



VCU

College of Engineering

Project 318 and Safe Human-Robot Collaboration through AI-embedded Smart Glove System

Team Contract

Prepared for

Company Contact/Mentor

Sponsor Organization

By

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Step 1: Get to Know One Another. Gather Basic Information.

Task: This initial time together is important to form a strong team dynamic and get to know each other more as people outside of class time. Consider ways to develop positive working relationships with others, while remaining open and personal. Learn each other's strengths and discuss good/bad team experiences. This is also a good opportunity to start to better understand each other's communication and working styles.

<i>Team Member Name</i>	<i>Strengths each member bring to the group</i>	<i>Other Info</i>	<i>Contact Info</i>
Caitlin Ngo	Collaborator, problem-solver, Organized, Creative	I enjoy being a part of a team and meeting new people.	ngoca@vcu.edu 703-400-2786
Sienna Sterling	Works well under pressure, problem solver, determined, good presenter.	Normally I will complete things when I say I will. I'm really deadline oriented.	sterlingsr@vcu.edu 804-895-3042
Chris Hoang	Organization, Punctual, Easygoing, Fast typer, Work well under pressure.	I'm good at coming up with solutions. Good at public speaking.	hoangc3@vcu.edu 703-732-1494
Erin Anderson Person	Structured, Organized, problem-solver, accountable	I am good at designing.	ea@levelforward.co 202-300-4485

<i>Other Stakeholders</i>	<i>Notes</i>	<i>Contact Info</i>
<i>Example: Faculty Advisor</i>	Also our sponsor	ebulut@vcu.edu
<i>Sponsor, Mentor, etc. (Add rows if necessary)</i>		

Step 2: Team Culture. Clarify the Group's Purpose and Culture Goals.

Task: Discuss how each team member wants to be treated to encourage them to make valuable contributions to the group and how each team member would like to feel recognized for their efforts. Discuss how the team will foster an environment where each team member feels they are accountable for their actions and the way they contribute to the project. These are your Culture Goals (left column). How do the students demonstrate these culture goals? These are your Actions (middle column). Finally, how do students deviate from the team's culture goals? What are ways that other team members can notice when that culture goal is no longer being honored in team dynamics? These are your Warning Signs (right column).

Resources: More information and an example Team Culture can be found in the Biodesign Student Guide "Intentional Teamwork" page ([webpage](#) | [PDF](#))

<i>Culture Goals</i>	<i>Actions</i>	<i>Warning Signs</i>
<i>Being on time to every meeting</i>	<ul style="list-style-type: none">• <i>Set up meetings in shared calendar</i>• <i>Send reminder email in day before meeting</i>• <i>If you are going to be late beyond your control just let us know.</i>	<ul style="list-style-type: none">• <i>Student misses first meeting, warning is granted</i>• <i>Student misses meetings afterwards – issue is brought up with faculty advisor</i>
<i>Informing the group of any delays in completing assignments</i>	<ul style="list-style-type: none">• <i>Stay up to date with each other's project responsibilities</i>• <i>Set reasonable deadlines and note when an extension is needed</i>• <i>Inform team members if you're unsure of something</i>	<ul style="list-style-type: none">• <i>Student shows up for weekly meeting with no considerable work done</i>

Take notes each meeting.	Document every meeting, including Google Drive and deadlines.	
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Step 3: Time Commitments, Meeting Structure, and Communication

Task: Discuss the anticipated time commitments for the group project. Consider the following questions (don't answer these questions in the box below):

- What are reasonable time commitments for everyone to invest in this project?
- What other activities and commitments do group members have in their lives?
- How will we communicate with each other?
- When will we meet as a team? Where will we meet? How Often?
- Who will run the meetings? Will there be an assigned team leader or scribe? Does that position rotate or will same person take on that role for the duration of the project?

Required: How often you will meet with your faculty advisor, where you will meet, and how the meetings will be conducted. Who arranges these meetings?

See examples below.

