**Needs Identification and Problem Statement**

Project Deliverable B

GNG1103[A03]

Team A10

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### **Part I:** **Introduction**

The clients for this project are a group of students who are filling a deficiency gap in the food industry by introducing autonomous drones as an alternative delivery method.

This document discusses the client’s requirements for an application for the customer’s user interface. We took the client requests and split them up into groups. Each group is elaborated on in Part II and its respective interpreted needs are elaborated on in Part III.

**Part II:** **Client Requests**

The client’s requests all revolve around the concepts of having a customer feedback system as well as an attractive interface for the project. For the customer feedback, they requested a 5-star rating system, customer support, and a help page to aid in navigating the app. In terms of the interface, they requested a very simplistic design such as a menu item selection. The interface must also include efficient notifications about the location of the drone as well as the expected delivery time and location.

**Part III:** **Interpreted Needs**

The following table contains the numerical ranking of each group with 1 being the most critical and 5 being desirable but unnecessary.

|  |  |  |  |
| --- | --- | --- | --- |
| Need | Group | Interpreted need | Priority |
| 1 | Tracking + arrival confirmation | Application must have a tracking feature and must confirm delivery for the user and the restaurant | 2 |
| 2 | Customer Service | Customer service numbers and reviewing options must be displayed during the duration of the delivery process | 3 |
| 3 | Rural areas | Application must be accessible to suburban areas and cater to local businesses | 4 |
| 4 | Translate languages | Application should be able to operate in multiple languages | 5 |
| 5 | Simple functionality | Application should be extremely practical and easy to use | 2 |
| 6 | Shopping Cart | Must contain 'shopping cart' to which food from restaurants its added/removed | 1 |
| 7 | Member login | Must be able to make an 'account' which includes accessibility and allergy information | 3 |

**Part IV:** **Benchmarking**

It must also be noted that there are several food delivery services that already exist. We used a few to benchmark features that will be included in the application. The clients also mentioned that out of the currently existing services, they would like their application to be most similar to SkipTheDishes.

|  |  |
| --- | --- |
|  | Technical Benchmarking |
| Delivery Service | Delivery fees | Surge Pricing (busy time fee) | Reviews (out of 5) | Total: |
| SkipThe Dishes | 4-7% | Yes ($) | 4.6 (216k ratings) | **29** |
| UberEats | 7-15% (up to $4.50) | Yes ($$$) | 4.6 (158k ratings) | **20** |
| DoorDash | 7-15% | Yes ($$) | 4.6 (298k ratings) | **26** |
| Importance (Weight): | 5 | 2 | 4 |  |

Green = 3; Yellow = 2; Red = 1

Comparing the most relevant competitors, we see that Skip The Dishes is the best option when prioritizing delivery fees the most in comparison to the other criteria. This information is very important since JAMZ is looking to have a similar UI to the Skip The Dishes UI.

**Part V:** **Problem Statement**

The goal is to design a food delivery application that uses autonomous drones to deliver food reliably to the customer. The application must be easy to use and accessible to rural, suburban areas.