25-338: Intelligently identifying and locating Electronic Components in Power System Circuit Diagrams

Team Contract

Prepared for

Company Contact/Mentor

Sponsor Organization

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 bring to the group	Other Info	Contact Info
Kyle Jones	Industry experience in software engineering	I have a second degree in physics and a math minor	Joneskl12@vcu.edu
Erick Zheng	Problem-solving, can find solutions	Cyber security concentration for cs degree	zhenge@vcu.edu
Alex Kem	Backend development, problem solving	Trying to get a business minor along with cs degree	kema@vcu.edu
Daniel Polen	UI/UX design	Active game developer	polenda@vcu.edu

Other Stakeholders	Notes	Contact Info
Dr. Changqing Luo	Both sponsor and advisor, with a masters student also a point of contact for team.	cluo@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*
Being on time to every meeting	- Set up meetings in discord	- Student misses meetings with no communication, warning is issued - Student misses meetings after warnings – issue is brought up with faculty advisor
Informing the group of any delays in completing assignments	- Stay up to date with each other's project responsibilities - Set reasonable deadlines and note when an extension is needed	- Student fails to communicate work being done or delays before/during meeting times
Working/making deadlines within the agile framework	- 2-week sprints to iterate and establish workflow	- Student Failing to follow structure/workflow of sprint deadlines results in a warning - Repeated warnings brought up to faculty advisor

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.

Meeting Participants	Frequency Dates and Times / Locations	Meeting Goals Responsible Party
Students Only	As Needed, On Discord Voice Channel Daily text update via discord	Update group on day-to-day challenges and accomplishments (Avery will record these for the weekly progress reports and meetings with advisor)
Students Only	Biweekly on Mondays	plan for each sprint (post on Discord and update Capstone Report)
Students + Faculty advisor/Project Sponsor	Biweekly Wednesday at 2 pm (tentative/TBD; could change based on advisors schedule)	Update faculty advisor and get answers to our questions, Update project sponsor and make sure we are on the right track (Daniel will scribe; Daniel will create meeting agenda and lead meeting)

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 <u>for the client/sponsor</u>. This person will schedule meetings, send updates, and ensure deliverables are met.

Suggested: Assign a team member to be the primary contact <u>for faculty advisor</u>. 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
Kyle Jones	*Systems Engineer/Test 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. 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.
Erick Zheng	Systems Engineer/ Logistics manager	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. 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.
Alex Kem	Test Engineer/Financial Manager	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. Researches/benchmarks technical purchases and acquisitions; conducts pricing analysis and budget justifications on proposed purchases; carries out team purchase requests; monitors team budget.
Daniel Polen	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.)

Step 5: Agree to the above team contract

Team Member: Kyle Jones   Signature: *Kyle Jones*

Team Member: Erick Zheng   Signature: *Erick Zheng*

Team Member: Alex Kem   Signature: *Alex Kem*

Team Member: Daniel Polen   Signature: *Daniel Polen*