Tech Report Publishing System

"SPOTLITE-R"

Mid-Term Report

Submitted by

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In partial fulfilment for the award of the Degree of

MASTER OF COMPUTER APPLICATIONS

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2nd May 2017

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1. ABSTRACT

The whole process of submitting reports, sorting them according to their domain, getting them evaluated and then finally publishing them is being done manually which actually takes lot of time, is tedious and complex.

This report proposes a model "SPOTLITE-R" which is a Tech Report Publishing system that is being designed to control and manage all the various tasks in an efficient manner in order to publish any particular report. Currently, all these things are being done manually or through some unreliable applications. But being technologically efficient, there is a need to automate them so that the existing problems like copying and not having a unique identity of report can be removed. So, to fulfil this need we are working on this Tech report publishing system which is named as "SPOTLITE-R" that brings your report to spotlight by publishing it to a web portal.

This Tech Report publishing system shall support the following features:

1. User login and authentication using google accounts.
2. Dashboards for all the three users: Student, Editor and Reviewer.
3. Students will be able to upload reports; reports will be assigned to reviewers according to the report domain by the Editor.
4. The reviewers shall review the reports which would then be published by the Editor.
5. On successful publishing of a report, a unique Report ID will be generated.

2. INTRODUCTION

2.1 PROBLEM DEFINITION

To build a system for publishing tech reports in an institute/organisation where evaluation of reports can be done online by the reviewer and then be published on portal/journal thereby generating a unique report ID of successful publish.

SOLUTION: There shall be three users in the project namely "The student", "The Editor" and "The reviewer". SPOTLITE-R would allow the student to upload and submit a report which would then be assigned to the concerned faculty(Reviewer) of the department by the Editor. The report shall then be checked for any corrections required by the faculty (Reviewer) and sent back to the editor along with their comments. If there are no corrections to be made then the report is published at the required server/Website.

User/ Operation	**INPUT**	**OUTPUT**	**TASK**
STUDENT	REPORT	TRACKING ID	1. Submit the report for evaluation. 2. If any corrections are to be made, make the changes and re-submit the report.
EDITOR	SUBMITTED REPORT (By student)	1. ASSIGN THE REPORT TO FACULTY 2. PUBLISH THE REPORT WITH **UNIQUE "REPORT ID"**	3. Assign the uploaded report to concerned faculty according to subject/domain. 4. Send back the report to the student if any comments are given by the reviewer. 5. If no comments given, then publish the report.
REVIEWER	REPORT TO BE EVALUATED (By Editor)	EVALUATE THE REPORT	1. Evaluate and check the report for corrections to be made and send it back to editor.

- After each operation, the user shall be notified through an email. For eg: On the submission of report, a notification email shall be sent to the Editor as well the student.
- After the corrections are made by the student and the report is resubmitted, the reviewer shall evaluate it again and if satisfied shall approve it by sending it to the Editor for publishing it.
- The Editor shall finally publish the approved report.
- As the report gets published, a unique Report ID for the report is generated which shall be of the following format:
    - **Institute_Name/Department/Roll_Number/Tech-Report-Date**

