

Enterprise Web Software Development

Course code: COMP1640

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Greenwich Course Leader

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Team Name: The Ultimate

Team Member		
	Name	Role
1		System Analyst
2		
3		
4		

Credential:

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Introduction:

The System that I have been asked to Analyze is an online discussion forum where Students are allowed to post Ideas under Topic, Comments on as well as react on it through the use of Thumbs up and Down.

Environment such as this is beneficial for student as it allows them to interact as well as learn and participate through the discussion of these new Ideas.

As per my task I have been asked to analyze on the best way to develop a secure web-based system where students can submit their Ideas so that an interactive learning Environment for the Student can be created which can be very beneficial for the Student.

This system is developed by our team called "The Ultimate". This team has four members, and everyone has played different roles for the successful development of this system. While developing this system we have tried to fulfill all the requirements to the best of our understanding, skills and ability.

In the development of this system I myself have played the role of System Analyst, here I have tried to analyze the requirements of all the functionalities of the system to the best of my understanding and discuss them through the use of diagrams and charts, as well as maintain the analytical factors such as "User Story", "Product Backlog", "Scrum" and "Meeting Management", among other things in this document.

System Evaluation:

Evaluation of the product & process:

UOG discussion forum is a role based system where the main aspects of the system is to collect ideas from the students under provided topic by the Admin or QAM. There are also some other role in the system which is for normal staff and QAC. QAC are here to maintain their own department, and if any student submit any idea then a mail notification will be sent to the department QAC. On the other hand normal staff will only be able to see, comment and provide reaction on ideas. Also staffs contribution will not be seen by the student. If a student want to submit ideas on a selected topic then it is needed to be approved by the admin otherwise the idea will not be posted on the idea list. Admin can set a date against topic and there will be a closure date as well as a final closure date. Admin and QAM also be able to see all the reports which will generate from the system like department wise student contribution, percentage etc.

Assumption:

Before the development of the system some key issues are being assumed. The assumption we have made are being given below:

- The system is a subsystem of a large University system.
- Only the Admin and the QAM has the power of controlling the whole system.
- Role will be predefined for the users.
- Only the authorized user will be able to access the system.
- Password should be encrypted properly.
- Ideas should be approved by the admin.
- Mail notification is needed to be sent to both student and to the admin as well as to the QAC.
- Evidence can be uploaded both in text or image format.
- Zip download of contribution for both QAM and Administrator.

Functional Requirement:

- Role based user login
- Admin can manage user profile.
- Admin can set topic as well as deleting them if not being used.
- Admin & QAM can set start and closure date against the topic as well as editing them.
- Admin can approve newly submitted ideas.
- Student can share their ideas against the given topic.
- Student can upload evidence against their ideas & can give like or comment on the ideas.
- Getting notification through email.
- Admin can view all the reports.

Non-functional Requirement:

- Admin gets dashboard notification.
- Admin can manage user profile.
- Percentage reports of the contributors.
- Admin can comment & react on ideas.
- Viewing reply list on student dashboards.

System Strength:

- Maintaining system based on their role as well as the security section.
- On board notification for administrator.
- Seeking approval before submitting any idea.
- Responsive for different screen size.
- Passwords are properly hashed.
- User friendly.
- Notification via email even if user is not logged in.
- Managing own profile if anything goes wrong.

System weakness:

- Download is not possible through marking multiple items.
- UI could be more pleasing.
- All the functionality is admin dependent.

Further development:

- On board notification for every users.
- Using two factor authentication system for security.
- Reminder notification before publishing new topic.
- Printing reports if needed.
- Categorizing topics criteria.

System working area:

Login page:

All user must be authorized and sign in into the system.

