Customer Needs

Questions	Responses	Interpretations
How will the camera impact the sensors in the cave?	The IR camera may cause excess noise in the environment.	A mask whether programmed or physical needs to be present.
Is there a size constraint?	Yes, 12x12x12 inches to start.	The robot must fit into a 12x12x12 inch cube but can expand afterward, so folding parts may be an option.
What should we focus on?	Having a robot that may not be the best at everything.	Focus on what gets us the most points and make sure our robot can do all the chosen tasks.
Is there anything not allowed on the robot?	Yes, a list of materials and systems are not allowed.	Make sure that none of the items on the illegal materials list are present in the robot's design.
Is there a mass constraint?	12 kilograms.	26 pounds is the goal weight, so we are not near the weight limitation

Is there a time constraint?	Yes, 3 minutes.	The robot will have a maximum of 3 minutes to complete all its tasks.
What will be required to let the robot know when to start?	A start LED will be attached to the field wall.	Make sure the robot can sense an illuminated LED so it will start operating thereafter.
How are points acquired?	There are several ways to get points, and they are detailed out in the game manual.	Reference the game manual to design the robot based on point allocation.
Is the team beacon provided?	No. The beacon should be designed by the team and must pass inspection. Must follow rules in section 3.5.4 of the game manual.	The design of the team beacon is up to team 507, provided it follows the guidelines in section 3.5.4
Can the robot modify the field?	Any damage to the field can be penalized with a yellow card. Significant damage requiring extensive repairs can merit a red card.	Design the robot such that it will not damage or destroy the game field.
Are there any limitations what can be used to propel the robot (i.e. wheels and tank treads)?	No, as long as the robot does not damage the field and adheres to the Mechanical	Make the robot so that it will not damage the field and use the game manual as a reference when considering

	Robot Rules in the game manual.	the use of different mechanisms and propulsion systems.
Will the position of the game elements in the playing field be standardized?	The astral materials will be randomly placed on the field. The shipping containers and other game elements have a positional tolerance that may vary ±1 inch.	Design a robot to accommodate positional variance of the game elements as described by the game manual.

For team 507 there are not customer needs as may be present in other projects. Functionally the customer is the Southeast Con competition, with the primary method of communication being the game manual they've provided. This game manual is quite thorough in its descriptions of the competition and can be consulted anytime with internet access, any questions about the competition should be answered through the manual. Southeast Con has provided a Discord server to connect with other teams, but the information within this social network is not inerrant as it is within the game manual.