

Design Requirement

Date:	10/18/2021	
Design Project Title:	Deliveroid	
Team Name:	Tempest Team	
Team Advisor	Dr. Kim	
Team Assistant		
Project's Long Term Goal	To create a robot that will autonomously deliver items to multiple floors and buildings	
Project's Current Academic Year Goal	2022	
Team Members (Senior Design Class)	Michael Vaughan , Forzando Mebane, Williams Obidike	
Team Members (Others)		
1-Sentence Problem Statement	Getting up from your desk to transfer documents has developed the need to create a robot that will autonomously transfer said documents so that you will not get disturbed from your work.	
Requirements	Items	Descriptions
1. Product Specification (or Software Requirement Specification)	2D Map	Simulation area mapping and measurement
	Arduino code	Meshing map with motor code
	Arduino Uno	For embedded development of device functions
	3D Model	Frame assembly of the robot

	ESP8266 wifi module	Network features
2. Constraints	Cost	Under \$200
	Time	Deadline: April 2022
	Environmental and Social Responsibility	Use recycled parts Electric motor Power efficient

3. Compliance to regulations and standards

Standard / Regulations	ISO 13849-1 Safety of machinery and parts of control system International Electrotechnical Commission (IEC) 61000-4-2 Electrostatic Discharge Immunity Test
Standard	
Patent Intellectual Property	Delivery robot product