<i>Meeting Participants</i>	<i>Frequency Dates and Times / Locations</i>	<i>Meeting Goals Responsible Party</i>
<i>Students Only</i>	<i>As Needed, On Discord Voice Channel or Facetime.</i>	<i>Update group on day-to-day challenges and accomplishments (Avery will record these for the weekly progress reports and meetings with advisor)</i>
<i>Students Only</i>	<i>Fridayay</i>	<i>Actively work on project (Sienna will document these meetings by taking photos of whiteboards, physical prototypes, etc, then post on Discord and update Capstone Report)</i>
<i>Students + Faculty advisor</i>	<i>Every Wednesday at 1 pm in TBD</i>	<i>Update faculty advisor and get answers to our questions (Chris will scribe; Erin will create meeting agenda and lead meeting)</i>

Step 4: Determine Individual Roles and Responsibilities

Task: As part of the Capstone Team experience, each member will take on a leadership role, *in addition to* contributing to the overall weekly action items for the project. Some common leadership roles for Capstone projects are listed below. Other roles may be assigned with approval of your faculty advisor as deemed fit for the project. For the entirety of the project, you should communicate progress to your advisor specifically with regard to your role.

- **Before meeting with your team**, take some time to ask yourself: what is my “natural” role in this group (strengths)? How can I use this experience to help me grow and develop more?
- **As a group**, discuss the various tasks needed for the project and role preferences. Then assign roles in the table on the next page. Try to create a team dynamic that is fair and equitable, while promoting the strengths of each member.

Communication Leaders

Suggested: Assign a team member to be the primary contact for the client/sponsor. This person will schedule meetings, send updates, and ensure deliverables are met.

Suggested: Assign a team member to be the primary contact for faculty advisor. This person will schedule meetings, send updates, and ensure deliverables are met.

Common Leadership Roles for Capstone

1. **Project Manager:** Manages all tasks; develops overall schedule for project; writes agendas and runs meetings; reviews and monitors individual action items; creates an environment where team members are respected, take risks and feel safe expressing their ideas.
Required: On Edusourced, under the Team tab, make sure that this student is assigned the Project Manager role. This is required so that Capstone program staff can easily identify a single contact person, especially for items like Purchasing and Receiving project supplies.
2. **Logistics Manager:** coordinates all internal and external interactions; lead in establishing contact within and outside of organization, following up on communication of commitments, obtaining information for the team; documents meeting minutes; manages facility and resource usage.
3. **Financial Manager:** researches/benchmarks technical purchases and acquisitions; conducts pricing analysis and budget justifications on proposed purchases; carries out team purchase requests; monitors team budget.
4. **Systems Engineer:** analyzes Client initial design specification and leads establishment of product specifications; monitors, coordinates and manages integration of sub-systems in the prototype; develops and recommends system architecture and manages product interfaces.
5. **Test Engineer:** oversees experimental design, test plan, procedures and data analysis; acquires data acquisition equipment and any necessary software; establishes test protocols and schedules; oversees statistical analysis of results; leads presentation of experimental finding and resulting recommendations.

6. **Manufacturing Engineer:** coordinates all fabrication required to meet final prototype requirements; oversees that all engineering drawings meet the requirements of machine shop or vendor; reviews designs to ensure design for manufacturing; determines realistic timing for fabrication and quality; develops schedule for all manufacturing.

<i>Team Member</i>	<i>Role(s)</i>	<i>Responsibilities</i>
<i>Chris Hoang</i>	<i>Scriber, Logistics Manager.</i>	<ul style="list-style-type: none"> • <i>Keep a detailed record of meeting notes and share with group</i> • <i>Manages facility and resource usage.</i> • <i>Lead external and internal interactions.</i>
<i>Caitlin Ngo</i>	Financial Manager, Test Engineer	<ul style="list-style-type: none"> • researches/benchmarks technical purchases and acquisitions; conducts pricing analysis and budget justifications on proposed purchases; carries out team purchase requests; monitors team budget. • oversees experimental design, test plan, procedures, and data analysis; acquires data acquisition equipment and any necessary software; establishes test protocols and schedules; oversees statistical analysis of results; leads presentation of experimental findings and resulting recommendations.
<i>Erin Anderson</i>	Project Manager	<ul style="list-style-type: none"> • develops overall schedule for project • writes agendas and runs meetings • reviews and monitors individual action items • creates an environment where team members are respected • take risks and feel safe expressing their ideas.
Sienna Sterling	Systems Engineer, Historian	<ul style="list-style-type: none"> • Analyzes Client initial design specification and leads establishment of product specifications • Monitor, coordinate and manage integration of subsystems in the prototype • Develops and recommends system architecture and manages product interfaces. • Take pictures of our team to document our progress.

Step 5: Agree to the above team contract

Team Member: Chris Hoang

Signature: __Chris Hoang__

Team Member: Sienna Sterling

Signature: _____Sienna Sterling_____

Team Member: Caitlin Ngo

Signature: __Caitlin Ngo__

Team Member: Erin Anderson

Signature: _____Erin Anderson_____