

Team Contributions: POC Software Engineering

Team 4, EvENGage
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Omar Al-Asfar
Rayyan Suhail
Ibrahim Quraishi
Mohammad Mahdi Mahboob

This document summarizes the contributions of each team member up to the POC Demo. The time period of interest is the time between the beginning of the term and the POC demo.

1 Demo Plans

For the POC demo, we will be spending a week completing the design documentation, and the remaining week before the deadline working on a codebase for the proof of concept. The goal for the proof of concept is to create a bare-bones system that highlights the main functionalities required by the system at the simplest level. By the presentation date and time, the team should have a system complete enough to present a demonstration of at least one business use case from end to end as defined in the SRS document.

This will be achieved by building a simple web application that allows the user to create a form with very basic customization options such as creating questions and setting the form name. The created form should be sent to a backend for storage in a database and its details should be retrieved by a mobile application. The mobile application should be able to display the forms contents to the user and allow them to fill it out and submit the responses back to the backend. Finally, the web application should retrieve the submitted responses for the form and display some basic statistics about the data such as submission counts and question response distribution.

2 Team Meeting Attendance

Student	Meetings
Total	4
Ibrahim Quraishi	4
Virochaan Ravichandran Gowri	4
Mohammad Mahdi Mahboob	4
Rayyan Suhail	4
Omar Al-Asfar	4

3 Supervisor/Stakeholder Meeting Attendance

Supervisor's Name: Luke Schuurman

Student	Meetings
Total	3
Ibrahim Quraishi	3
Virochaan Ravichandran Gowri	3
Mohammad Mahdi Mahboob	2
Rayyan Suhail	3
Omar Al-Asfar	3

4 Lecture Attendance

Student	Lectures
Total	8
Ibrahim Quraishi	7
Virochaan Ravichandran Gowri	3
Mohammad Mahdi Mahboob	3
Rayyan Suhail	3
Omar Al-Asfar	3

This table includes all lectures attended from week 3 onwards when the team was formed. Ibrahim attended more lectures as it was later agreed by the team to have one person attend and relay information to save time.

5 TA Document Discussion Attendance

TA's Name: Tiago de Moraes Machado

Student	Lectures
Total	3
Ibrahim Quraishi	3
Virochaan Ravichandran Gowri	3
Mohammad Mahdi Mahboob	3
Rayyan Suhail	3
Omar Al-Asfar	3

6 Commits

Student	Commits	Percent
Total	264	100%
Ibrahim Quraishi	40	15.2%
Virochaan Ravichandran Gowri	93	35.2%
Rayyan Suhail	45	17.0%
Mohammad Mahdi Mahboob	51	19.3%
Omar Al-Asfar	35	13.3%

The contribution percentage for Virochaan is much higher due to them handling most of the branch merging and conflict fixing when resolving pull requests, as well as differences in commit sizes.

7 Issue Tracker

Student	Authored (O+C)	Assigned (C only)
Ibrahim Quraishi	6	29
Virochaan Ravichandran Gowri	34	32
Rayyan Suhail	14	32
Mohammad Mahdi Mahboob	25	29
Omar Al-Asfar	7	27

The counts for some members are higher due to them taking on the role of project manager during certain phases, which involves creating and assigning

issues to team members. All members would discuss the creation and assignment of issues during meetings, and a certain member would take responsibility for creating them on GitHub (generally Virochaan as the repository owner). This was done intentionally to ensure a consistent format across the project board. As a result, the number of issues authored does not reflect the actual contributions of each member in this regard.

In addition, the team did not settle on a strict level of detail per issue. Some members preferred to break down tasks into smaller issues, while others opted to encompass all relevant tasks into a single issue. This also contributed to discrepancies in the number of issues authored by each member.

Finally, we also linked pull requests to issues when applicable. This means that if a member was assigned an issue and created a pull request to resolve it, they would be credited with closing the issue upon merging, hence the higher Assigned counts.

8 CICD

The main use of CI/CD for the duration of the project will be for regression testing. Every created unit test that has been verified to be correct will be added to the pipeline to ensure the correctness of the system remains the same between changes. Additionally, the CI/CD will be used to enforce the AirBNB Javascript and JSX styling guides, as outlined in the development plan.

9 Team Charter Trigger Items

The team charter is outlined in the Development Plan, where various quantifiable triggers are defined to monitor team progress. These triggers are used to monitor important elements of team performance, including attendance, communication, and quality:

- **Attendance:** All members are expected to attend meetings punctually for the entire agreed upon duration. Repeated unexcused absences constitute a trigger violation.
- **Communication:** All members are expected to respond to team communications within 24 hours. Failure to respond within this timeframe is considered a trigger violation. Moreover, failure to communicate scheduling difficulties or absences in advance is also considered a communication violation.
- **Quality:** All members are expected to complete their assigned tasks to an agreed upon standard. Repeated and blatant lack of effort or quality in completed tasks is considered a trigger violation. Members are expected to seek help from the team if they are struggling to complete their tasks

to the expected standard. Failure to do so reflects on the entire team and is therefore a quality violation.

- **Attitude:** All members are expected to maintain a respectful and open-minded attitude towards each other. A good attitude facilitates effective teamwork and communication. Repeated negative or disrespectful behaviour is considered a trigger violation. Differences of opinion and conflict are not excusable under this trigger. All members are expected to address any issues maturely and professionally based on the team charter guidelines.
- **Contribution:** All members are expected to contribute equitably to the workload. Members are expected to proactively seek out tasks and responsibilities to support the team. Failure to achieve agreed upon performance metrics is a trigger violation. These expectations differ depending on the task, and may include number of commits, software features, lines of code, or even idea generation. The team will agree upon these metrics and expectations at the start of each phase.

No members have behaved in a manner that violates any of the team charter triggers to date. Everyone has generally met the aforementioned expectations, effectively collaborating and communicating to ensure the successful completion of deliverables.

10 Additional Productivity Metrics

- **Pull Requests:** Highlight the number of pull requests opened by each member. This is a better indicator of contribution than commits alone, as it is compatible with our branching system. Number of commits can be misleading, as some members may make many small commits, while others make fewer but larger commits. Also, when a member merges from another branch it may appear as they committed all of that branches underlying commits. With pull requests, the real source of the contributions is clear. This metric will not be susceptible to inflation since we have agreed on a standard for pull requests that requires them to be of a reasonable size and scope.
- **Task Timeliness:** Highlight the number of days before the deadline each member completes their assigned tasks. This metric encourages members to complete their work ahead of schedule, allowing time for review and integration. Members who consistently complete tasks early can be assigned the foundational tasks in cases where other tasks are reliant on their completion.