Use Cases

| Use Case | Login |
|-------------------|---|
| Primary Actor | Professor OR Teaching Assistant |
| Goal in Context | Allows the User to Log into the site. Depending on type of user, the features might be different. |
| Preconditions: | User should be registered before as Professor or Teaching Assistant. |
| Trigger: | The user logs into the system with the proper id and password as professor or teaching assistant. |
| Scenario: | The professor logs into the system to check plagiarism of students with desired threshold limit. The teaching assistant logs into the system just to run the plagiarism on students based on threshold set by professor. |
| Exceptions | The user enters wrong user id or password. |
| Completion Status | Completed |

| Use Case | Register |
|-------------------|---|
| Primary Actor | Professor OR Teaching Assistant |
| Goal in Context | Allows user to register as professor or Teaching Assistant. |
| Preconditions: | User should not be registered previously. |
| Trigger: | The user provides valid username and password and clicks register. |
| Scenario: | The Actor provides username and password. User validation is done in database and if proper, user is registered. |
| Exceptions | Username entered by actor already exists. |
| Completion Status | Completed |

| Use Case | Setting plagiarism Limit |
|-------------------|---|
| Primary Actor | Professor |
| Goal in Context | Allow the professor to set the plagiarism limit above which the files are considered to be plagiarized |
| Preconditions: | System has been programmed to accept the Plagiarism limit and value is set in database. |
| Trigger: | The professor logs into the system and decides to set the limit. |
| Scenario: | The person interacting with the system selects the type of user as Professor. The professor then sets the plagiarism limit. |
| Exceptions | 1) The user is not able to set the plagiarism limit because the application is not responding. The user refreshes the application and tries to set the limit again. 3) Plagiarism limit is less than 0 or greater than 100. User should enter a value greater than 0 and less than 100. |
| Completion Status | Completed |

| Use Case | Uploading the files |
|-------------------|--|
| Primary Actor | Professor, Teaching assistant |
| Goal in Context | Allow the actors to upload the files which the application will parse for plagiarism. |
| Preconditions: | System allows the user to upload the files from their Computer by clicking on the upload button in the application. The user is allowed to upload only .py files. |
| Trigger: | The actor wants to upload the files for plagiarism detection. |
| Scenario: | 1) The person interacting with the system selects the type of user as Professor or TA. 2) The actor then clicks on the upload button to select the files from their system. 3) The actor can upload multiple files. 4) The actor can upload multiple versions of same student. |
| Exceptions: | User uploaded the file with wrong format. A pop up will appear notifying the user about the error. |
| Completion Status | Completed |

| Use Case | Viewing the uploaded files |
|-------------------|--|
| Primary Actor | Professor, Teaching assistant |
| Goal in Context | Allow the actors to view the uploaded files along with version. |
| Preconditions: | The actor has already uploaded the files or is uploading files. |
| Trigger: | The actor uploads the files. As the actor uploads, the list of uploaded files is generated. |
| Scenario: | The person interacting with the system selects the type of user as Professor or TA. The actor then clicks on the upload button to select the files from their system. The actor uploads files from local machine. The actor can view the list of files that are uploaded with version number. |
| Exceptions: | No file uploaded. |
| Completion Status | Completed |

| Use Case | Running the plagiarism test |
|-------------------|--|
| Primary Actor | Professor, Teaching assistant |
| Goal in Context | Allow the actors to run the test on the uploaded files. |
| Preconditions: | 1)The actor should have uploaded all files before. 2)The plagiarism limit should be set, or it will be taken from database. |
| Trigger: | The actor selects the appropriate algorithm to run. The actor then clicks on compare. |
| Scenario: | 1)The person interacting with the system selects the type of user as Professor or TA. 2) The actor then clicks on the upload button to select the files from their system. 3) The actor selects appropriate algorithm to run. 4) The actor then clicks on compare button. 5) The algorithm is run in the backend and appropriate results are calculated. |
| Exceptions | The actor in not able to run the tests because the files are missing. The actor uploads the files and tries again. |
| Completion Status | Completed. |

| Use Case | Viewing the Report |
|-------------------|--|
| Primary Actor | Professor, Teaching assistant |
| Goal in Context | Allow the actors to view the test results for the uploaded files |
| Preconditions: | Actor has uploaded files of all students. Actor has selected proper algorithm. Actor clicks on compare button and algorithm runs in the background. |
| Trigger: | The actor wants to view the test results for uploaded files. |
| Scenario: | The actor clicks on view report. Report is generated for entire project of one student with every other student. The report consists of a pie-chart showing how much similar the two projects are. The report also contains two files with the similar lines highlighted. |
| Exceptions | The actor tries to view the report before running the tests. The actor should run the tests first. |
| Completion Status | Completed |

| Use Case | Printing the Report |
|-------------------|--|
| Primary Actor | Professor, Teaching assistant |
| Goal in Context | Allow the actors to print the test results for the uploaded files |
| Preconditions: | Algorithm is run as selected by actor on uploaded files. |
| Trigger: | The actor wants to print the test results for tested files. |
| Scenario: | 1) The actor clicks on the "Generate Report" button to see the plagiarism output 2) The actor clicks on the "print Report" button to print the report. 3) The print preview is then shown from which user can select the printer and print. |
| Exceptions | The actor should run the tests first only after which the print button becomes clickable. Printer is not configured or not found. |
| Completion Status | Completed. |