2.2 BACKGROUND

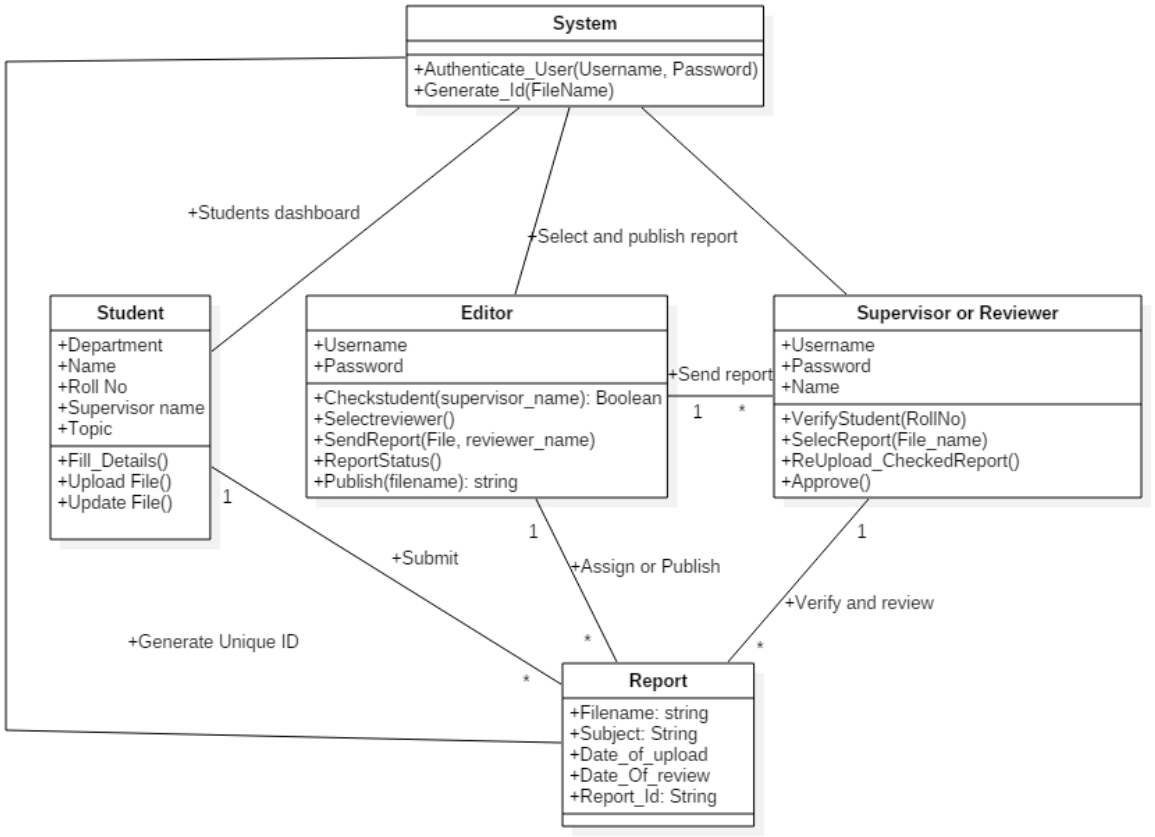
Publishing a report has always been a problem for the publisher as well as the one who has to check it for its quality on content and standards. It is quite difficult to maintain its record. People often steal the ideas and copy the content from others' report. Since there is no way to check for the genuineness of anyone's report and make firm claim of one's work, the need for a better application exists which gives the student security of his material.Also, the student needs to submit the report physically in the form of printed hardcopy and the editor has to sort it out to the concerned department and then give it to the faculty. Further it is really difficult for the faculty to review it and send it back to the student via editor. It would be become many more times simpler and easier if all these series of tasks can be automated through a system. Hence we came for the idea to develop a system for this work.

