

Project Deliverable B: Need Identification and Problem Statement

GNG 1103 – Engineering Design

Faculty of Engineering – University of Ottawa

Need	Description	Importance (1-5)
Log in Page	Basic credentials (name, email/phone number, location)	5
	Allergies and or accessibility issues (make this changeable and customizable per order)	4
Main Browse Window	List of restaurants -> sub-list of their menu when clicked on	5
	A promoted/ featured section at top???	0
	Time estimate of when the food arrives	4
	The restaurants will be divided into categories for easy searching by customer. Like Uber the app would ask “what do you feel like eating today?” based on customer response the app will display all those types of restaurants or foods available for that category	3
Search Bar	Search Bar at the top for customer to search for their favorite restaurants quickly	3
Shopping Cart	Checkout feature	5
	Modify allergies per meal (could be just a confirm to apply your basic allergy info to all meals or exclude some)	4
	Somewhere it has to tell you if you are using the larger load drone or the smaller load drone (affects price)	4
Map	Should always show drones location	5
	Time estimates of arrival	4
	If drone has issues (e.g. crash): consumer and Jamz have to be notified	5
FAQ section	Basic FAQ	4
	A message feature if the question wasn't answered by the FAQ	3
Report Stolen Drone Button	Where should this button be? Should be easy/quick to find...	3
Steps When Person Receives Food	1. Button confirming that the consumer sees the drone	5
	2. Some form of QR-code that the drone scans from sky	5
	3. Button to confirm that the food is out of the drone and that it can fly away	5
	4. Some kind of feedback and star (rating out of 5) prompt	4
	Extra button that makes drone emit a sound (if the consumer can't find drone) (this would also be convenient for orders that take place at night)	4
Operational Screen	If Jamz is not operating, then the app should display this (no access to restaurant list) (see red light)	4
Bilingual	Button on top right to change language	4
Call/Contact Support (Customer Services)	If ever an issue experienced by customer then contact info of business or operator should be available to customer to express their concerns and help business meet those needs	4

History Section	To display and keep record of all past orders made by customer. This way they have receipts to all orders.	3
Red Light	This light can indicate when there are physical issues with the drone itself that make it difficult to deliver to customer in time. This red light will indicate to customer that an issue with the drone has occurred and their delivery is on its way.	3
Aesthetics	Have simple features like a color palette or logo's that would draw the attention of consumers. (e.g. bright colors like pastels may be more eye catching and appealing to customers)	2
Promos	Promos can be displayed in bright colors at the top of screen right when user logs in to instantly catch their attention. As well as referring a friend with promo codes to draw more customers.	3
In App Wallet	This application will take and securely store the customers debit or credit cards so they will not have to continuously type in their payment information.	4

Scale: 0: unsure/should ask client, 1: not wanted, 2: unimportant, 3: would be good to have, 4: necessary, 5: 100% essential

Benchmarking findings (include stuff into the table that you think is good):

- Uber Eats Air: The drone is shaped like a plane and the package would be a box with a rectangle gadget on top that would lock into bottom of drone and the drone will only begin once package is securely locked and in place. In addition, the package will have the Uber logo printed in big bright bold letters. This feature helps with grabbing the attention of individuals who may see drone in air. (still in testing phases)
- Google's "Project Wing: This is a new concept recently released by google that involves a type of drone that doesn't have to land. This is called a Tail Sitter and is a type of drone that takes off vertically, however, once in the air changes the direction of its propellers and fly's just like a plane. When the drone reaches its destination, it returns to hover mode, and releases a package called the "egg", which falls freely from the drone until it is just above the ground, and then decelerates safely via a string. The idea that the drone does not have to land allows for zero contact delivery, reducing the chance of contamination of the drone itself.

Problem Statement:

A UI that is simple, sleek, and easy to navigate for a variety of customers, with real time drone tracking capabilities.