SOEN342
Software Requirements and Specifications

QuickBite

(Phase 2: Vision Document)

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Vision Document
QuickBite

1. Introduction

This document aims to first state the problem with current systems, followed by a clear explanation of why QuickBite would be a successful solution. Then, the roles and descriptions of stakeholders and users of this system to-be are defined to help specify who will be involved and affected and how. The user environment and the needs of key stakeholders and users are further explored to deepen the understanding of why this project is taking place and under which conditions. Finally, the product features and their use cases as well as the risks will all be thoroughly analyzed to provide an all-rounded perspective of this system to-be.

Scope: This document is constructed for QuickBite's system developed by Team B. QuickBite will provide users with an improved and enhanced experience with food delivery apps by combining all the important and useful elements of different but similar apps into a single convenient software that carries them all along with bonus features.

2. Positioning

2.1. Problem Statement

The problem of	Current food delivery apps each have useful features that are not implemented by other food delivery apps.
Affects	Food delivery apps users.
The impact of which is	That, for each food delivery app that they use, they don't have access to all the benefits and convenient features of all the apps combined.
A successful solution would be	To combine all the useful features of current food delivery apps and more in one single application.

2.2. Product Position Statement

For	Food delivery apps users.
Who	Want access to useful features from different food delivery apps.
QuickBite	Is a software application product.
That	Allows users to order food and products from diverse restaurants or stores, and get it delivered right at their doors.
Unlike	Current food delivery apps who may not have certain useful features that others do.
Our product	Combines and transposes important elements from different food delivery apps in one single software application so that users can have access to maximum benefits.

3. Stakeholder Descriptions

3.1. Stakeholder Summary

Name	Description	Responsibilities
Product Investor	An entity which will put money into the development of the system for financial or any type of utility return.	- To ensure that the process of developing the system is well funded so that it may be completed. - Determine, check, and agree with requirements of application.
Software Development Company	An entity which oversees the development of the system and helps manage goals	- Ensures that the system will be maintainable. - Ensures that there will be a market demand for the product's features. - Monitors the project's progress.

3.2. User Summary

Name	Description	Responsibilities	Stakeholder
Customer	They represent an end user of the system who will be the primary user of this application. They are the ones who use this app to order food.	- place orders - create profile - track orders - rate restaurants	self-represented
Driver	They represent people who will use the app to help restaurants fulfill orders and act as a courier between restaurants and customers.	- deliver orders	self-represented
Restaurants	They represent users who will use the app to create and manage orders for their restaurant. They provide their services to customers.	- manage orders - create and fulfill orders	self-represented
Administration	Provides support to end users of this application.	- help and support users - monitor the applications activity - helps with payment processing issues - manages user accounts - overviews delivery logistics	Product owner

3.3. User Environment

The number of people on a task depends on the nature of the task. A project of this magnitude would require anywhere from 3 to 8 people involved in completing a task. This number should not vary a lot since this kind of project has been done before and people should have prior experience.

A task cycle is a sprint of 2 weeks. Bi-weekly, there will be a big meeting between the developers, the managers, and representatives of the stakeholders. The team itself will meet every day and set goals for themselves and for the updates they want to have on the stories they are working on for the sprint.

The amount of time spent on each activity will vary depending on the required effort of the activity. However, it should not exceed a couple weeks for a single activity. It shouldn't vary a lot since most activities would be similar (e.g. create a webpage and link it to the backend).

There are no unique constraints, our software will be available on tablets and mobile devices as an app, available on apple and android devices. Moreover, to be accommodating to larger audiences, it will be available as a website as well.

- Users will need to have a wifi or LTE connection in order to connect to our application and be able to use its functionality.
- Users will be expected to have a browser enabled device to check or fulfill orders and viewing content in general.
- Administrators will need a browser enabled device to help with orders and issues on the app.
- Users will need to have the latest operating systems in use to be able to use the full functionalities of our features.
- Users will be expected to have a cellular device that is up to date with functionalities like gps tracking and compatible with new payment types.

