VCU College of Engineering

CS 25-346 Artificial Intelligence / Deep Learning / Machine Learning / Linguistics / Acoustics

Team Contract

Prepared for

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DoD

By

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Contents

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.

Team Member Name	***Strengths each member brings to the group***	***Other Info***	***Contact Info***
Nathan DeVore	NLP, Python, Java, C, Engineering, problem solving		devoreni@vcu.edu (434) 282-8258
Allen Lee	Experience with Machine Learning, Java, C(++,#), Python in that order.	Currently in a few classes that may also help, like Artificial Intelligence and Databases. Have had some fairly unresponsive groups in the past.	leea18@vcu.edu (804) 683-8526
Nate Eldering	Communication, technical skills, problem solving, Python, Java, C	currently taking machine learning, artificial intelligence and databases.	elderingn@vcu.edu 703-935-6689
Connor Kohout	C, Java, Python, sql	currently in ML	kohoutck@vcu.edu 703-508-6386

Other Stakeholders	***Notes***	***Contact Info***
Tamer Nadeem	Faculty advisor.	tnadeem@vcu.edu
Nibir Dhar	Contact from project sponsor.	dharnk@vcu.edu

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)

Culture Goals	***Actions***	***Warning Signs***
Getting to each meeting on time.	- Create meetings with everyone's schedules in mind - Communicate in the Discord, posting reminders before each meeting	- If a student misses a meeting, they receive a warning - If a student continues to miss meetings, the issue will be brought to the faculty advisor
Making everyone aware of any delays in the schedule	- Keep each other informed about each person's portion of the project - Create achievable benchmarks, and communicate when they cannot be met	- Student has not contributed what they communicated they would in the weekly meeting
Keep work well documented	- maintain clean well documented code - keep work consistent with others and up to date on github	- pushes to github with no comments or explanation
Communication and understanding	- let others know if responsibilities are too much or not reasonable - adjust responsibilities if needed	- Student seems to never complete anything
consistent communication with sponsor	- meeting on zoom or live some other way	- skipping meetings or multitasking during meetings

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 advisor, where you will meet, and how the meetings will be conducted. Who arranges these meetings?
See examples below.

Meeting Participants	***Frequency*** ***Dates and Times / Locations***	***Meeting Goals*** ***Responsible Party***
Students Only	As Needed, On Discord Voice Channel	Update group on day-to-day challenges and accomplishments
Students Only	Weekly, 6pm Thursday,	Actively work on project
Students + Faculty advisor	Once a week via Zoom, time to be determined	Update faculty advisor and get answers to our questions
Project Sponsor	Twice a month via Zoom, time to be determined	Update project sponsor and make sure we are on the right track

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.

Team Member	***Role(s)***	***Responsibilities***
Nathan DeVore	System Engineer Test Engineer	- Keep track of all project specifications and make sure that all aspects of the prototype meet requirements - Test prototype to ensure quality
Nate Eldering	Project Manager	- Keep everyone working on a timely consistent schedule - Ensure everyone feels safe and open to share ideas
Allen Lee	Logistics Manager	- Communicate with members of the project to coordinate meeting times - Acquiring information the team requires to continue the project
Connor Kohout	Manufacturing engineer	- Ensure that the product is made to task

Step 5: Agree to the above team contract

Team Member: *Signature:* *Nathan DeVore*

Team Member: *Signature:* *Allen Lee*

Team Member: *Signature:* *Nate Eldering*

Team Member: *Signature:* *Connor Kohout*