Team Contributions: POC
Software Engineering

Team #1, Sanskrit Ciphers
Omar El Aref
Dylan Garner
Muhammad Umar Khan
Aswin Kuganesan
Yousef Shahin

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 are loosening the scope to reflect current bandwidth. This list intentionally diverges from the Development Plan, and we will adjust that document accordingly so everything stays consistent:

- Demonstrate orientation correction and normalization on representative fragments to show we can standardize images ahead of downstream analysis.
- Present a deterministic edge matching algorithm operating on raw fragments (intentionally without normalization) to baseline our matching heuristics.
- Build a one-criteria feature model that tags uploaded fragments with lightweight metadata (e.g. estimated line counts) that will drive future filtering and search.
- Walk through interactive interface mockups/prototypes of the canvas tool to illustrate the planned researcher workflow.

Together these elements show that we have validated critical preprocessing, established deterministic baselines for feature and edge analysis, and mapped the user experience we will expand in upcoming milestones.

2 Team Meeting Attendance

Student	Meetings
Total	5
Omar El Aref	5
Dylan Garner	5
Muhammad Umar Khan	5
Aswin Kuganesan	5
Yousef Shahin	5

3 Supervisor/Stakeholder Meeting Attendance

Supervisor's Name: Dr. Shayne Clarke

Student	Meetings
Total	3
Omar El Aref	3
Dylan Garner	3
Muhammad Umar Khan	3
Aswin Kuganesan	3
Yousef Shahin	3

4 Lecture Attendance

[For each team member how many lectures have they attended over the time period of interest. This number should be determined from the lecture issues in the team's repo. You can find the number of lectures in the time period of interest by looking at the Google calendar for the capstone course. —SS]

[NOTE: There will be approximately 13 lectures between the start of class and the POC demos —SS]

Student	Lectures
Total	Num
Name 1	Num
Name 2	Num
Name 3	Num
Name 4	Num
Name 5	Num

[If needed, an explanation for the lecture attendance can be provided here. —SS]

5 TA Document Discussion Attendance

TA's Name: Tanya Djavaherpour

Student	Lectures
Total	3
Omar El Aref	3
Dylan Garner	3
Muhammad Umar Khan	3
Aswin Kuganesan	2
Yousef Shahin	2

Some members of the team missed the last TA document discussions due to having a midterm that was scheduled right after that discussion. However, the team members that attended the discussion talked about the team's concerns with the TA and shared the discussion notes with the rest of the team after.

6 Commits

Student	Commits	Percent
Total	109	100%
Omar El Aref	34	31.2%
Dylan Garner	22	20.2%
Muhammad Umar Khan	25	22.9%
Aswin Kuganesan	12	11.0%
Yousef Shahin	16	14.7%

7 Issue Tracker

Student	Authored (O+C)	Assigned (C only)
Omar El Aref	16	6
Dylan Garner	6	4
Aswin Kuganesan	4	4
Yousef Shahin	3	4
Muhammad Umar Khan	14	5

The assigned & completed issues are consistent across team members, there is some variation in created issues due to things like supervisor & TA meetings and granularity of issues created for self-assigned tasks.

8 CICD

Our project utilizes GitHub Actions for Continuous Integration and Continuous Deployment (CI/CD) in the following ways:

1. **Automated LaTeX Compilation**: A CI/CD workflow automatically compiles LaTeX documentation files whenever changes are pushed to the `docs/` directory. The workflow:
    - Uses TeXLive 2024 with full scheme
    - Detects changed .tex files and compiles only those files
    - Automatically commits generated PDFs back to the repository
    - Runs on both push and pull request events to the main branch
2. **Front-end Build and Deployment**: CI/CD will automatically build and deploy the front-end application after changes are made to the source code, ensuring the latest version is always available.
3. **Database Repopulation**: Automated workflows will repopulate sample databases after changes are made to the underlying models and logic that generates metadata for each manuscript fragment image. This ensures database schemas and sample data remain consistent with code changes.
4. **Linting & Automated Testing**: We will automate linting according to the appropriate style guides, as well as execute our automated test suites where applicable on a PR.

9 Team Charter Trigger Items

The team charter had the following quantified triggers:

- **Attendance Triggers:** All team members were expected to attend all meetings unless a valid excuse was provided in advance. This included team meetings and supervisor meetings, and missing a meeting without a valid excuse would count as a violation. This also includes leaving a meeting early or being late without a valid excuse.
- **Performance Triggers:** Team members were expected to complete their assigned tasks on time and participate in providing code reviews and feedback. All team members were expected to equally contribute to the project, and the team was expected to work together to ensure that the team's performance met the project goals.
- **Communication Triggers:** Team members were expected to equally participate in group discussions, communicate effectively with each other, and respect each other's opinions. Team members were also expected to follow the code of conduct outlined in the team charter, which included treating each other with respect and professionalism.
- **Decision-Making Triggers:** Team members were expected to actively participate in decision-making processes, which involved using a consensus-based approach for decision-making. No team member was to take control of the decision-making process in any circumstance.

There have been the following violations of the triggers:

- **Decision-Making:** There have been a couple of instances where consensus-based decision-making was not fully adhered to, which was necessary in instances where team members did not need to be involved in certain decisions.
- **Performance:** The team has been falling behind schedule on some tasks, leading to delays in the overall project timeline. Although all team members have been contributing to the project, and we have completed all milestones on time, we have been finishing our milestones with less time to spare than originally planned.

To address these violations, the team plans to:

- **Adjust Decision-Making Triggers:** In instances where certain team members do not need to be involved, the team will be able to decide without all team members involved. However, consensus-based decision-making will still be used for major decisions that affect the entire team.
- **Prevent Violation of Performance Triggers:** We will reiterate the importance of adhering to the project timeline and ensure that all team members are aware of their responsibilities and deadlines.

10 Additional Productivity Metrics

There are no additional productivity metrics to report at this time.