



**VCU**

College of Engineering

# CS 25-319 Analyzing and Designing Complex Systems using GraphQL (Part II)

## **Team Contract**

Prepared for  
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Bank of America

By

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## Contents

Step 1: Get to Know Another	2
Step 2: Team Culture. Clarify the Group's Purpose and Culture Goals.	3
Step 3: Time Commitments, Meeting Structure, and Communication	4
Step 4: Determine Individual Roles and Responsibilities	5
Step 5: Agree to the above team contract	6

## 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.

<b>Team Member Name</b>	<b>Strengths each member bring to the group</b>	<b>Other Info</b>	<b>Contact Info</b>
Jayson Urena	Backend, Databases, SQL, Python, Scala, Java, C, RestAPI, Elastic Search, Testing.	Experience with Agile development, backend, RestAPI, and database integration.	urenajm@vcu.edu
Diya Ram Mohan	Web development experience React, Angular, Java, Typescript, Python, MSSQL, HTML/CSS	Experience with agile methodology, full-stack web development, and web development software like Figma, Swagger, etc.	rammd@vcu.edu
Montel Marks	Strategy, Statistical Analysis, Java, SQL, Python, SAS	Experience with statistical software, Data relations, and hypothesis testing	marksm2@vcu.edu
Houda Lahrouz	C, C++, SQL, CSS, JavaScript, full stack development	Experience with agile methodology, Designing websites, using Figma, Trello, and Github.	lahrouzh@vcu.edu

<b>Other Stakeholders</b>	<b>Notes</b>	<b>Contact Info</b>
Thomas Gyeera	Faculty Advisor	gyeeratw@vcu.edu
Michael Karafotis	Sponsor	michael.karafotis@bofa.com

## 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](#))

<b><i>Culture Goals</i></b>	<b><i>Actions</i></b>	<b><i>Warning Signs</i></b>
<i>Showing up to group meetings</i>	<ul style="list-style-type: none"><li>- <i>Meeting reminders and confirmations the day before the meeting</i></li></ul>	<ul style="list-style-type: none"><li>- <i>Verbal warning if a student misses or is over 20 minutes late to a meeting without warning given.</i></li><li>- <i>Advisor meeting if the student fails to attend or be on time for meetings.</i></li></ul>
<i>Informing the group of any issues or delays in assignments</i>	<ul style="list-style-type: none"><li>- <i>Inform all partners about responsibilities and timeline</i></li><li>- <i>Set reasonable deadlines and communicate when extensions are needed</i></li></ul>	<ul style="list-style-type: none"><li>- <i>Student shows up to meeting with no work done or misses deadline</i></li></ul>
<i>Maintain professionalism and respect with all members</i>	<ul style="list-style-type: none"><li>- <i>Ensure all partners get a voice in any group decisions</i></li><li>- <i>Communicate any displeasures within a group</i></li></ul>	<ul style="list-style-type: none"><li>- <i>Members show displeasure with the group or decisions made by the group</i></li></ul>

### 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>Tuesdays After 3:30 Location will Vary (check group chat)</i>	<i>Talk about over-the-weekend work/create a weekly goal</i>
<i>Students Only</i>	<i>Thursdays After 3:30 Location will vary (check group chat)</i>	<i>Problem-solving / Questions and adjustments to weekly goals or deadlines</i>
<i>Students + Faculty advisor</i>	<i>Fridays from 11 am to 12 pm varying locations between Zoom and advisors office</i>	<i>Update advisor on changes over the past week and any questions on the project</i>
<i>Project Sponsor</i>	<i>To be determined: The faculty advisor has contacted the sponsor and we are waiting for a response. Preferential timing would be meeting on the first Thursday of every month.</i>	<i>Update sponsor on progress with the project, ask any questions, confirm project work is up to standards and timeline is maintained</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.

Montel Marks

**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.

Jayson Urena

### 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.

<b>Team Member</b>	<b>Role(s)</b>	<b>Responsibilities</b>
<i>Diya Ram Mohan</i>	Project Manager	<ul style="list-style-type: none"> <li>- Keep a detailed record of meeting notes and share them with the group</li> <li>- Manages schedules to ensure tasks are completed on time</li> <li>- helps write agendas and run group meetings</li> </ul>
<i>Houda Lahrouz</i>	Logistics Manager	<ul style="list-style-type: none"> <li>- coordinates all internal and external interactions;</li> <li>- following up on communication of commitments, obtaining information for the team;</li> <li>- Documents meeting minutes; manages facility and resource usage.</li> <li>- lead in establishing contact within and outside of the organization</li> </ul>
<i>Montel Marks</i>	Financial Manager & Client Communication Leader	<ul style="list-style-type: none"> <li>- Keeping track of spending and sponsor coordination</li> <li>- Keep weekly professional update summaries to send to sponsor</li> <li>- Relational analysis and structured categorizations</li> </ul>
<i>Jayson Urena</i>	Faculty Advisor Communication Leader & Systems Engineer Test Engineer	<ul style="list-style-type: none"> <li>- Managing communication with the Faculty advisor</li> <li>- Analyzing client design specifications and leading the design and integration of subsystems.</li> <li>- Overviewing testing procedures, protocols and schedules</li> </ul>

## Step 5: Agree to the above team contract

Team Member: *Diya Ram Mohan*      Signature: *Diya Ram Mohan*

Team Member: *Houda Lahrouz*      Signature: *Houda Lahrouz*

Team Member: *Montel Marks*      Signature: ***Montel Marks***

Team Member: *Jayson Urena*      Signature: *Jayson Urena*