System platform in use today windows, mac os and in the future linux. It is also available on apple and android phone applications.

In the future we plan on extending services to linux systems as well.

The system should integrate with a payment service (apple pay, paypal). It should also integrate sharing features with external social media apps so that reviews for restaurants can be more widely received and attract more business. Websites such as twitter and instagram should be the priority.

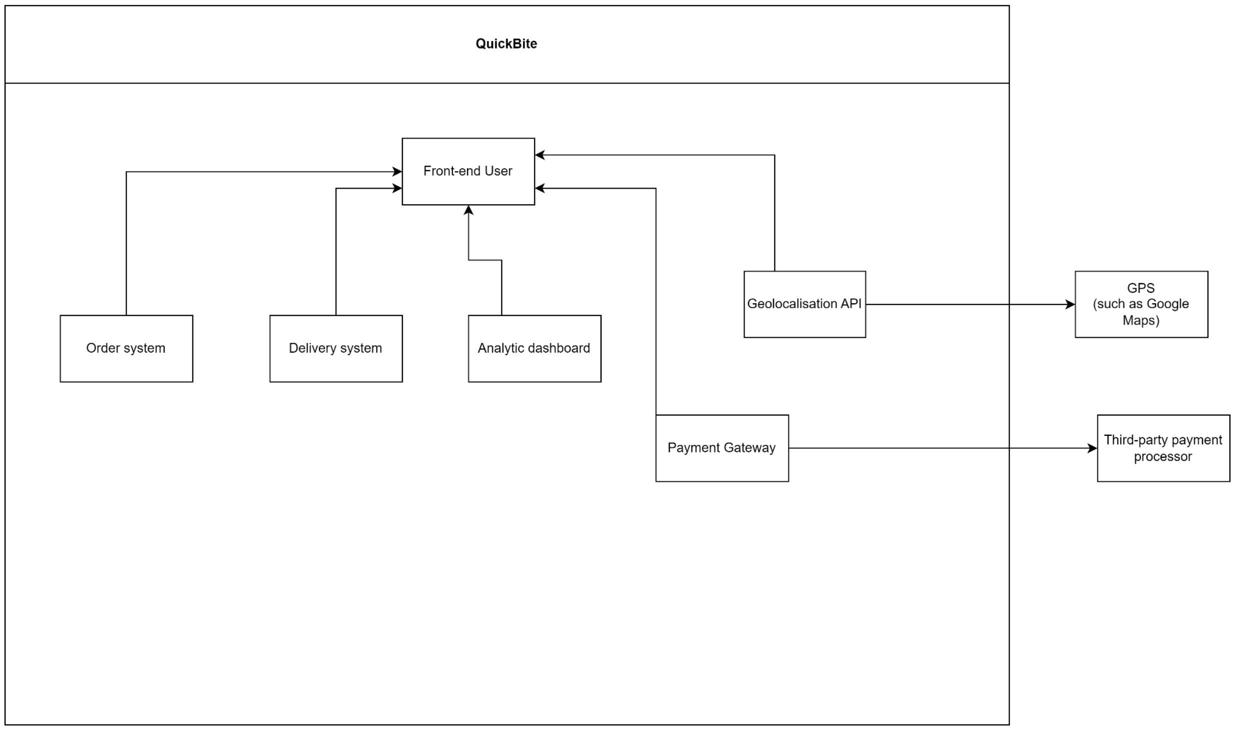
3.4 Key Stakeholder or User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Food delivery application that prioritizes customer experience and is accessible.	High	Rising prices in food delivery applications with taxes and service fees		Having a rewards program so that customers will be able to get better deals. Users will be able to get loyalty points from ordering from their favorite restaurants and use their

				accumulated points to get discounts.
A delivery app that does not only give chain restaurants a chance to benefit from its use.	Low	Local restaurants are struggling especially due to covid-19 and the after-effects with rising prices so they cannot keep up with large brands.	Let them promote themselves by allowing everyone to pay for ad slots in apps.	Have a designated section for local businesses so they can promote themselves more. Offer additional coupons by purchasing from their businesses.
A food delivery application that lets users use a variety of coupons in apps.	medium	Restaurants cannot use their in store coupons in delivery apps and must offer different, app exclusive coupons, restricting the amount of business they could be getting.		Allow businesses to offer exclusive in app coupons along with their in store promotions to let them attract as much business as they can and be able to entice more people to buy from them.

