

#025-345 Network Feature Extraction from Traffic Captures to Support Automation of High-Fidelity Cyber Simulation Environment

Team Contract

Prepared for
Nibir Dhar/Irfan Ahmed
DoD Aspire

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.

| Team Member Name | Strengths each member bring to the group | Other Info | Contact Info |
|-----------------------|--|--|--------------------|
| William Lagos | Technical skills, flexibility, problem solving, teamwork | | lagoswj@vcu.edu |
| Sam Soltanian | Always trying to learn, problem-solving flexible | I enjoy learning from other people and in turn offering new knowledge | soltanians@vcu.edu |
| Christopher Castro | Friendly, curious, bias for action, hard worker | Unfamiliar with cybersecurity topics / PCAP data, but eager to fill in knowledge gaps. | castrocm5@vcu.edu |
| Ryan Collette | Always want to learn, willing to adapt to complete goals, enjoy working with a team. | Lack of in depth cyber-security concepts, but surface level knowledge and very interested in learning. | colletterc@vcu.edu |

| Other | Notes | Contact Info |
|--------------|------------------------------------|-----------------|
| Stakeholders | | |
| Project | Pending | Nibir Dhar |
| Sponsor | | dharnk@ycu.edu |
| 1 | | |
| | | |
| Staff Mentor | Initial Meeting Wed, Sep. 4 @ Zoom | Irfan Ahmed |
| | 1 | iahmed3@ycu.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 |
|--|---|--|
| 1: Punctuality | - Students will arrive to meetings on time | - Student misses with no explanation first meeting, warning is granted |
| | - Students need to communicate any needs to cancel or reschedule meetings | - Student misses meetings with no explanation afterwards – issue is brought up with faculty advisor |
| 2: 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 shows up for weekly meeting with no considerable work done |
| 3: Be open to critical | - Be receptive to ideas that | - Students are |
| feedback and receptive | potentially differ from your own. | unreceptive/immature about feedback. |
| | - Be open to alternative design options that you may be unfamiliar with. | |
| | - Respond to feedback in a mature and normal manner. | |

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 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, in-person or on Discord based on requirements per week. Scheduled based on discussion every Thursday. | Actively work on project (Group will document these meetings by taking photos of whiteboards, physical prototypes, etc, then post on Discord and update Capstone Report) |
| Students Only | Every Thursday during the seminar time block | Update group on weekly challenges and accomplishments, scheduling as needed meetings for other time slots during the week. |
| Students + Faculty advisor | Every Every Monday at 4:15 on Zoom | Update faculty advisor and get answers to our questions, updates following agile methodology (what we've accomplished, what we're blocked on, what we're doing next) |
| Project Sponsor | Pending | 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 <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.

| Team Member | Role(s) | Responsibilities |
|--------------------|----------------------|--|
| William Lagos | Systems Engineer | Establish project specifications, monitor, coordinate and manages integration of subsystems in the prototype, and develop/recommend systems for use in product |
| Christopher Castro | Project Manager | Write agendas and run meetings, review and monitor individual action items. Come up with major stories and set up agile board, organize action items. |
| Sam Soltanian | Logistics Manager | Communicate with Faculty Advisor & Advisor and communicate between team and faculty/sponsor. Make sure everyone is on the same page. |
| Ryan Collette | Test Engineer | Collaborate and plan experimental design, plan testing frameworks, scheduling testing, statistical analysis of training results or confidence weights. |

Step 5: Agree to the above team contract

Team Member: Sam S Signature: Sam Soltanian

Team Member: Ryan C Signature: Ryan Collette

Team Member: Chris C Signature: Christopher Castro

Team Member: William L Signature: William Lagos