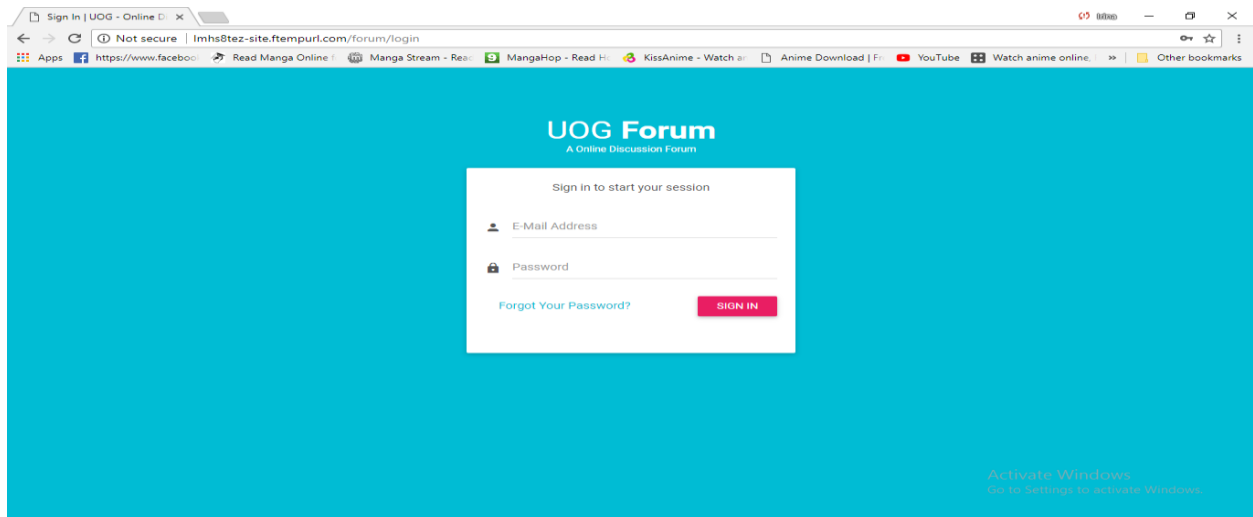


Figure 1: Login Page

Login as Student

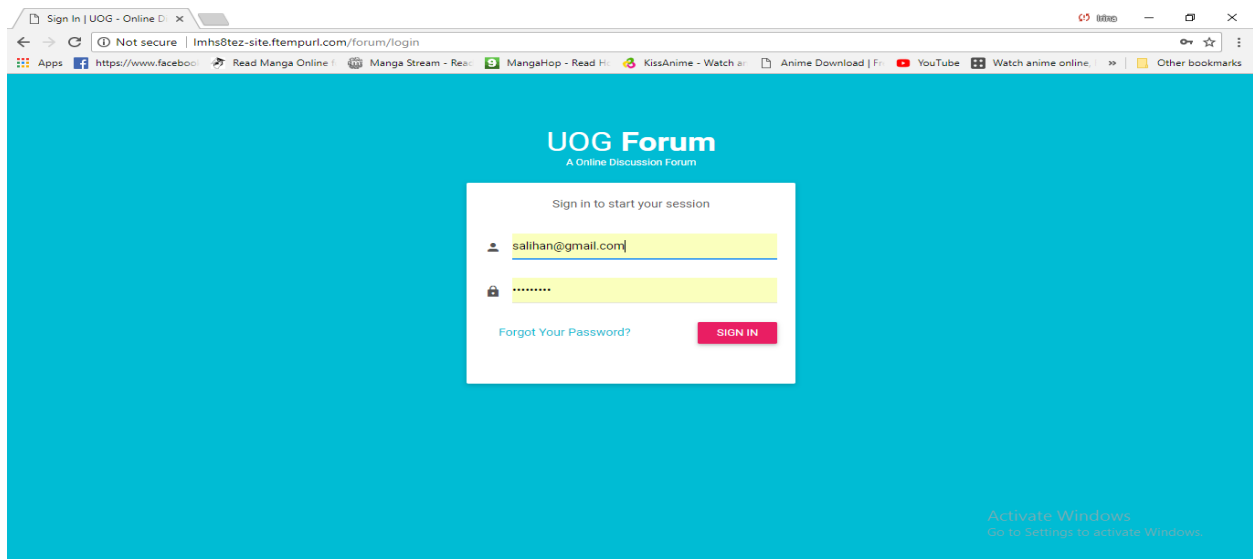


Figure 2: Login as a Student

Student Forum Page

After login all Students can view the user dashboard and interact with all the activities

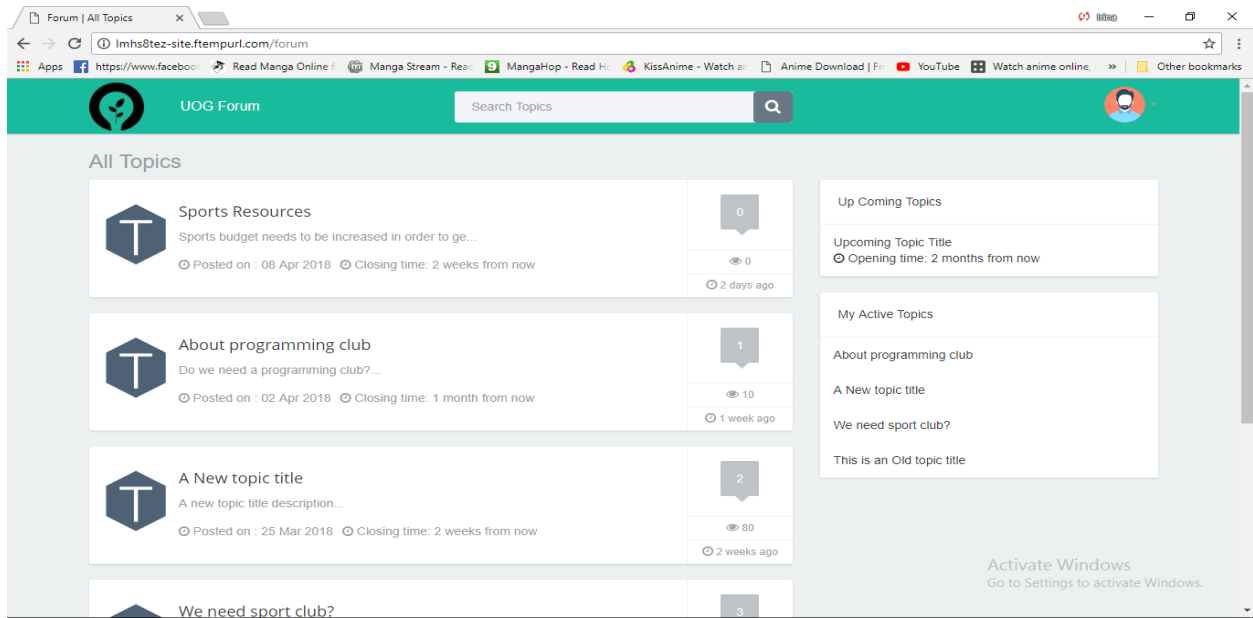


Figure 3: Student Forum page

Submit Idea:

Select a Topic from the forum page, it will direct you to another page under the selected Topic, now you can submit an Idea under this Topic by clicking “Post an Idea” button, it will then redirect to another page which contains the form for submitting new Idea.