4. Product Overview

4.1. Product Perspective



4.2. Assumptions and Dependencies

Assumptions	Dependencies
Assumption that there are enough available human resources to have the app function, such as drivers.	Dependency on specific hardware and software configurations such as operating system and platform.
Assumption that the app will give the customers, restaurants, and drivers accurate and appropriate information.	Dependency on third-party payment and geolocation API.
The application should be able to handle a high volume of orders and traffic.	Dependency on a fast and reliable internet connection while using the app.
There is demand for the goods and services offered through QuickBite.	Dependency on features that we have and the need for it to the general public

5. Product Features

5.1. Core Features

Our aim in this project is to develop an application that excels in comparison to other similar applications. To accomplish this goal, we need to integrate necessary features. However, possessing a large number of features is inadequate without a user-friendly design. If, for example, a coupon feature is challenging to use, it may receive negative feedback not because of the functionality, but due to the poor implementation. This emphasizes the importance of having a clear and straightforward design layout, which is crucial to the success of the application.

5.1.1.In-app coupons

With the use of coupons in our system, users will be more inclined to buy from our app due to the deals we offer. Users can use app-exclusive coupons or coupons handed out by the restaurants. Restaurants can register app exclusive coupons to their system in order for the restaurant to be included in the app.

5.1.2.Search filters

The app's search filters will enable users to find exactly what they are looking for. These filters will mitigate any complications users would have otherwise looking at each restaurant's menus whereas the app would show them which restaurants offer what they are looking for.

5.1.3.Restaurant suggestion

Our app will log user orders in our database to provide personalized recommendations based on their frequently ordered items. This feature encourages users to try new restaurants that offer similar food and benefits restaurants that are registered with our system.

5.1.4. Profile Creation

Users can create their own profile to store their personal details and save time by not having to enter their information every time they want to order food. The user's phone number will be linked to their account to facilitate communication between the user, driver, and application. No banking information will be stored for security reasons.

5.1.5. Order Placement

After paying for their order, users will receive a notification confirming that their order has been placed successfully. The application will forward the order to the restaurant to be prepared.

5.1.6. Order Tracking (gps and status)

One of the essential features of a good food delivery application is the ability for customers to track their food's location in real-time using GPS. Once the order is confirmed, users can track its current location and delivery status.

5.1.7. Transaction Processing (pay features)

Users can choose from multiple payment methods, such as Google Wallet, Apple Pay, iOS Paypal, Mastercard, Credit Cards, Debit Cards, and Cash on Delivery, to make the payment process efficient and user-friendly.

5.1.8. Display Restaurants In Area

Users can view a list of nearby restaurants based on their current location. The list will show the distance between the customer and the restaurant, as well as the estimated time it will take for the order to be prepared, picked up, and delivered. This ensures that users can find suitable restaurants close to them, reducing waiting time and lowering the delivery fee.

5.1.9. Display Menu

When users select a restaurant, they can view the menu. Each section of the menu will be tabbed, with the price displayed next to each item. Food and drink descriptions will be included, and users can modify or customize their orders.

5.1.10. Order History

Users can access their order history to view past orders they have made. This provides a convenient way for users to keep track of their order details, such as the items ordered, cost, date and time of the order, and delivery information, including the courier service and the driver's name. This feature improves the user experience by allowing them to easily refer to previous orders and can help them make more informed decisions in the future.

5.1.11 Ratings and Reviews

Users are able to rate and review the restaurants and meals they've ordered using this feature. It provides the business feedback, which can result in higher customer retention and better service. Also, it gives other users useful data that they may use to decide where and what to order.

