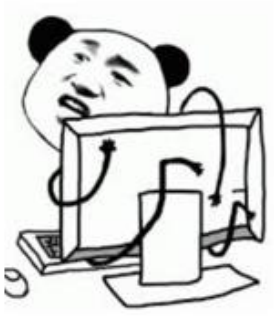
404 Not Found



Project Document 1:
Team Charter

June 3rd, 2025

EN.605.601.81.SU25

Johns Hopkins University

Foundations of Software Engineering

Agenda

Member Biographies, Roles and Responsibilities

1. John Benitez → **DevOps**

Responsibilities: For this project, John will serve as the lead DevOps engineer, responsible for maintaining the reliability and performance of core infrastructure components. His role includes building and managing automated pipelines, ensuring continuous integration, and delivery of software components. Also, John will ensure that the system is scalable, secure, and aligned with the project requirements.

Background:

John Benitez is a Data Analyst at the Johns Hopkins University Applied Physics Lab(APL), located in Laurel, Maryland, where he has contributed for nearly 3 years. His scope of work consists of information system security, facility management, and financial analysis. John is proficient in Python, Java, Assembly, and SQL, bringing a strong technical foundation to his role. Prior to joining APL, John worked at Amazon as an Operations Manager for over 2 ½ years, where he focused on labor tracking, project management, and financial analysis.

John earned his undergraduate degree at Towson University, studying Computer Science and Bioinformatics with a minor in Chemistry. He is currently pursuing a Master of Science in Computer Science at Johns Hopkins University, with a focus on Artificial Intelligence.

Strengths: John excels at bridging the gap between development and operations teams. He brings a proactive, process improvement-oriented mindset to the team. He is able to anticipate technical bottlenecks, identify infrastructure needs, and address areas of process inefficiencies. His strong communication skills and experience in operations make him a valuable asset to the team.

Fun Fact: John loves listening to original soundtrack compositions. His favorite composer is Hans Zimmer, and he has had the privilege of seeing him perform live. John also has two dogs: a German shepherd that he found at a ga station at El Paso, Texas and a Siberian husky that was gifted to him for Christmas.

2. Parker Jackson → **Lead Architect**

Responsibilities: As Lead Architect, Parker is responsible for designing the overall structure of the Trivia game software. Parker will collaborate with the team to ensure that the system architecture aligns with the project requirements.

Background: Parker is a Data Scientist at Squarepeg Technologies, where he works on a research and development team, focused on building and testing AI tools. He holds an undergraduate degree in Economics from Brigham Young University and is currently enrolled in the Master of Computer Science Engineering Program(EP) at Johns Hopkins University.

Strengths: Parker brings tenacity and adaptability to the team. He thrives in environments that require learning on the job and is committed to understanding complex problems. His real-world experience in developing rapid prototypes and proof-of-concept tools provides him with the agility and creativity needed for fast-paced software projects.

Fun Fact: Parker is an avid rock climber who enjoys the challenge and focus that come with scaling new routes.

3. Baihan (Charles) Jiang → **Game Logic**

Responsibilities: Charles is responsible for designing and implementing the game logic system. His role includes managing game flow, turn-based mechanics, scoring, win condition evaluation, etc. He will lead the definition of core classes and game state structures and collaborate with both front-end and DevOps members to ensure seamless system integration. His contributions will be central to the Design Document, particularly in modeling class behavior and interactions.

Background: Charles is currently pursuing his Master of Science in Computer Science at Johns Hopkins University. Although his undergraduate degree was in Hospitality, his professional experience with HRIS systems in the hotel industry sparked a strong interest in computing. Since then, he has actively participated in several game development forums and online collaboration projects, gaining practical experience in game design and object-oriented logic development. He has hands-on experience using both Java and Python for backend and logic-oriented programming.

Strengths: Charles thrives in collaborative environments. He believes that robust game logic—arguably the most critical part of this project—relies on continuous team communication. While not a project manager by title, he brings strong interpersonal and coordination skills that help unify team efforts around the logic and architecture of the system.

Fun Fact: Outside of software development, Charles enjoys photography. His passion for capturing light and motion naturally led to a curiosity about the technology behind the camera—specifically the optics, circuits, and embedded systems that enable image capture and processing. This interest sparked a growing appreciation for electrical and computer engineering (ECE) concepts and continues to influence how he approaches system design with both a creative and technical perspective.