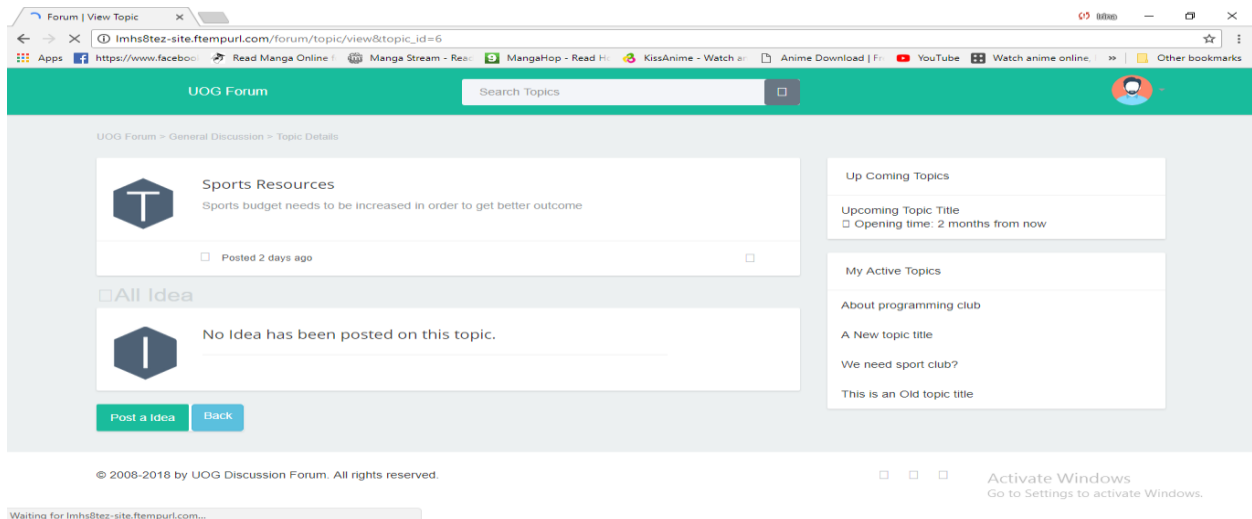


Figure 4: Selected Topic page, here click on “Post an Idea” button

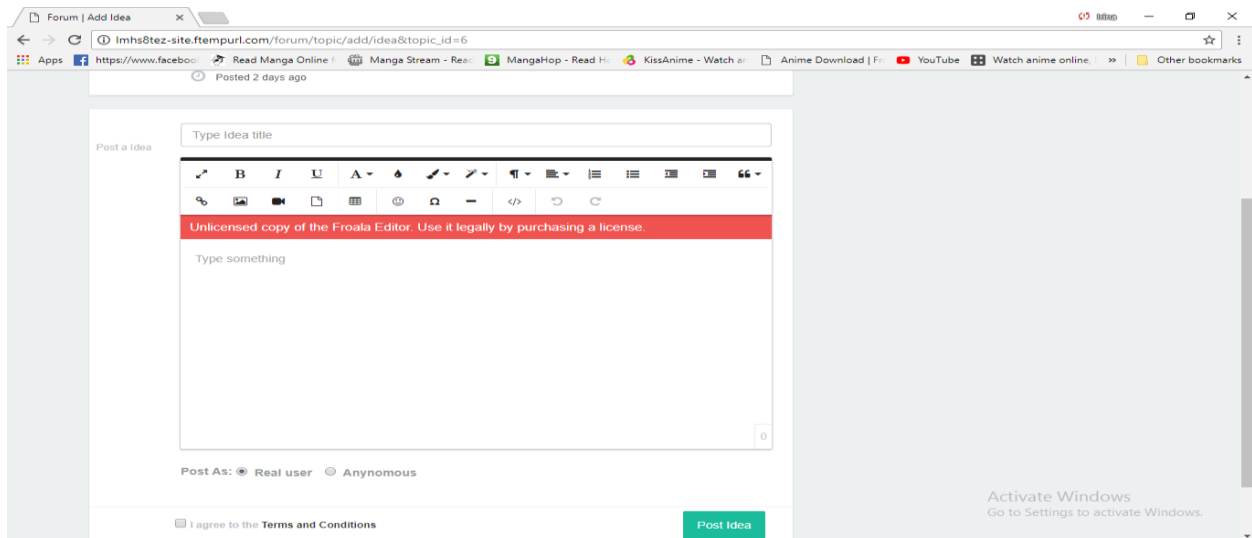


Figure 5: Post Idea page

Post a Comment:

Student need to select a specific idea title. It will be redirected to an idea page, the Student can now comment in the provided textbox and finally click on 'Add Comment' button to post the comment as either self or anonymous by accepting Terms and condition.

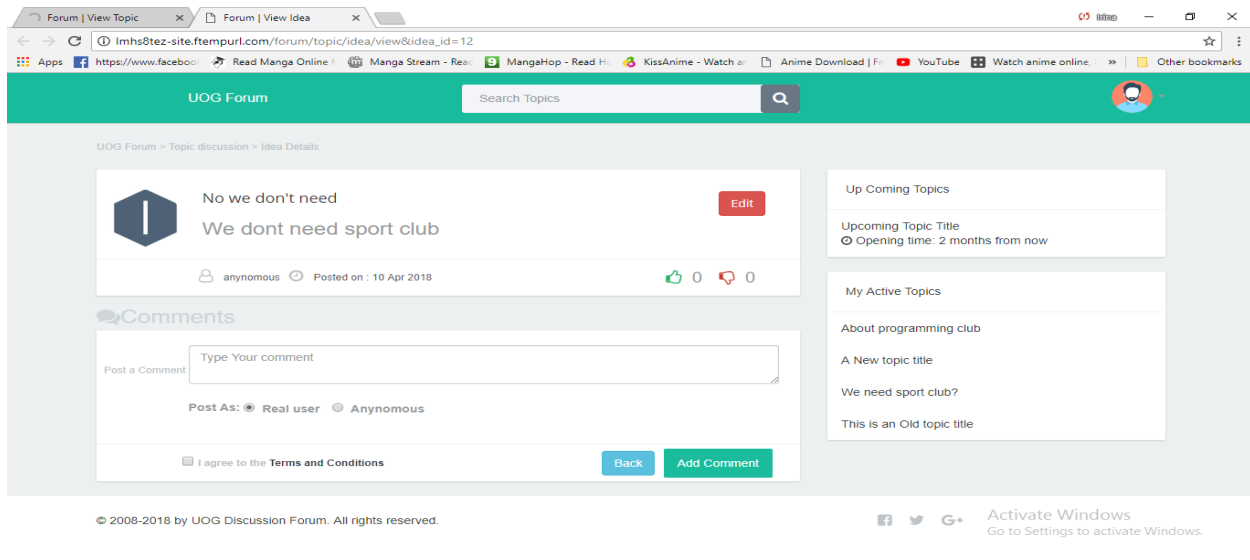


Figure 6: Add comment page

React on an Idea:

Student can give either Thumbs up or Thumbs down in any idea by clicking on 'Thumbs up' or 'Thumbs down' icon in this page.

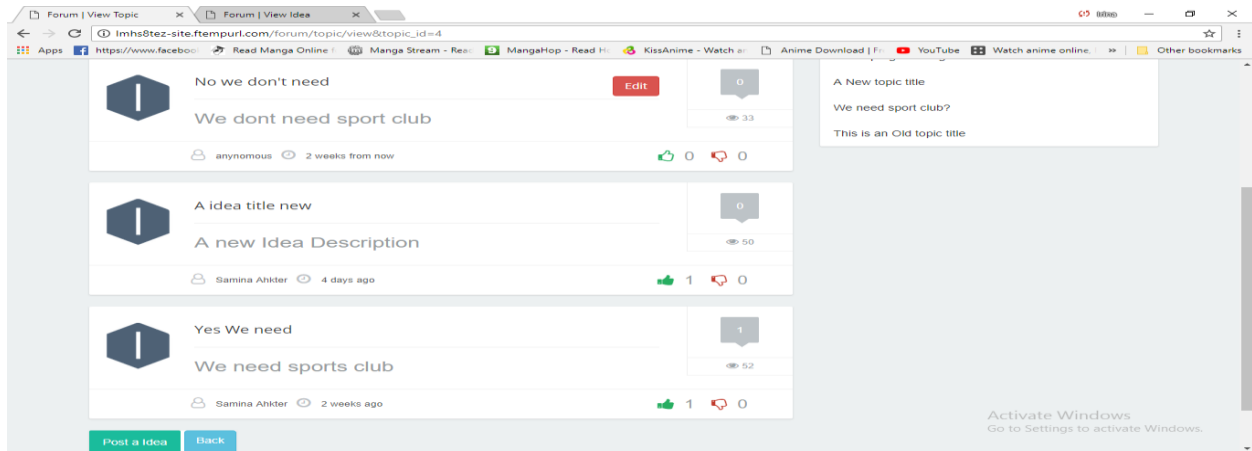


Figure 7: Reaction to Idea

Student Dashboard:

In this page, student will be able to view their recent posted idea and comment.