5.1.12 Favorites

This feature enables users to save their favorite restaurants or dishes in a separate list within the app. It provides a convenient way for users to reorder their favorite dishes and discover new dishes from their favorite restaurants.

5.1.13. Help Center

Users can access the support center via a website if they have questions about a range of topics. The most frequently asked questions are categorized according to the category they fall under. Users may also email the support team via the Contact Us feature to express their concerns. The support team answers to emails right away with the necessary solutions.

5.1.14. Reward Program

Users will be able to earn points for their loyalty to the app. The points will be accumulated by placing orders, writing reviews, or referring friends to the app. Users can then redeem their points to get discounts and coupons.

5.2. Other Product Requirements

At a high level, the following are the product requirements for our app delivery system:

5.2.1 Applicable Standards, Hardware, or Platform Requirements

- The app will be compatible with all mobile platforms (iOS and Android).
- The system will adhere to standard security protocols and encryption methods to protect user data.

5.2.2 Performance requirements

- The app will be fast and reliable, with minimal downtime.
- The system should be able to handle a high volume of requests simultaneously.

5.2.3 Environmental requirements

- The app should be accessible from any location with an internet connection.

5.2.4 Quality Ranges

- Performance: The app will have fast and responsive performance.
- Robustness: The system should be able to handle errors or exceptions without causing data loss or system failure.
- Fault tolerance: The system should be able to maintain operation in case of hardware or software failures.

- Usability: The system should be user-friendly, with an easy-to-use interface.

5.2.5 Design and external constraints

- The app will be designed to be accessible to all users, including users with disabilities. Features like voice commands, text-to-speech, and other accessibility tools will be provided.
- The app will support different languages and localizations to serve a wide range of users. This requires that the software provides language translation.

5.2.6 Documentation requirements

- The app will include a user manual to provide instructions on how to use the app. It should include step-by-step instructions with illustrations to help users understand the app's features and functions.
- The app will include an online help system to provide users with quick answers to common questions and problems that they may encounter.
- Installation requirements: The app should provide clear instructions on how to download and install the app.

5.2.7 Priority

- The app will be stable and reliable.The following requirements will be prioritized: reducing crashes, improving load times, and optimizing server performance.
- Our app will be prioritizing features that directly improve the user experience, such as providing real-time delivery tracking or allowing users to easily reorder previous orders because these features would improve customer satisfaction.
- Our app will be prioritizing features that are easy to implement and do not require not many resources, such as enabling users to cancel orders or change their delivery address.
- Our app will be prioritizing features that mitigate risks, like implementing secure data storage that would help to protect both users and businesses from potential data leaks.

6. Risk and Feasibility

6.1 Domain Specific Risks

6.1.1 Delivery Delay

There could be events such as traffic, weather, car accidents, and more, that could lead to some delivery delays. In consequence, it could result in the dissatisfaction of customers leaving negative reviews. This could negatively impact QuickBite's reputation and revenue.

6.1.2 Data privacy and security

The app will collect sensitive information such as the user's address and payment information which will need to be kept secure from unauthorized access or breaches.

6.1.3 Market Competition

There exist many delivery apps, making the market highly competitive. This can make it difficult to attract clients that are already using other applications which may impact the app's revenue. Thus, it is important to come up with new ideas and services to differentiate from other competition.

6.2 Process Related Risks

6.2.1 Product development

The market and technologies are constantly evolving. The app must continuously be updated to keep up with those changes and the competition.