2.3 MOTIVATION

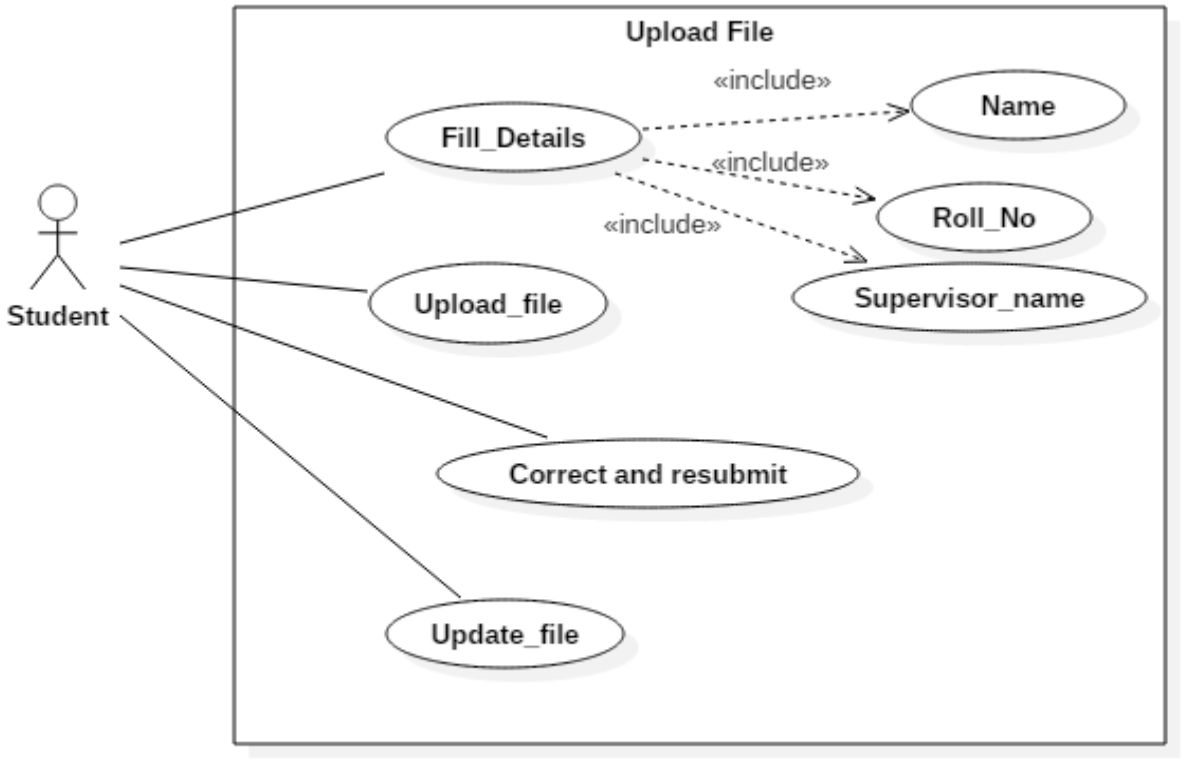
1) To get a official record of the work done by a person (Getting timestamp so that nobody else can copy the work)
2) Can be used as a draft before publishing
3) Can act as reference for author's publications.
4) Records can be used while searching of previous work.