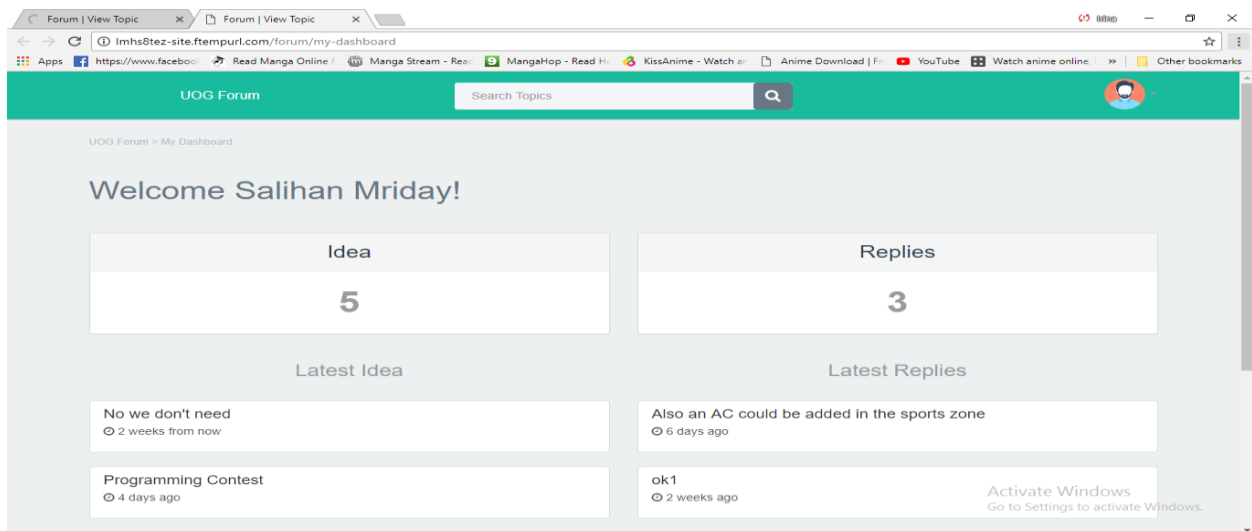


Figure 8: Student Dashboard

Login as Admin

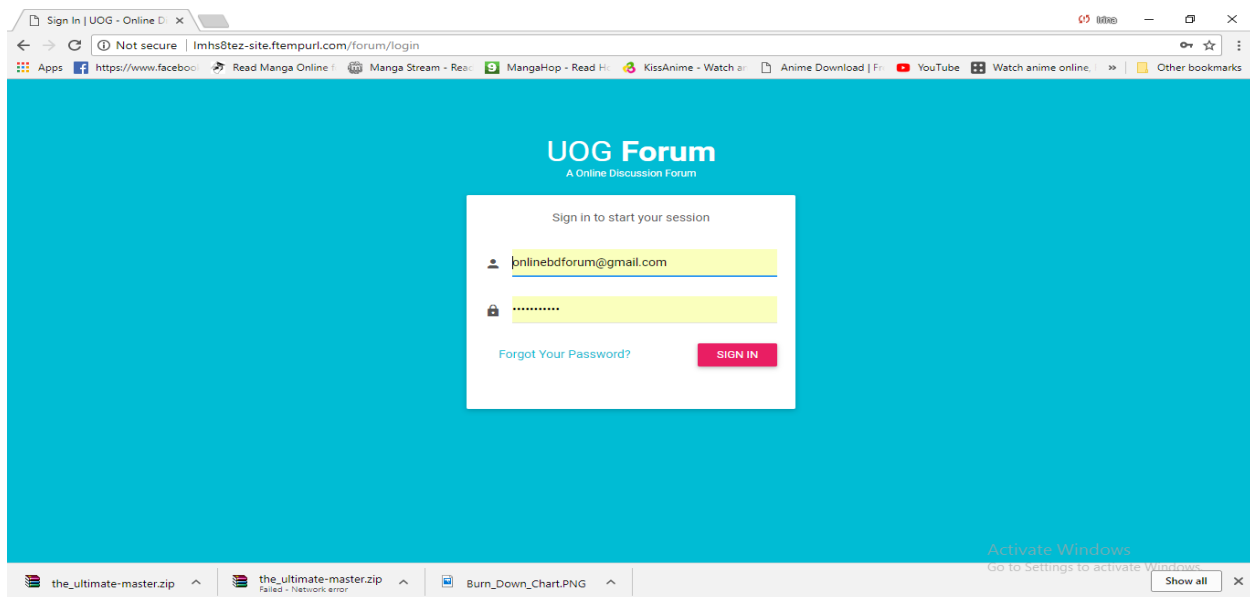


Figure 9: Login as Admin

Admin Forum Page

After login Admin can view its forum, dashboard and interact with all the activities

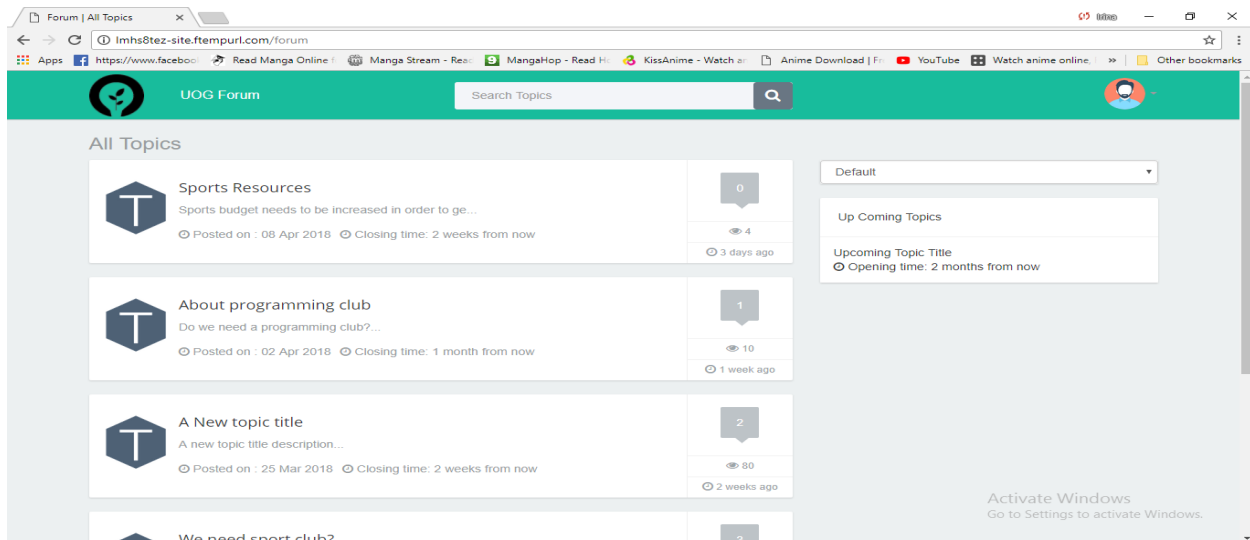


Figure 10: Student Forum page

Admin Dashboard:

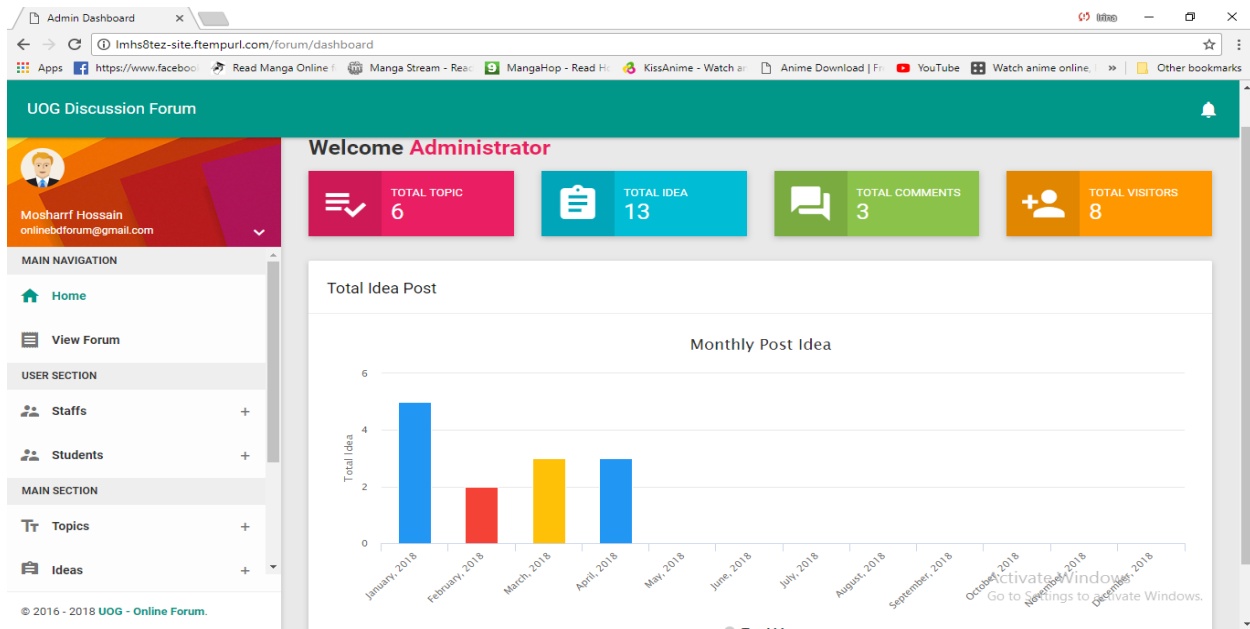


Figure 11: Admin Dashboard

Create Topics: Here Admin can create new topic. By providing valid information

The 'Add new Topic' page contains the following form fields:

- Topic Title: Type topic title
- Description: Type topic description
- Start Date: Please choose a date
- Closure Date: Please choose a date
- Final Closure Date: Please choose a date
- Publication Status: Deactive

An 'Add Topic' button is located at the bottom of the form.

Figure 12: Add topic page

Topics page: Here the Admin can view List of Topics

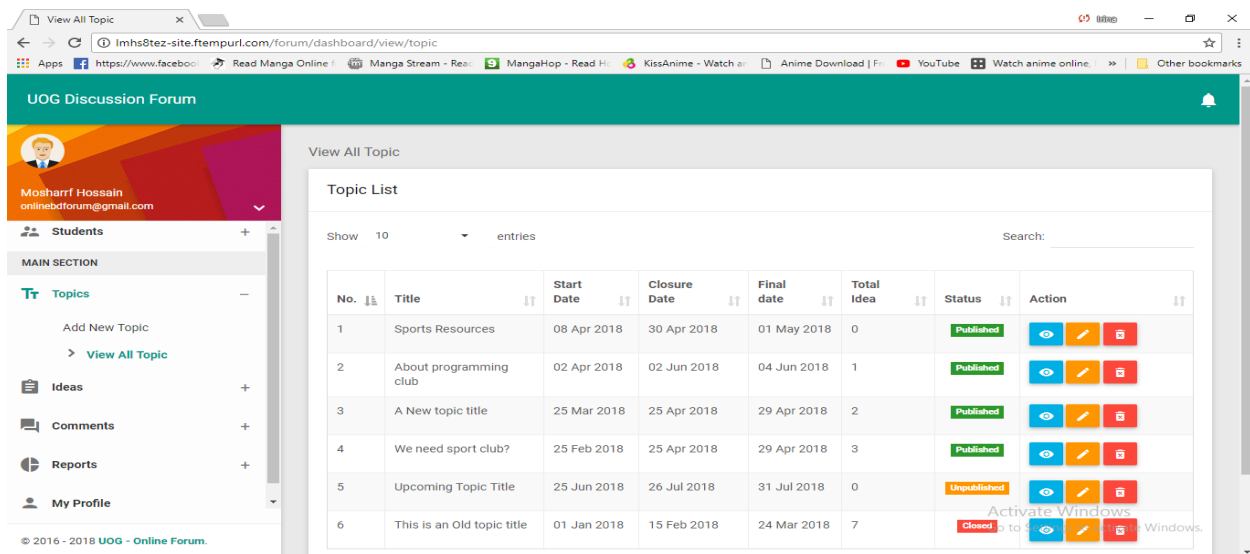


Figure 13: All topic page

Update topics: By clicking on edit button in view topic page, admin can change any topic information.