4. Samantha Paulson → **Project Manager**

Responsibilities: As a Project Manager(PM), Samantha is responsible for organizing, planning, and scheduling the project. Her role includes ensuring that all milestones are completed on time and within scope, while actively managing risks and addressing roadblocks.

Background: Samantha is currently halfway through the M.S. Bioinformatics program here at JHU. Her previous educational background includes a B.S. in Genetics, Cell Biology, and Development and a minor in Computational Biology from the University of Minnesota: Twin Cities. Her initial professional experience involves wet lab molecular biology and cell culture, focusing on R&D genome engineering, stem cell differentiation, and the manufacturing of culture media and hiPSC-derived sensory neurons. However, she has now transitioned to the analysis and production support of bioinformatics pipelines at the clinical genetic testing company, Natera. Samantha's coding experience thus far includes R, Python, and Java languages. Additional knowledge includes UNIX systems and SQL.

Strengths: In her current industry position she works daily with software engineers, reading their code, troubleshooting their pipelines, etc. She has additionally gained sufficient experience with the Agile method of software engineering, attending Scrum meetings, along with sprint planning and review meetings. Therefore, she has sufficient understanding of how software engineering operates outside of academia. Additionally, her biology background may provide an alternative perspective to problem-solving.

Fun Fact: Samantha enjoys renovating her 1930s home, reading, crocheting, and playing video games with her husband. She even built her own high-end PC yet still would rather play games from the early 2000s.

5. Steven Solis → **Test Engineer**

Responsibilities: As the resident Test Engineer, Steven will design the test cases which verify "404 Not Found" software meets all product requirements, craft the documentation for testing plans, perform and/or direct all testing plans, and document the testing procedure outcomes.

Background: Steven currently works as a Software Testing Engineer and was a Software Developer in his past life.

Strengths: Though Steven can perform 1,000 sit-ups, he prefers to sit up late at night to learn by writing simple Python and C programs.

Fun fact: Steven can lick his elbow.

Team Communication and Decision-Making Processes

Team "404 Not Found" will maintain consistent and collaborative communication throughout the duration of the project. Text messaging will be the primary platform for daily communication, quick updates, and informal discussions. For technical collaboration, the team will utilize GitHub to manage project tracking, assignments, code reviews, and documentation. Team members will be expected to maintain the organization of the codebase with detailed descriptions, consistent naming conventions, clean branching, and merge maintenance.

Regular team meetings will be held once a week every Thursday at 7pm EST via Microsoft Teams. These meetings will provide the team with the opportunity to review project progression, assign upcoming tasks, and address any current or future challenges. Each team member is expected to provide a brief weekly progress update during these meetings. Major decisions regarding architecture or major feature changes will be

discussed as well. Additional meetings will be scheduled as needed for debugging, design discussions, project planning, or other urgent discussions.

To aid with the accountability of each member, meeting notes and action items will be documented by the PM. These notes will be made accessible to all members and stored in the project GitHub. This will help us to keep track of our progress, project timeline, and the ownership of tasks. Overall, this team aims to be efficient via honesty, open communication, and trust in each other.

Conflict Resolution Process

When team members disagree on an issue or course of action, team “404 Not Found” will vote on the resolution, with the relative majority as the deciding outcome. The vote will be an informal raise of hands or an anonymized poll, depending upon the medium. Ranked-choice votes may be used to determine the backup plan.

Team members are expected to communicate disruptions which affect their ability to fulfill their tasking in order to reassign those tasks without interruption to the team's goals. Should a team member fail to communicate their inability to complete their task or refuse to participate in their role, the team will follow a three-step process to remove the student. The first step is a verbal reminder to the student of their responsibilities, which will be provided by any team member at the next weekly group meeting. If the student repeats an offense, then the student will be emailed the details of their missed obligations from any team member, and all other team members will be included via the Carbon Copy line. The final step will be a joint meeting of the team and professor to remove that student from the team.

Assignment Credits & Contributions

John:

- Project Overview
- Biography section
- Revisions of the entire Team Charter document
- Team communication and decision-making processes

Parker:

- Conflict Resolution Process
- Biography section
- Team Name

Charles:

- Team Logo
- Team Charter Format
- Biography section
- Initiated using Microsoft Teams as the platform for team meetings.

Samantha:

- Invited members and coordinated team meetings
- Biography section
- Created Team Charter template and aesthetic/format editing
- Team communication and decision-making processes

Steven:

- Conflict Resolution Process
- Communicated and clarified Project Requirements
- Biography section