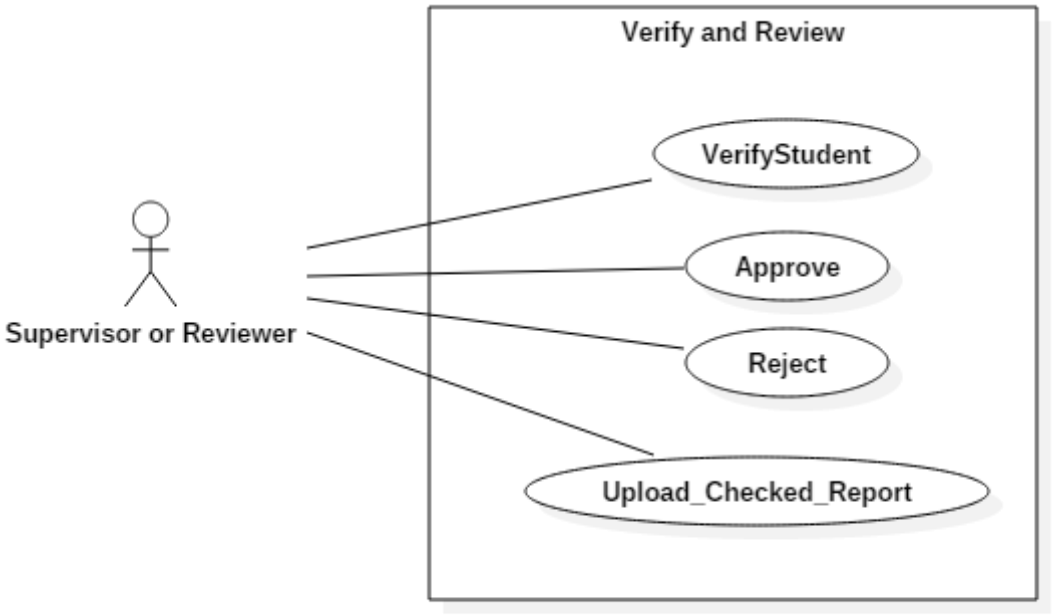
3. DESIGN AND IMPLEMENTTION

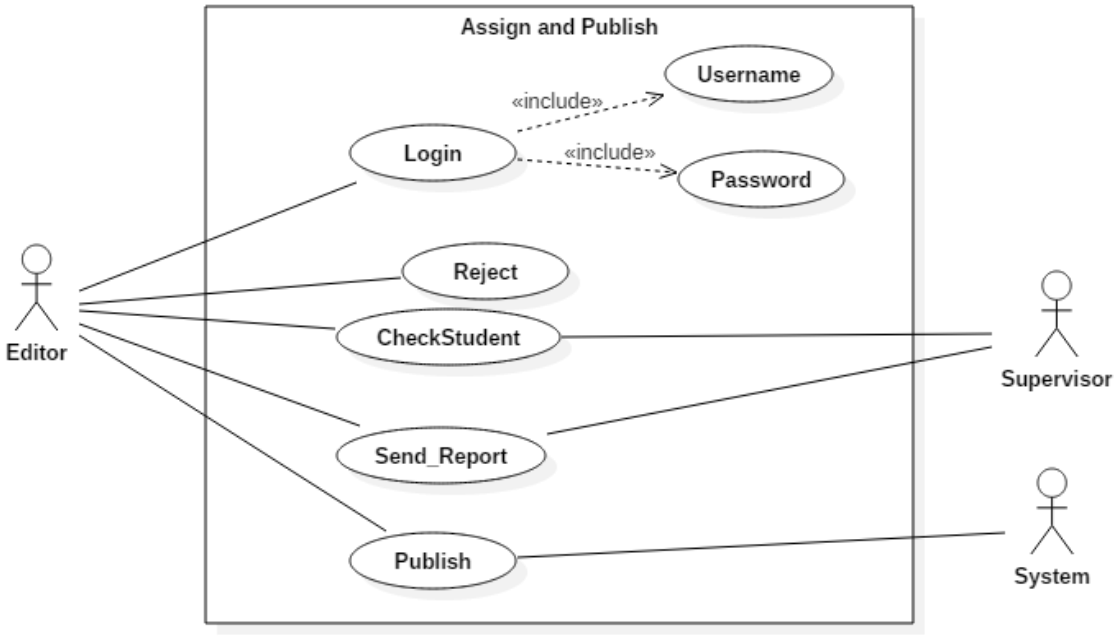