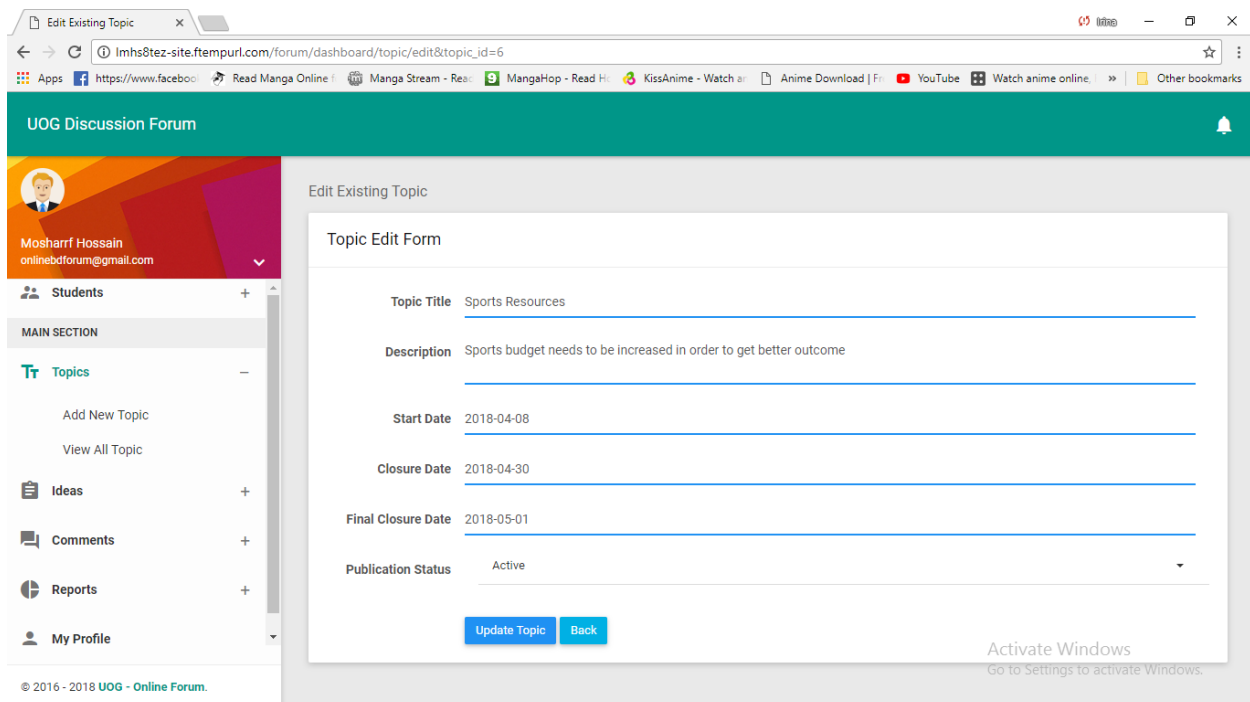


Figure 14: Topic update page

Approve Idea: By clicking on edit button in view page, admin can change any idea status from the edit page.

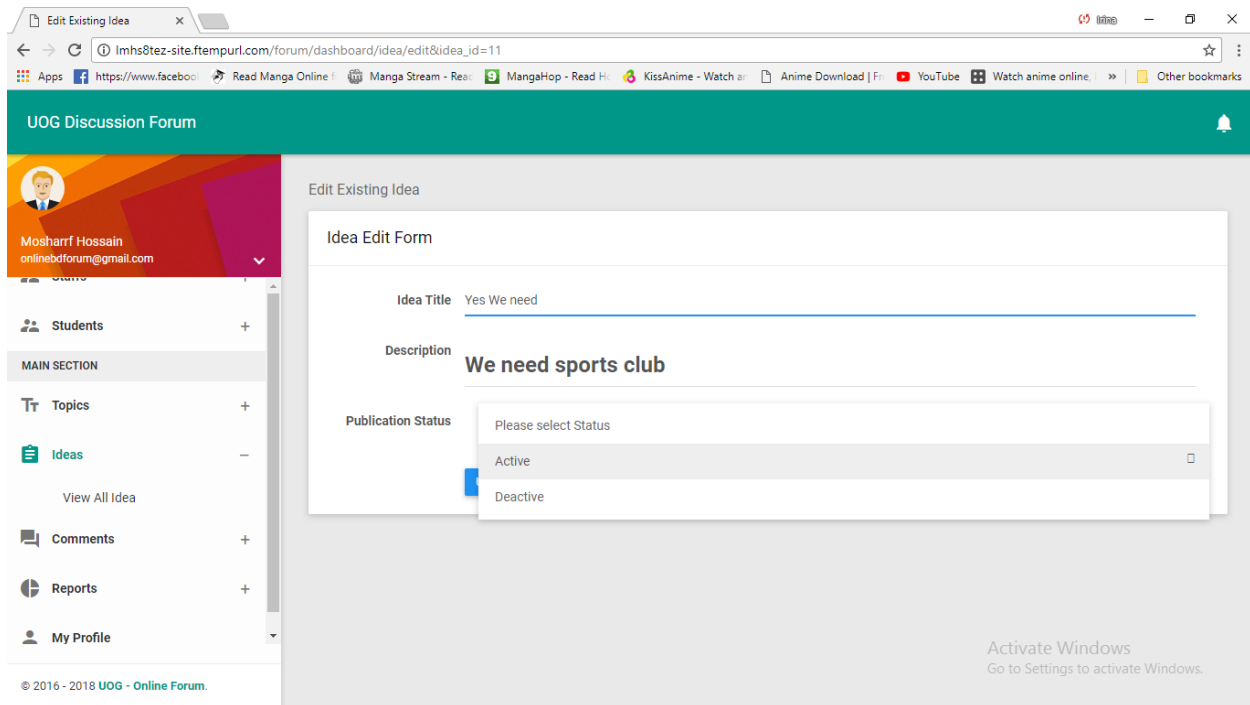


Figure 15: Change status

Download idea details: Admin can download idea by clicking the download option from the Idea list page.

