Milestone One Progress Evaluation

Project Title: Student Code Online Review and Evaluation 2.0

Names and email addresses of team members:

Dorothy Ammons dammons2022@my.fit.edu

Patrick Kelly <u>pkelly2022@my.fit.edu</u> Shamik Bera <u>sbera2022@my.fit.edu</u> Rak Alsharif <u>ralsharif2021@my.fit.edu</u>

Faculty advisor from CSE: Raghuveer Mohan, rmohan@fit.edu Client name and affiliation: Raghuveer Mohan, CSE Professor

| Task | Completion % | Dorothy | Patrick | Shamik | Rak | To do |
|-------------------------------|--------------|---------|---------|--------|-----|---|
| Investigate new tools | 100% | 60% | 40% | 0% | 0% | |
| 2. Investigate old tools | 70% | 50% | 20% | 0% | 0% | Familiarize ourselves with rust and MongoDB |
| 3. Investigate current system | 100% | 70% | 20% | 10% | 0% | |
| 4. Requirement Document | 100% | 80% | 0% | 20% | 0% | |
| 5. Test Plan | 100% | 5% | 5% | 90% | 0% | |
| 6. Design Document | 100% | 95% | 0% | 5% | 0% | |

Tasks

Task 1:

For this task, we looked at the functions we want to implement into the project. We then researched tools that could accomplish these tasks. For example, for the collusion detection we looked into the MOSS API, including sending an email to the Stanford MOSS address in order to gain an access key. We also looked into converting the current program to consist of more Python-based systems, including using Flask instead of MongoDB. Furthermore, we investigated servers to host the application, including Cloud Run and Cloud SQL for relational databases.

Task 2:

For this task, we looked at the tools the old system uses. This includes Docker, MongoDB, Cargo/Rust, and essential API.

Task 3:

For this task, we obtained and studied the files from the previous S.C.O.R.E. project group. We met with the previous team and asked questions about their system along the lines of: how to run it, what does the framework look like and what files are where and what do they do? We forked their Github repository, set up the docker container and ran the install script. Following the developer manual, we ran each server and got the system available to inspect. We tested some of the system features, including log in, class creation, submissions, etc.

Task 4:

For this task, the team worked on creating the requirements document following the IEEE Software Requirements Specification format. We outlined the main goals of the system, described the features that need to be added, and made sure the document reflected both the client's needs and the improvements we planned for the project.

Task 5:

For this task, the team prepared the test plan to guide how the system will be checked as development continues. The plan covers what areas of the project need testing, the type of tests to be used, and how results will be tracked. It is meant to make sure the system functions as intended and to identify problems early in development.

Task 6:

For this task, the team put together the design document. This included drawing out the models of the system and explaining how the different parts will interact with each other. The document gives a clear picture of the structure of the program and sets the foundation for coding in the next milestones.

Contributions

Dorothy Ammons:

Dorothy met with the previous developers. She maintained communication and obtained the server files. She studied the files to learn where everything was and how it worked. She created the docker container and went through the process of running all of the servers required by S.C.O.R.E.. She researched the tools used by those servers and gained understanding of how they work. She researched new tools to either replace or add to the existing system. She drafted the Software Requirements Specification document, the Test Plan document, and the Design Requirements document. She wrote the Milestone One Evaluation document and set up an advisor/client meeting. She wrote 80% of the Software Requirements Specification document and created all of the diagrams and mockups in the Design Document.

Shamik Bera:

Shamik met with the previous developers. Shamik met with the client/advisor. Shamik wrote 20% of the Software Requirements Specification document. He also wrote 90% of the testing plan document and wrote each test case for each functional test and user test. He wrote the introduction of the design document. Shamik drafted the presentation slides that combine a summary of Software Requirements Specification document, the Test Plan document, and the Design Requirements document.

Patrick Kelly:

Patrick contributed to investigating both new and old tools, focusing on how Flask and MySQL could be used in place of Rust and MongoDB. His main focus, however, was on the upcoming MOSS integration. Patrick researched the MOSS API and gathered details on how to connect it with the system, including steps for obtaining an access key and structuring how results could be displayed. He also began preparing the design for a dedicated MOSS page on the website, setting up the framework for its implementation in the next milestone.

Rak Alsharif:

Rak attended team meetings and the Milestone 1 presentation, staying engaged with project discussions. While his direct contributions to documents and tasks in this phase were limited, he plans to contribute significantly in Milestone 2 by leading the testing of MOSS detections and assisting with clustering research and visualization.

Next Milestone

| Task | Dorothy | Patrick | Shamik | Rak | |
|---|---------|---------|--------|------|--|
| Replace frontend/backend with Flask and MySQL | 100% | 0% | 0% | 0% | |
| 2. Replace rust server with Python | 0% | 0% | 100% | 0% | |
| 3. Add MOSS page to website without functionality | 0% | 0% | 0% | 100% | |
| 4. Test MOSS detections | 0% | 100 | 0% | 0% | |
| 5. Determine and test clustering algorithms | 25% | 25% | 25% | 25% | |
| 6. Draft visuals for clusters | 25% | 25% | 25% | 25% | |

Date(s) of meeting(s) with Faculty Advisor/Client during the current milestone:

9/24/2025

Faculty Advisor feedback on each task for the current Milestone

- Task 1:
 - Agreed with the new tools MOSS, Flask, and the overall conversion to Python based systems within the application
 - Advised us to speak with Dr. Silaghi for server hosting
 - o Advised us to speak with Dr. White for clustering advice with MOSS data
- Task 2: No comments needed.
- Task 3:
 - o Appreciated our understanding of the current system from the previous team
- Task 4:
- Task 5:
- Task 6:

| Faculty Advisor Signature: | Date: |
|----------------------------|-----------|

Evaluation by Faculty Advisor

Faculty Advisor: detach and return this page to Dr. Chan (HC 209) or email the scores to pkc@cs.fit.edu

Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

| Dorothy Ammons | 0 | 1 | 2 | 3 | 4 | 5 | 5.5 | 6 | 6.5 | 7 | 7.5 | 8 | 8.5 | 9 | 9.5 | 10 |
|-------------------|---|---|---|---|---|---|-----|---|-----|---|-----|---|-----|---|-----|----|
| Patrick Kelly | 0 | 1 | 2 | 3 | 4 | 5 | 5.5 | 6 | 6.5 | 7 | 7.5 | 8 | 8.5 | 9 | 9.5 | 10 |
| Shamik Bera | 0 | 1 | 2 | 3 | 4 | 5 | 5.5 | 6 | 6.5 | 7 | 7.5 | 8 | 8.5 | 9 | 9.5 | 10 |
| Rak Alsharif | 0 | 1 | 2 | 3 | 4 | 5 | 5.5 | 6 | 6.5 | 7 | 7.5 | 8 | 8.5 | 9 | 9.5 | 10 |

| Faculty Advisor Signature | Dat | e: |
|---------------------------|-----|----|
|---------------------------|-----|----|