PURPOSE: The purpose of developing a team contract is to jump-start your work together as a team, to help avoid the problems commonly faced by many teams, and to facilitate continual improvement of your teamwork throughout the entire project. By addressing the following issues, you should be able to enhance your team performance, member satisfaction, and learning.

INSTRUCTIONS: Develop your team contract through mutual discussion and consensus during your team meeting. Please complete the following components.

Team Name: Automations for ABLE Alliance

Team Member Information:

Name	Contact Info (email, phone number, etc.)	College Major/ Program of Study / or Area of Expertise	Knowledge, Skills, or Abilities you think will be relevant for this project
Jong Yoon Kim	<u>jkim3328@gatech.edu</u> 781-999-3029	Computer Science	Python, Android Studio
Anirudh Gattu	agattu3@gatech.edu	Computer Engineering	Microcontrollers, Arduino, and PoC outline
Yu-Chen Lin	ylin726@gatech.edu	Computer Science	Digital Signal Processing, Microcontrollers, Python, Machine Learning

Shared Cognition:

a) What is your team's goal for this project?Create an emergency crash detection system on a wheelchair.

Roles:

a) What will be each person's role?

Anirudh Gattu	Jong Yoon Kim	Yu-Chen Lin
Microcontroller Fixations Sensor Testing Coding Arudino	Coding the application	Microcontroller system design Sensor signal processing

b) Will roles change and adapt? How?

This would be indeed necessary as some technical resolutions might be a byproduct of a swap of roles to successfully achieve the task at hand. Be it a different approach, level of expertise, or even just a second attempt. Wearing many hats in this project and being as versatile as possible is key in this team.

Communication Norms:

a) Will your team have regular team meetings? When and where will your team meet?

Our team will have regular teams meetings online using Microsoft Teams or at the College of Computing building. We will meet on Tuesdays and Thursday at 5 P.M. and on Fridays at 12 P.M. if there is anything we need to discuss. We will also meet with our facilitator weekly on Fridays at 2 P.M.

b) How will you meet as a team? (face-to-face, using video conferencing, etc.)

Face-to-face when prototyping and meeting with mentor. Video conferencing when coming up with ideas/resolutions, checking in about deadlines, and meeting with facilitator.

c) What are the rules for your team meetings?

We will have a weekly scrum where we ask each member the following questions: What have you accomplished? What are you currently working on? What will you be working on (decided during project management time which includes teaser video, proposal etc)? (Have sufficient answers for these such that the project is progressing and not static.)

We will follow this Agile methodology designed to enhance communication, collaboration, and transparency within the team.

Be punctual and come prepared to talk about the meeting topics. If you are going to be late or miss the meeting, you should let other members know as soon as possible.

d) What will be your method of completing assignments (virtual meetings, face-to-face meetings, splitting up the work, etc.)

First, discuss the milestones to and reach a potential solution to the problems, then split up the work to individual and collaborative parts.

We will allocate weekly meetings to present results that has been done individually or as a combined effort from the previous week and potential problems that arose.

e) What are the norms for responding to virtual communication? (e.g., respond to emails within 24 hours, etc.)

We have decided to incorporate Teams Chat, which we can differentiate other personal messages and chats from iMessage to Project Related messages (also available on the Teams app) to differentiate notification mediums for project related messages vs other. Respond and/or react to chat within 24hrs. We also have each other's phone numbers in case direct contact may be necessary.

Operating Guidelines:

a) How will your team make decisions?

Team decision time should be made separate from engineering time. Team decisions will be coordinated a week in advance to create concrete plans before the individual or combined work begins.

If we reach an impasse during a discussion, we will consult with our mentor.

- b) What are your team's expectations regarding team member performance and contribution quality? It is necessary that team members carry their weight. Some may be more familiar with certain things than others but atleast a genuine effort will be appreciated.
- c) What are your team's expectations regarding cooperation and attitudes?

Our team expects other members to be engaged in the team meetings and the project deliverables. We should always keep a positive attitude and be willing to listen to new ideas and thoughts.

D) What are your team's expectations regarding meeting attendance, punctuality, and participation? We expect all members to attend the meetings on time and come prepared to participate. There will be a 5 minute grace period to attend the meetings. We do realize that not every single member can attend every single event and will be understanding if certain events prevents attendance but the absent member must let others know at least 2 hours in advance. We will expect each member to attend each meeting we have organized and agreed upon.

Conflict Management:

- a) What strategies will your team use to resolve differences of opinions among members? Once there is a difference of opinions, come with some reasonable validations as to why there is. Take time to address and talk things out, however if it is extending the allocated meeting duration, revisit it next meeting. If still not resolved, consult with the mentor or another engineering faculty for a second opinion.
- b) What strategies will your team use to deal with non-cooperative or underperforming members? We do understand that each member comes from a different background and can underperform. If we feel like a member is underperforming, we will discuss with him what the potential barriers are and attempt to solve it together. However, if a member is non-cooperative, that is unacceptable behavior and we will have a chat as a team to resolve this issue and escalate it to the facilitator if they are still non-cooperative. c) How will your team handle unexpected issues (e.g. family emergencies, illnesses, etc.)? If the unexpected issues make the member unable to spend time on the project, other members will try to take his share of work for the week. But if the issue occurs too frequently, we will deem this as a

Outside Commitments:

a) What outside commitments (family, job, personal) that could impact an individual's ability to work on this team project?

non-cooperative behavior and have a chat with the member and escalate it to the facilitator if it continues.

Anirudh - personal , however I should not have any problems. Jong Yoon Kim- schoolwork and also have to find a new place to live Yu Chen Lin - a lot of schoolwork

Research Question your team will pursue:

How can we effectively integrate efficient and reliable sensor-based, low-power smart technology into wheelchair systems to enhance the safety and overall quality of life for individuals with mobility impairments like Trey?

Indicate full team agreement on these decisions: All Team members must indicate their agreement by typing their names at the bottom of this document.

Anirudh Gattu Jong Yoon Kim Yu-Chen Lin