3.1 CLASS DIAGRAM



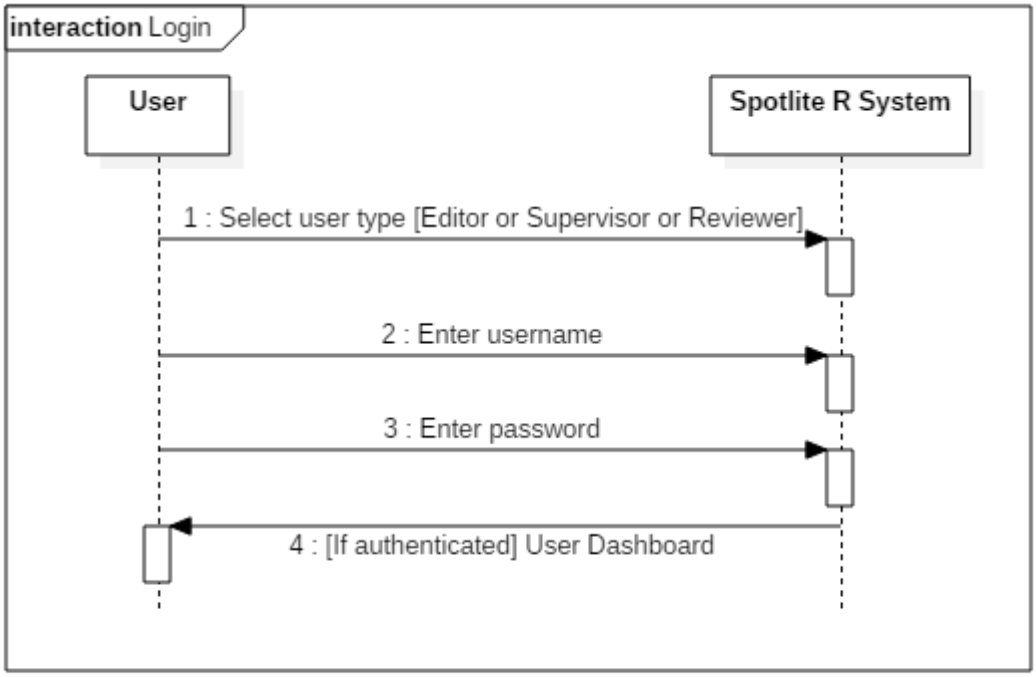
3.2 USE CASE DIAGRAMS

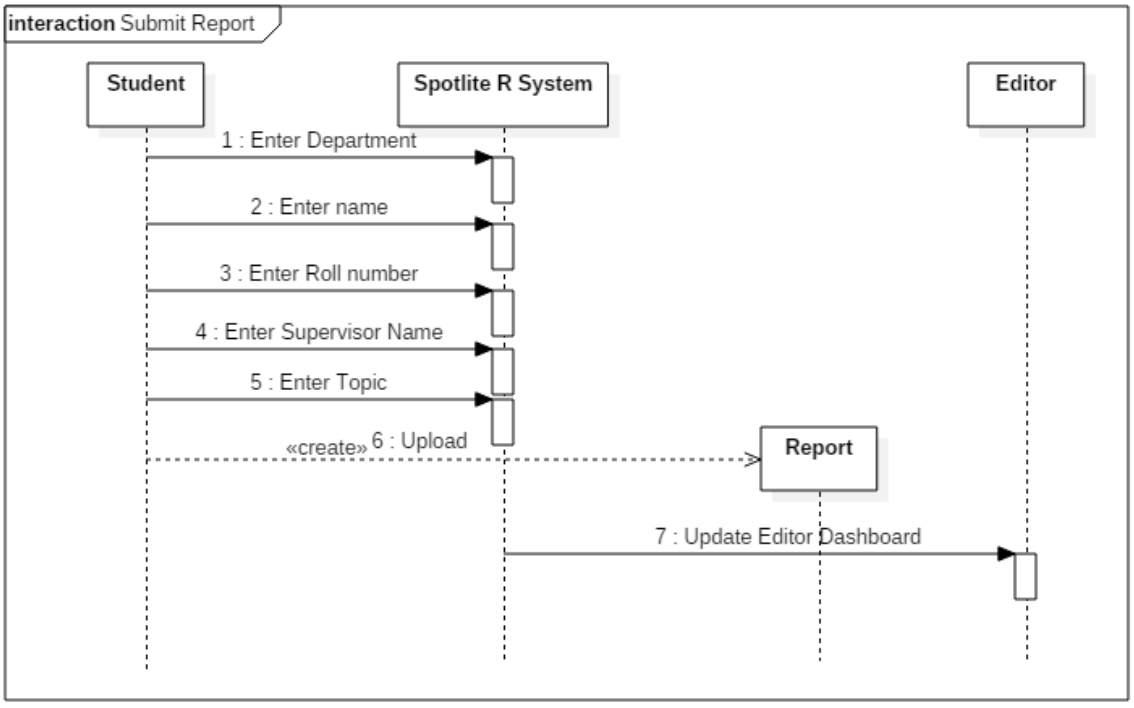