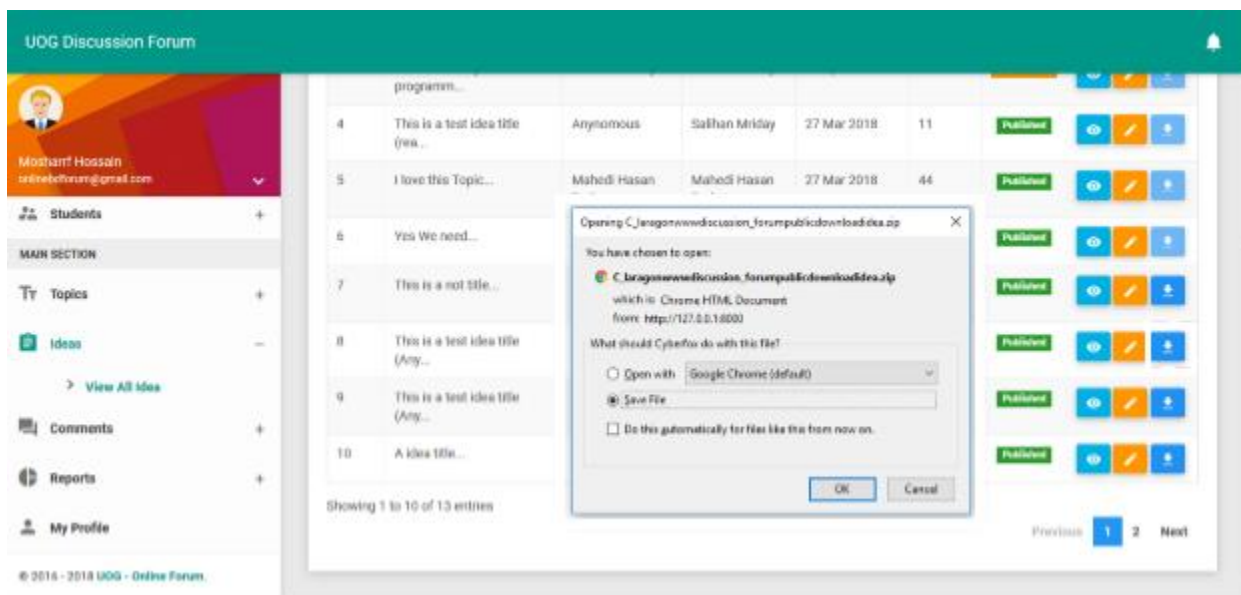


Figure 16: Downloading ideas

Report view: Admin can view different types of reports. Here are few examples

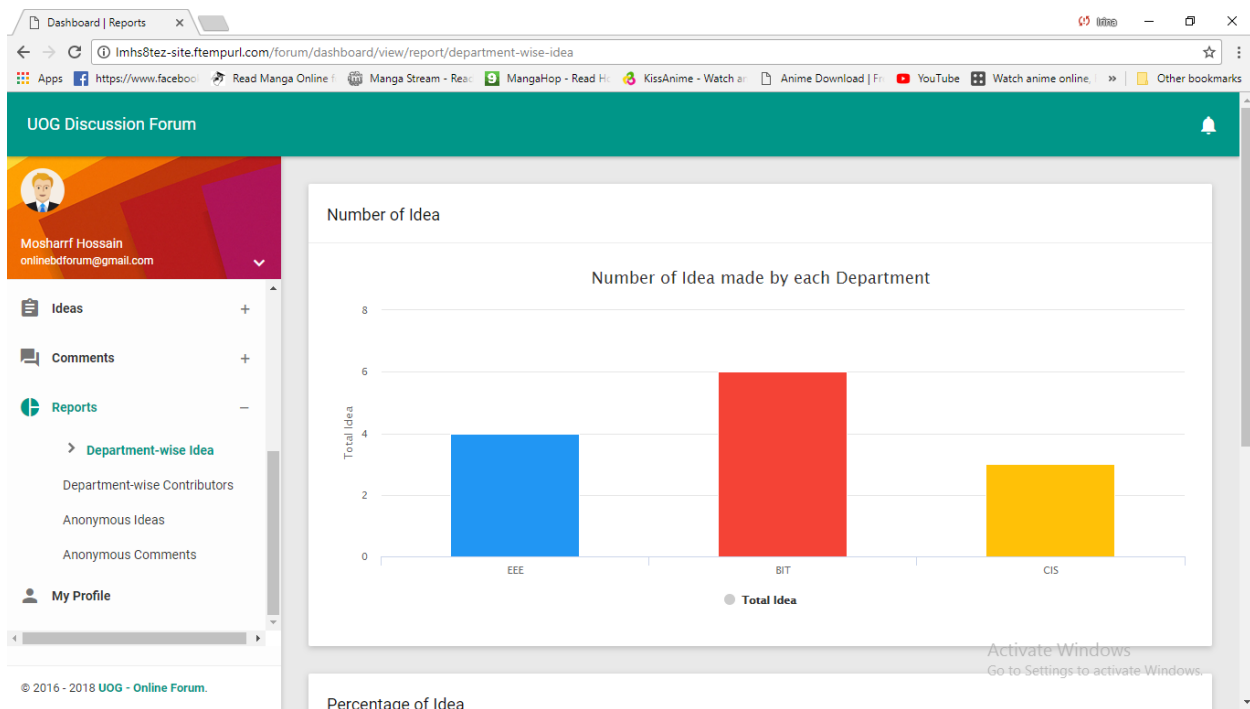


Figure 17: Report for Department wise Idea (number of idea)

