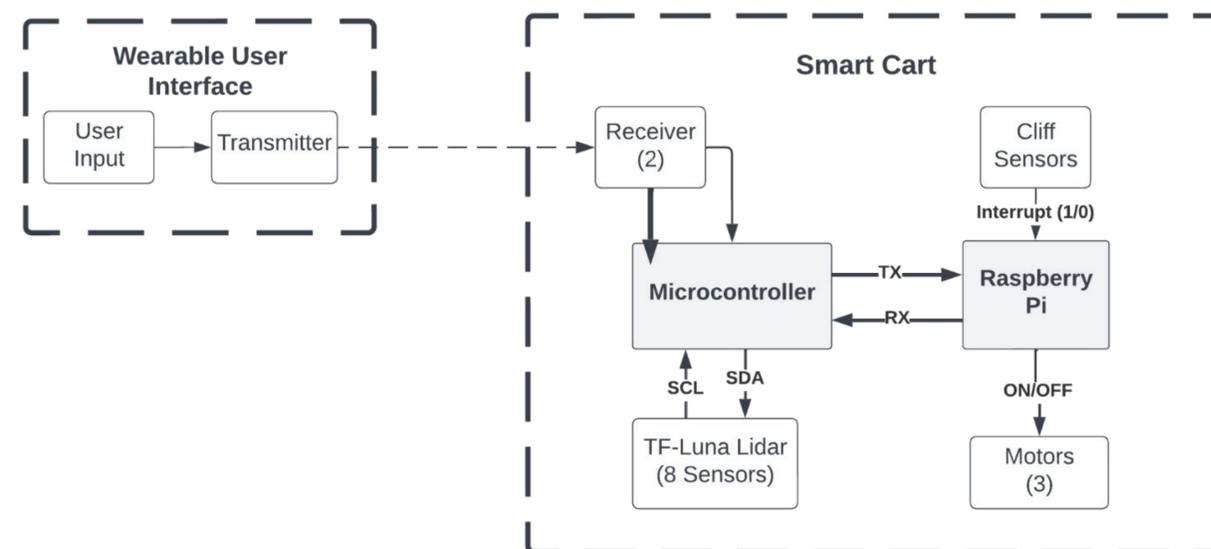


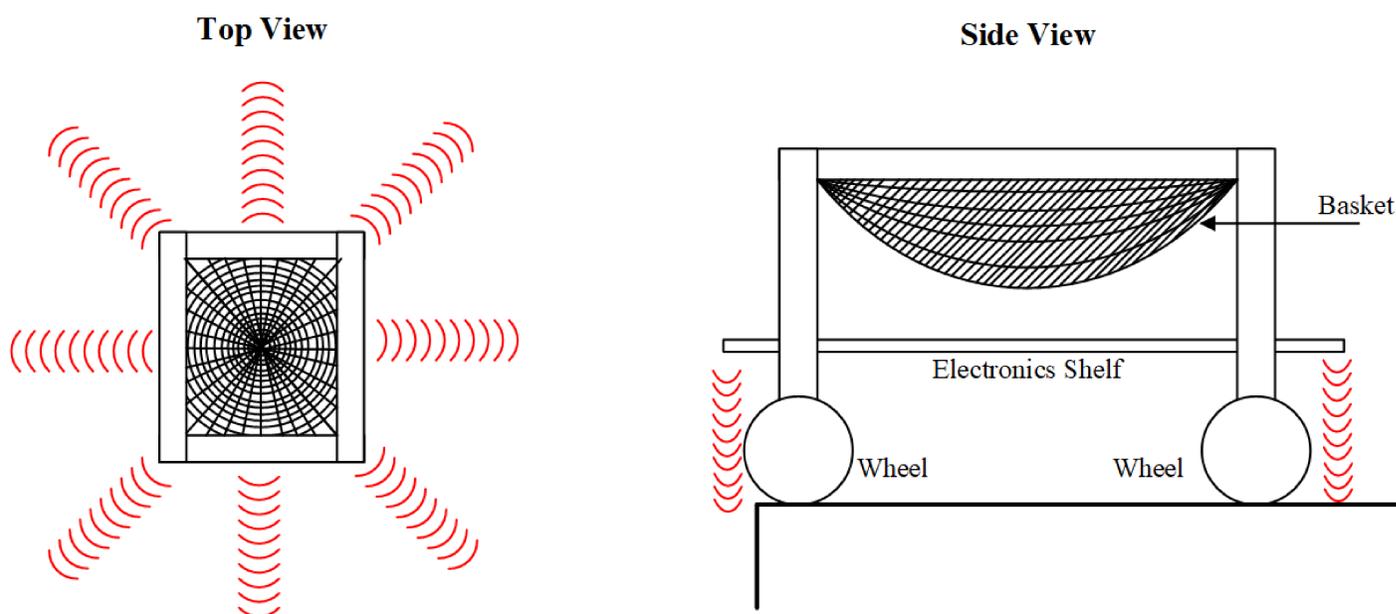
## Project

- People with disabilities often have difficulties carrying their personal belongings from one place to another due to mobility challenges.
- The project will help people with disabilities maintain their independence and provide a safe and efficient method to transport user items.
- The Smart Cart utilizes object following and obstacle avoidance technology to follow the user and efficiently carry user belongings.

## System



## Methods



## Conclusion

- Structure and net system provide support to carry items up to 30 lb and increases safety margins.
- Motors move the robot at 1.5 ft per sec.
- Robot system follows a user within 10 ft, allowing user access to the system.
- Circuit powers all electronics using eight AA batteries, increasing simplicity for the user.
- Sensors detect objects at 25 ft, demonstrating obstacle detection and avoidance.
- User device is connected to the robot via Bluetooth connection.