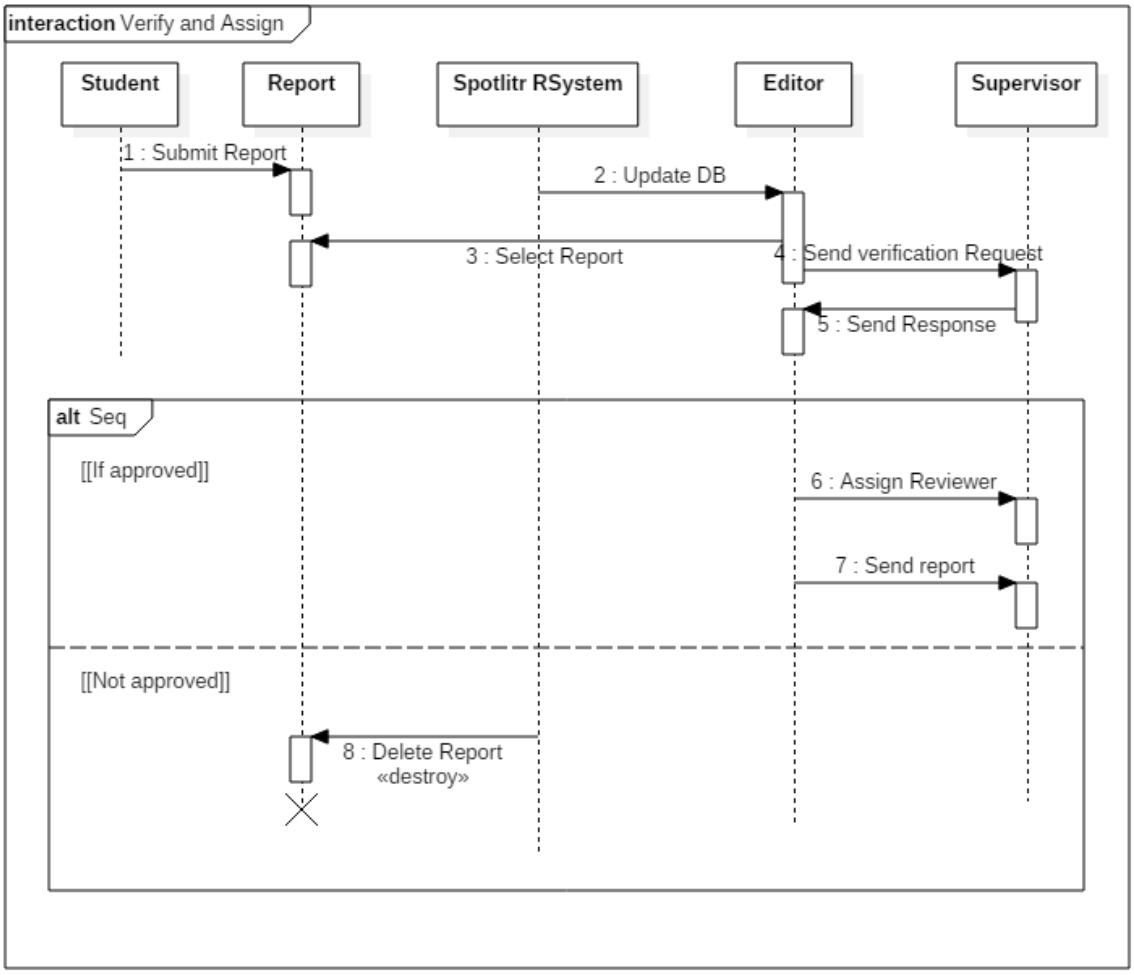


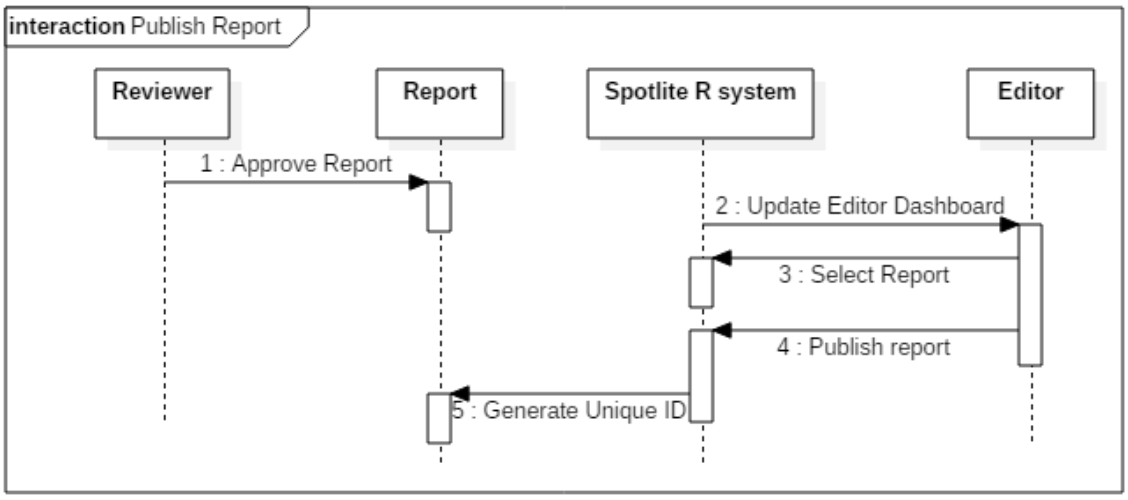

Assign and Publish
Username
«include»
Login
«include»
Password
Reject
CheckStudent
Send_Report
Publish
Editor
Supervisor
System

