# Beverage Booker Vision

## Introduction

Beverage Booker is a system that will be implemented to make university cafes more accessible by giving them an online presence. The new system will support a mobile app that supports accounts, orders, and payment methods as well as give the option to sign in as administrator or customer. The system is to allow patrons to order online and be given a rough time frame of order preparation. A cafe manager will be able to login online to the app and update the menu items and other aspects such as cost of items. Patrons will be able to order on the mobile app, pay for it, and create an account. Employees will be able to see the orders and update their status. Baristas and kitchen staff will be able to update order status for those using the app to signal completion of order.

## Positioning

Problem Statement:

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| **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 a admin login so that a manager can go and add/edit/delete items from the menu. |

Product Position Statement:

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| **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 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 | Operates equipment that has to do with preparing beverages. 8 in total. | Baristas prepare the beverages for an order placed by the customers. |
| Register Operators | Operates the registers of the cafe in which they must process money and interact with customers. 6 in total. | Operates registers, handles transactions of customers and handles face to face orders. |
| Kitchen Staff | Operate kitchen equipment to prepare non-beverage items such as food. 6 in total. | Kitchen staff prepare the food items for an order placed by the customer. |
| Cafe Manager/Admin | Operates the business end of the cafe, decides discounts, manages employees. 6 in total. | Manages cafe and employees. Handles paying employees. Handles complaints. Decides discounts on items. Decide menu items. |

User Environment/Interest:

- Customers: There are possibly thousands of customers, but only 5 to 10 being processed at any given time. In the system they are allowed to create accounts or use guests, add/delete items from a cart, finalise orders and pay for that order. On their account they are allowed to see order history. Search for menu item, view menu item photos and descriptions, add menu items to card, empty cart, apply student/pensioner discount, place order, book a table at the cafe, book cafe for event.
- Baristas: There are 8 baristas. 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.
- Register Operators: There are 6 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.
- Kitchen Staff: there are 6 kitchen staff. Kitchen staff are responsible for preparing the food items of the orders placed by the customers. In the system they are allowed to update orders to signal if it is complete or not.
- Manager: There are 2 managers. Managers handle the employees of the cafe. In the system they will be able to login as an admin and update the menu items. Such as change prices, show it as out of stock, etc.

# Product Overview

Needs and Features:

| Need | Priority | Features | Planned Release |
|---|---|---|---|
| Ordering mechanism | 1 | menu items, cart, checkout (name and payment info), order confirmation. | Mid-November/ End of Project |
| Admin mechanism | 2 | A sign in for admins, change menu items, add/delete menu items, change prices. | Mid-November/ End of Project |
| Table Booking mechanism | 3 | Time and date, number of guests, name and phone | Mid-November/ End of Project |

| | | | |
|---|---|---|---|
| | | number fields, confirmation of booking. | |
| Event Booking mechanism | 4 | Time and date, number of guests, name and phone number fields, confirmation of booking. | Mid-November/ End of Project |
| Account mechanism | 5 | A sign in for customers, Username, password, order history, saved payment info. | 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 mobile app. |
| Customer FR 2 | A user should be able to view menu items. This should be part of the ordering mechanism. |
| Customer FR 3 | A user should be able to view a cart where their selected items should be displayed. This should be part of the ordering mechanism. |
| Customer FR 4 | A user should be able to add or remove menu items in a cart. This should be part of the ordering mechanism. |
| Customer FR 5 | A user should be able to create or sign into an account. (sign out also) This should be part of the account mechanism. |
| Customer FR 6 | A user should be able to place their order and checkout. This should be part of the ordering mechanism. |
| Customer FR 7 | A user should be able to pay for the items in the cart. This should be part of the ordering mechanism. |
| Customer FR 8 | A user should be able to see a rough estimate in regard to the amount of time their order will take to prepare. This should be part of the ordering mechanism. |
| Customer FR 9 | A user should be able to book a table or event. This should be part of the table booking mechanism and event booking mechanism. |

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| Barista/Kitchen staff FR 10 | 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 should be part of the ordering mechanism. |
| Register Operators FR 11 | A register operator should be able to book a table, view table bookings, search table bookings and also delete table bookings. This should be part of the table booking mechanism. |
| Cafe Manager FR 12 | A manager should be able to access the system to which they can add, delete and edit the menu items. This should be part of the admin mechanism in which the manager should have administrative access to do this. They will do this via an admin login within the mobile app. |
| Cafe Manager FR 13 | A manager should be able to access the system to which they can view/delete/edit/book events. This should be handled in the admin mechanism. |
| Cafe Manager FR 14 | A manager should be able to access the system and view/update/delete/add inventory items (this is where it will say out of stock and other information regarding stock of items). This should be handled in the admin 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 ordering mechanism, admin mechanism, table booking mechanism, event booking mechanism and account mechanism will all need heavy focus on usability. | 1 | Mid-November/ End of Project |
| Availability | The admin mechanism should be available 24/7 however the ordering mechanism only needs to be available during cafe | 2 | Mid-November/ End of Project |

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| | opening hours (7 AM - 7 PM). if the system isn't available then customers won't be able to use any of the system potentially losing business as they wont be able to place their order through the ordering mechanism. | | |
| Security | Personal data should be kept securely using encryption. Security is of high priority as the account mechanism, admin mechanism and ordering mechanism will all have sensitive data stored thus security and encryption is a high priority. | 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 the ordering mechanism, admin mechanism, booking mechanism, account mechanism, etc. | 4 | Mid-November/ End of Project |
| Auditing | It's important to track orders and transactions. | 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.
- Admin 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 a login to prevent anyone from changing information.
    - Database: login information will have to be stored therefore utilisation of a database would be recommended.
- Table Booking Mechanism:
    - Database: Information about table bookings will have to be stored therefore a database should be utilised.
- Event Booking System:
    - Database: Information about event bookings will have to be stored therefore a database should be utilised.
- 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.