Zaki Ahmed

Prof. Narayanasami

CS 3354.007

19 February 2025

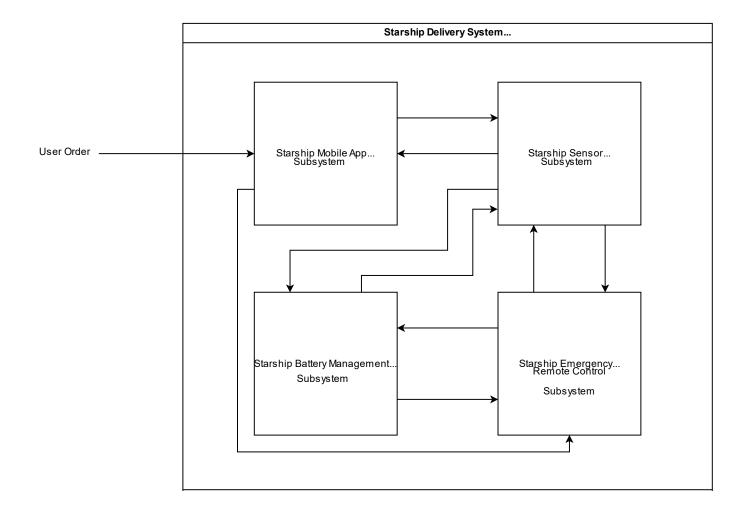
Homework 03

Functional Requirements

- 1. Starship shall allow UTD students, staff and faculty to use their delivery service.
 - 1. Starship will be accessed through the Starship Deliveries app.
- 2. Starship shall autonomously drive to specified locations within its range.
 - 1. Starship shall detect obstacles and reroute accordingly.
 - 2. Starship shall be remotely controlled by a human if any issues are to occur.
- 3. Starship shall deliver food to paying customers.
 - 1. Starship shall deliver food based on the user selected pinned location.
 - 2. Starship shall consistently notify user of its location once an order is placed.
 - 3. Starship shall send a notification to the user once it has arrived to the designated location.
 - 4. Starship shall hand off order once user uses app to unlock its contents.
 - 5. Starship shall verbally thank user.
- 4. Starship shall be able to deliver orders for 18 hours.
 - 1. Starship shall be recharged in specified charging area if battery is too low.
- 5. Starship shall allow users to submit help tickets if any issues occur in the order process.

Nonfunctional Requirements

- 6. Starship shall deliver orders within 60 minutes.
- 7. Starship shall have a maximum speed of 4 miles per hour.
- 8. Starship shall have a maximum weight capacity of 20 pounds.



	Mobile App Subsystem	Sensor Subsystem	Battery Mgmt Subsystem	Remote Control Subsystem
R1				
R1.1	Х			
R2				
R2.1		X		
R2.2]	X	X	X
R3				
R3.1	Х			
R3.2	Х	Х		Х
R3.3	Х	X		
R3.4	Х	X		
R3.5	Х	Х		
R4				
R4.1		Х	X	Х
R5	Х			Х
R6	Х	Х		Х
R7		X	X	X
R8		X	X	