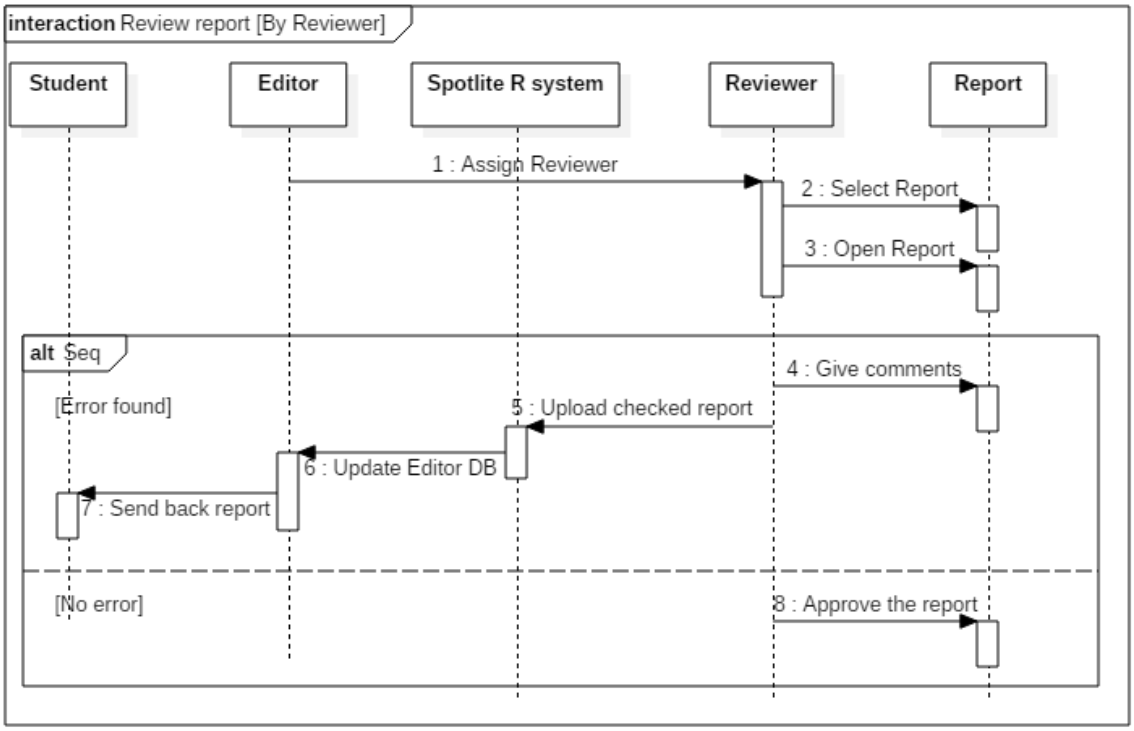
3.3 SEQUENCE DIAGRAMS






interaction Verify and Assign
Student
Report
Spotlitr RSystem
Editor
Supervisor
1 : Submit Report
2 : Update DB
3 : Select Report
4 : Send verification Request
5 : Send Response
alt Seq
[[If approved]]
6 : Assign Reviewer
7 : Send report
[[Not approved]]
8 : Delete Report
«destroy»


interaction Publish Report
Reviewer
Report
Spotlite R system
Editor
1 : Approve Report
2 : Update Editor Dashboard
3 : Select Report
4 : Publish report
5 : Generate Unique ID


interaction Review report [By Reviewer]
Student
Editor
Spotlite R system
Reviewer
Report
1 : Assign Reviewer
2 : Select Report
3 : Open Report
alt Seq
4 : Give comments
[Error found]
5 : Upload checked report
6 : Update Editor DB
7 : Send back report
[No error]
8 : Approve the report

4. SYSTEM REQUIREMENTS

4.1 HARDWARE REQUIREMENTS

- Processor : 32 bit OS and above, Intel core 2.30 GHz
- RAM : 4 GB
- Hard Disk: 100 GB

4.2 SOFTWARE REQUIREMENTS

- Database : Mongo DB
- Server : XAMPP
- Front End : HTML,CSS
- Backend : PHP
- Browser : Ubuntu 14.04 (LTS)/ Windows 8.1
- Notepad++

5. WORK PLAN

5.1 Work done so Far

- The basic technology focussed in the project is Mongo DB. **[1][2]**
- MongoDB is quite new and unfamiliar databse. Learnt about the database from the scratch.
- Studied about big data and NoSQL which are the basis for mongoDB**. [3]**
- Learnt what is MongoDB and why it is used **[4]**
- Gave presentation on MongoDB
- INSTALLATION **[5][6][7][8]**
  - Set up the MongoDB environment: MongoDB requires a data directory to store all data.
  - Start MongoDB: To start MongoDB, run mongod.exe
  - Connect to MongoDB.; To connect to MongoDB through the mongo.exe shell, open another Command Prompt.
  - Begin using mongoDB

- Studied how commands are written in mongoDB and ran few on my machine.
- Also found out how reports are currently being published in our institute.
- Planned along how to build up the project.
- Created designs which would be helpful for the building and implementation of the system.

5.2 FUTURE WORK

- Create various pages for the system modules
- Work on functionality in comments section, which would be very challenging
- Login would be authenticated by third party(Google) which will be difficult to implement.
- Learn how to connect MongoDB using php.
- Each time any submission is made, send a notification email to the editor should be sent. Have to work on it (Sending on click emails).

6. CONCLUSION

Knowing the importance of publishing of tech reports and knowing the limitations of existing available applications which lack in several features like management of reports, it is essential to have an efficient tech report publishing system. Efforts shall be made to build up the system following the specified time constraints.

7. REFERENCES

[1] https://www.youtube.com/watch?v=W-WihPoEbR4&t=1357s

[2] https://www.youtube.com/watch?v=liQzIsFnCr0&t=40s

[3] https://www.mongodb.com/

[4] https://docs.mongodb.com/

[5] https://www.tutorialspoint.com/mongodb/

[6] https://github.com/mongodb