	3	Mid-November/ End of Project
Reliability	The system will have to be reliable for customers to continue using it and to draw more people toward using the system. This includes both Customer and Staff applications.	4	Mid-November/ End of Project
Auditing	It's important to track orders and transactions. Tracking orders in the applications allow for tracking the completeness of the order which will change when the customer is notified when their order has been completed. Tracking also is necessary to indicate the different orders which are pick-up and delivery.	5	Mid-November/ End of Project

Software Characteristics

The software should be available on mobile devices therefore mobile interfaces will have to be considered during development.

- Ordering Mechanism:
 - Encryption: Due to the user paying online sensitive data will have to be handled and therefore this data should be protected through encryption.
 - Access Levels: Like above, a user is entering sensitive data, and through levels of access this means that data is not readily available to everyone once it is entered.
 - Database: Orders will have to be stored in a database as will other aspects e.g. payment info. Items such as orders, menu items, etc.
- Staff Mechanism:
 - Encryption: Due to sensitive data being stored encryption should be utilised.
 - Access Levels: Administrative access will be used and therefore this information will be locked behind the Staff Application.
 - Database: login information will have to be stored therefore utilisation of a database would be recommended.
- Account Mechanism:
 - Encryption: Sensitive data is stored so encryption is a recommended step to keep said data safe.
 - Access Levels: users can create or login to accounts that they have the information for e.g. user 1 has information for user 1 account (username and password). However this information is kept secret and is not readily available to anyone.
 - Database: account information will have to be stored therefore a database will have to be utilised.