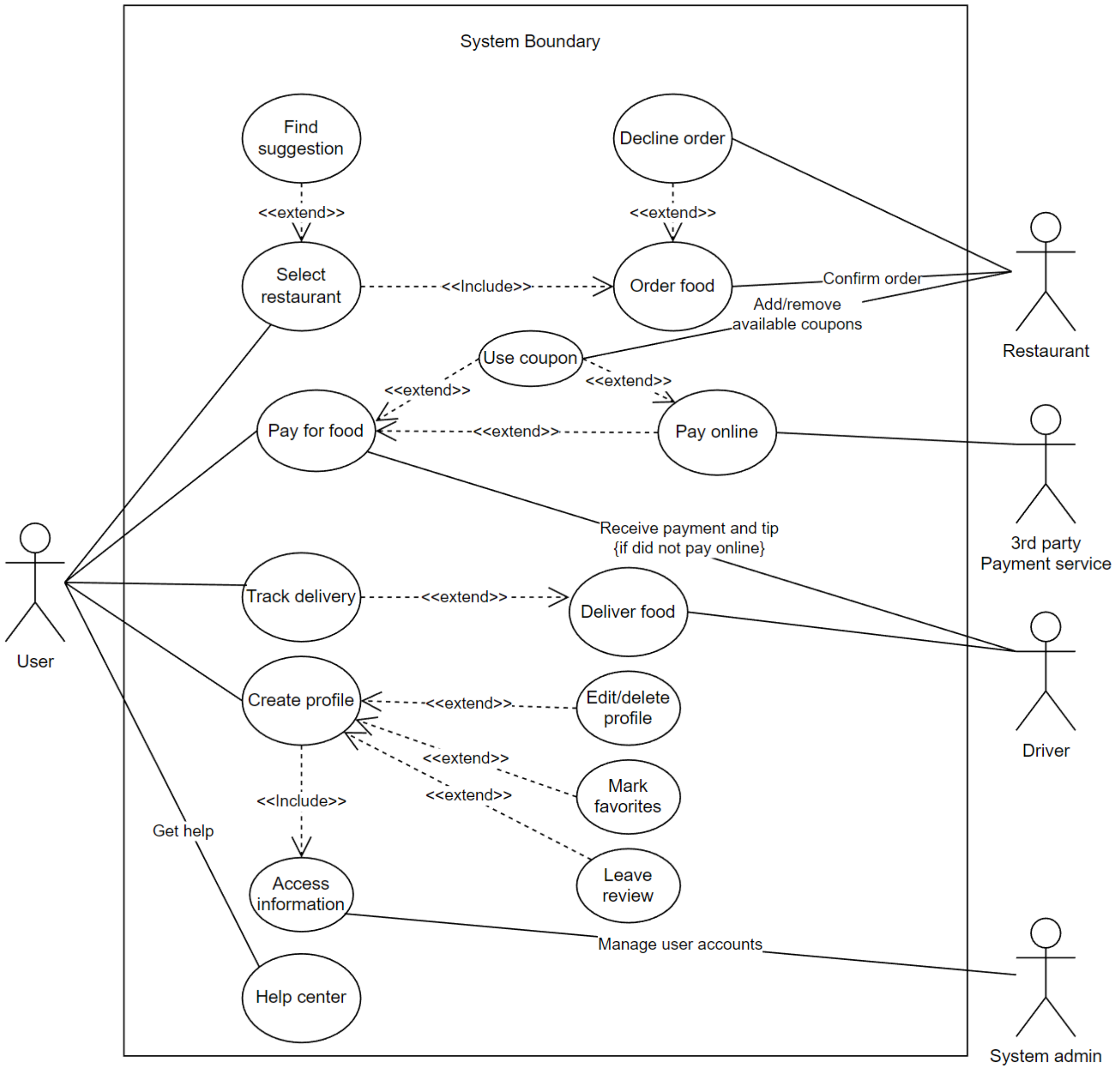
6.2.2 Delivery correct orders

The app must be correctly made to deliver the right order and products to the customers. If there are issues regarding the accuracy of the order, this could lead to bad reviews from the dissatisfied customers.

6.2.3 Performance issues

The app should be reliable and fast. This can be done by working on functionalities such as making sure deliveries are delivered on time and reducing the risk of app crashes.

7. Use Case Diagram



Use case diagram - represents the flow of interactions between system components and actors