

Team Contributions: POC Software Engineering

Team #12, Streamliners

Mahad Ahmed

Abyan Jaigirdar

Perna Prabhu

Farhan Rahman

Ali Zia

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

Our POC demo will focus on a simplified yet functional flow that highlights the system's core capabilities in payment processing, access control, and event sign-ups. The goal is to demonstrate how these features work together to create a smooth and secure experience for both attendees and organizers.

Phase 1: Payment System

Users will select an event, choose a ticket type such as general or early bird, and complete a payment using a mock or sandbox payment provider integration. Once payment is successful, the system records the transaction and marks the user as registered.

Phase 2: Bus and RSVP Sign-Ups

Users can reserve a seat or spot for event transportation or activities. When all spots are filled, additional users will see that the capacity is full. Admins can view a overview of all sign-ups.

Phase 3: Role-Based Access Control

The demo will show how different user roles, such as attendee and event admin, access separate parts of the system. Attendees can view their purchase details, while admins can see ticket summaries and manage sign-ups.

Demo Scenario

An attendee purchases a Fireball Formal ticket through the payment interface and is automatically registered for the event. The attendee then books a bus seat through the sign-up form. On the admin dashboard, the event organizer can view payment confirmations and current bus sign-up data in real time. This scenario demonstrates how payments, access control, and sign-up management integrate into a cohesive event management flow.

2 Team Meeting Attendance

Student	Meetings
Total	7
Mahad Ahmed	7
Abyan Jaigirdar	7
Prerna Prabhu	7
Farhan Rahman	7
Ali Zia	7

Our team meets weekly at the start of each deliverable, with additional meetings scheduled as needed, typically in the days leading up to major deadlines. Since the team was formed during Week 3, we have held a total of seven meetings to date, with the exception of reading week. Every team member has been able to attend these meetings, even if occasionally arriving slightly late or needing to leave early.

3 Supervisor/Stakeholder Meeting Attendance

Supervisor's Name: [fill in this information]

Student	Meetings
Total	2
Abyan	2
Ali	2
Farhan	2
Mahad	2
Prerna	2

4 Lecture Attendance

Between the beginning of the term's first lecture on September 3 and now, November 3, there have been approximately 13 lectures held as part of the course schedule.

Student	Lectures
Total	13
Mahad Ahmed	5
Abyan Jaigirdar	4
Prerna Prabhu	10
Farhan Rahman	5
Ali Zia	4

Note: Majority of the team members live relatively far from campus and have attended lectures in person where possible, with Prerna living nearby and attending most sessions regularly. This was discussed and agreed upon by the team prior to forming the group.

5 TA Document Discussion Attendance

TA's Name: Tiago de Moraes Machado

Student	Lectures
Total	3
Ali Zia	2
Abyan Jaigirdar	2
Mahad Ahmed	2
Farhan Rahman	2
Prerna Prabhu	2

There were approximately three meetings held with the TA during this period. Our team attended two of these meetings together. By group consensus, we decided not to attend the most recent session due to a midterm scheduled that evening, as we prioritized the additional study and commute time required on that day.

6 Commits

Student	Commits	Percent
Total	201	100%
Mahad Ahmed	41	20.40%
Abyan Jaigirdar	34	16.92%
Perna Prabhu	48	23.87%
Farhan Rahman	38	18.91%
Ali Zia	40	19.90%

7 Issue Tracker

Student	Issues Assigned
Mahad Ahmed	16
Abyan Jaigirdar	15
Perna Prabhu	24
Farhan Rahman	16
Ali Zia	16

One team member created and opened all issues for upcoming milestones and document sections. This was done intentionally to maintain a consistent issue structure and keep everything organized. During team meetings, these pre-created issues were reviewed based on how much time it would take and then assigned to team members evenly.

Because issue creation was done in this way, the column "O+C" (Opened and Closed Issues) does not accurately reflect the individual contribution. Instead, the key metric is just the number of issues assigned to each team member. Therefore, we have chosen to remove the "O+C" column and report only the Assigned (Closed) issues.

8 CICD

Continuous Integration and Continuous Deployment (CI/CD) will be used to keep the project stable and easy to maintain as new features are added. The team will use GitHub Actions to automatically build, test, and deploy the system.

For **Continuous Integration (CI)**, every time a pull request is opened, the pipeline will automatically run linting, type checks, and unit tests. This helps

catch issues early and ensures that the codebase stays clean and consistent. It will also build the project to make sure that new changes do not break existing functionality before they are merged.

For **Continuous Deployment (CD)**, after merging into the `dev` branch, a staging build will be automatically deployed for testing and feedback. When changes are merged into the `main` branch, a production build will be deployed to the university-hosted environment. This keeps updates smooth and reduces the chance of deployment errors.

GitHub Actions will also send build or test failure notifications to the team so that problems can be fixed quickly. Environment variables and API keys will be stored securely using GitHub's built-in secret management. Over time, the team may expand the pipeline to include integration or end-to-end tests, but for now the main goal is to automate testing and deployment to save time and improve reliability.

9 Team Charter Trigger Items

9.1 Summary of Triggers

The team charter established several quantified triggers to help maintain accountability and ensure consistent contribution. These include:

- **Attendance:** Members are expected to maintain a 100% attendance rate for all scheduled meetings unless an acceptable excuse (such as a health issue or family emergency) is provided.
- **GitHub Activity:** Each member must demonstrate consistent GitHub activity every week, with issues actively in progress or commits made for review.
- **Task Completion:** All assigned work must be completed and delivered on time according to deadlines set during weekly meetings.

9.2 Trigger Violations

So far, the team has not experienced any major violations of the triggers outlined in the charter. All members have remained communicative, met deadlines, and maintained consistent GitHub activity. Minor delays in individual tasks have occurred occasionally, but these were communicated early and resolved collaboratively without impacting the overall progress.

9.3 Plan to Address Violations

If future violations occur, the team will follow the three-step escalation process defined in the charter:

1. First incident: verbal reminder during team meeting.

2. Second incident: discussion with the TA to address underlying issues.
3. Third or repeated incidents: escalation to the course instructor.

If the team finds that the current triggers are too strict or unclear, they will be revised by team consensus. For example, attendance expectations may be adjusted for legitimate scheduling conflicts, or contribution tracking may be clarified to account for non-coding tasks such as documentation or research.

10 Additional Productivity Metrics

[If your team has additional metrics of productivity, please feel free to add them to this report. —SS]