



VCU College of Engineering

CS 25-333

Quantum Computing for K-12 with Blocky
Team Contract

Prepared for

Thang Dinh

VCU College of Engineering

By

Santiago Agudelo

Steven Acosta

Josh Pomeroy

Robert Duncan

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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>
Santiago Agudelo	Flexible with multiple workloads, willingness to work, and focus once assigned	C, Java, Linux command line	agudelos2@vcu.edu Discord
Robert Duncan	Teamwork and communication to help the team stay focused and produce a good product.	<i>C, Java, python</i>	duncanrm2@vcu.edu Discord
Steven Acosta	Communication and organization skills to help the team deliver project deliverables and goals.	Python, Java, SQL, C experience	acostas@vcu.edu Discord
Joshua Pomeroy	Make sure we keep updated with what we need to do. Keep in contact with each other. Wants to do my fair share	I know Java and Linux/C, Did a digital Internship with Global Tech in Fall 2023 for Digital Marketing and learned to build a website with Shopify.	pomeroyjd@vcu.edu Discord

<i>Other Stakeholders</i>	<i>Notes</i>	<i>Contact Info</i>
Thang Dinh (Sponsor/Advisor)	He is very nice, considerate of our time and has experience in working with Blockly.	tndinh@vcu.edu Discord

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>
1) Keep up with weekly meetings	<ul style="list-style-type: none"> • Meet up every Thursday at 6 at the West Engineering Hall • If needed, we'll set up a Discord Call meeting to cover extra materials and meet up in person if things are really bad. 	<ul style="list-style-type: none"> • Person doesn't show up to meeting (barring things like traffic) • Not telling ahead of time they can't make it • Not responding to emails or discord calls
2) Make sure everyone is pulling their weight	<ul style="list-style-type: none"> • split up work evenly • make reasonable deadlines for each persons section of work 	<ul style="list-style-type: none"> • someone falls behind on their section of work • someone stops communicating with the group
3) Integrating ideas from everyone into the team project	<ul style="list-style-type: none"> • Hearing out ideas from every individual • Finding a solution that works best for the team project 	<ul style="list-style-type: none"> • someone ignores someone else's idea • Not voicing their own idea's/opinion • Being controlling/not letting others speak • Not willing to compromise

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 the 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>
Students only: <ul style="list-style-type: none">• Santiago Agudelo• Robert Duncan• Steven Acosta• Joshua Pomeroy	As Needed, On Discord Voice Channel	Casual updates to keep people on task and on schedule and changes and updates are utilized if problems or scheduling conflicts arise.
Students Only: <ul style="list-style-type: none">• Santiago Agudelo• Robert Duncan• Steven Acosta• Joshua Pomeroy	Every Thursday at 6 at the West Engineering Hall	Meet-up in person and work on completing that week's assignment and starting on the next one.
Students + Faculty advisor: <ul style="list-style-type: none">• Santiago Agudelo• Robert Duncan• Steven Acosta• Joshua Pomeroy• Thang Dinh	On Zoom from 1-2 pm every Thursday	Update faculty advisor and get answers to our questions; address what we need to do for the project; work on the project

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>
Santiago Agudelo	Logistics Manager	<ul style="list-style-type: none"> • Leads contact within and outside of organization • Obtains any information the team may need • Documents meeting minutes • Tracks facility and resource usage
Robert Duncan	Systems Engineer	<ul style="list-style-type: none"> • Analyze the clients needs • Create and integrate sub-systems • Develop system architecture and manage product interfaces
Steven Acosta	Project Manager, Financial Manager	<ul style="list-style-type: none"> • Planning and Scheduling • Resource Management • Risk Management • Communication • Monitor and Reporting • Budget Management • Financial Reporting • Risk Assessment • Compliance
Joshua Pomeroy	Test Engineer	<ul style="list-style-type: none"> • 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.

Step 5: Agree to the above team contract

Team Member: Robert Duncan

*Signature: **Robert Duncan***

Team Member: Santiago Agudelo

*Signature: **Santiago Agudelo***

Team Member: Steven Acosta

*Signature: **Steven Acosta***

Team Member: Joshua Pomeroy

*Signature: **Joshua Pomeroy***