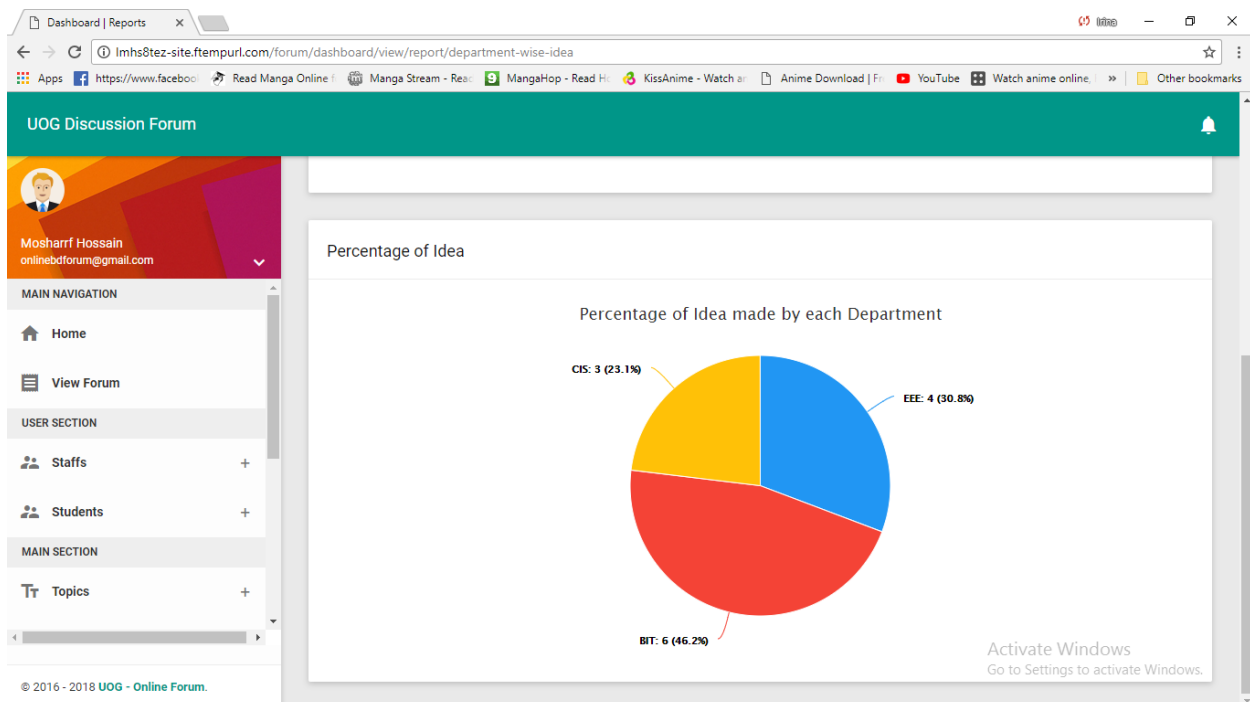


Figure 18: Report for Department wise Idea (percentage of idea)

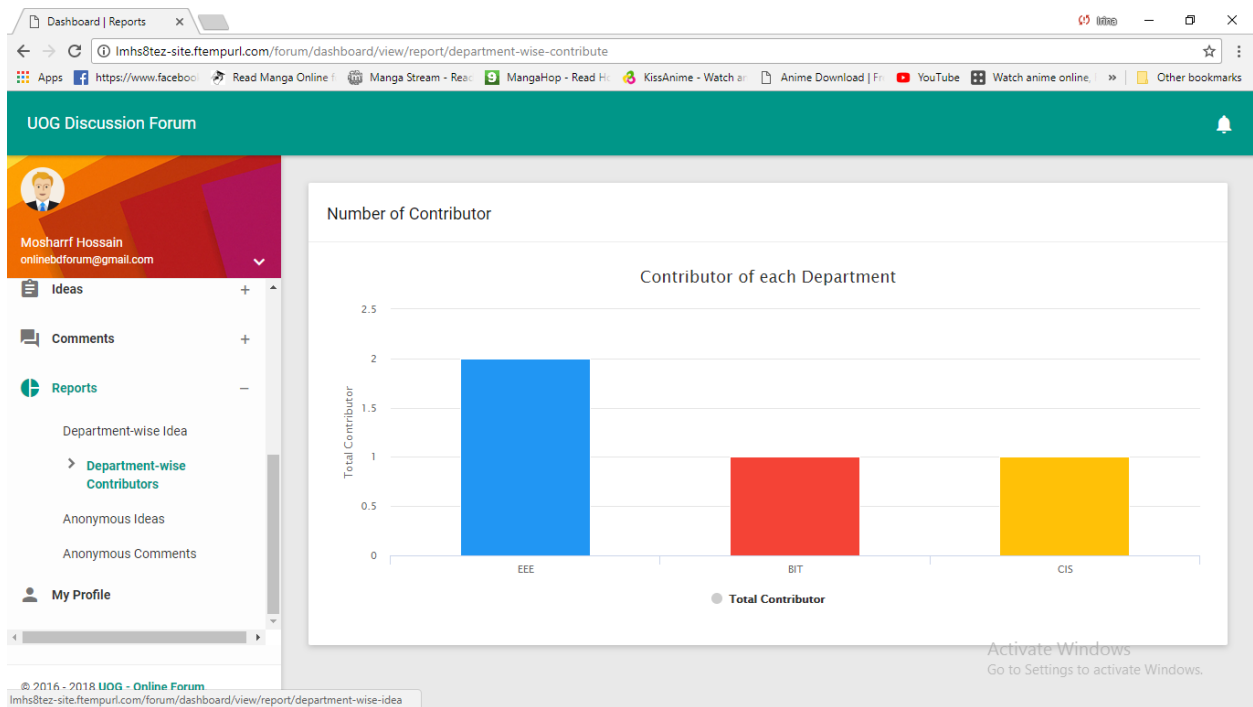


Figure 19: Report for Department wise Contributor

Team Evaluation:

The team we have formed is named by “The Ultimate” and in our team we have four members. Each team members of my team give their best effort to successfully complete the coursework within the given time. We have also attended some meeting by following agile scrum in order to find out the proper way of providing better solution against the course work. At first we have analysis some data and make assumption about the functionality of the system. Then the database designer design the database which was outstanding effort from him to make an efficient database system where the database is properly normalized and it maintains the role based procedure. I have drawn “Use Case” and “Activity Diagram” latter on the programmer and tester begin their work and complete the system properly. After completing the development part our tester test the system by applying all the possible way and ensures that all the functionality is working properly. At the end of team evaluation it could be easily said that all the team member was attentive and hard worker and as a result we become success to complete the system within time by completing all the requirement.

Assessing Team Performance:

Assessment	Team Member Name			
Criteria(10)	Irina	Mohon	Mahadi	Arman
	System Analyst	Programmer	UI Designer & Tester	Database Designer
Availability	9	10	10	10
Technical Skill	9	10	9	9
Collaboration	9	9	9	10
Skills on own area	9	10	9	9
Communication	8	9	8	10
Friendliness	10	10	10	10
Confidence	10	10	10	10
Total = 70	64	68	65	68

Self-Evaluation:

Being an Analyst was my role to play within my team. Even though I was the analyst I had to go through the given coursework scenario for several times until I have become able to breakdown all the requirement properly and shared those requirement with my team members. Also I have assumed some functionality to add within the system and shared those assumptions with my team. After that I have drawn “Use Case Diagram” and “Activity Diagram”, “Class Diagram” as well as “Sequence Diagram” of the system for the better understanding of the system to make it easy for my other team members to understand.

I have tried my best to find out and understand all that is required for the development of the system as possible. I have also tried to encourage my team through phone, in meetings and also through social media such as “Facebook”. Also I have tried my best to support all the team members when they have faced any problem. Furthermore I have volunteered in the scrum documentation like proving the artifacts of “User Stories”, “Product Backlog”, and “Sprint Backlog”, “Burn Down Chart” etc. These artifacts helps all of us to complete the work sequentially and to find out the work based on their priority as well as completing them within the fixed time.

Lesson Learned:

During the development of this project, I have gained a lot of experience as well as new skills and knowledge, such as I have learned about methodology, different types of UML diagrams, tools and techniques, due to this my understanding and knowledge of web development has become really strong.

I have gain skill and experience in how to plan and manage time for develop of a project. This project has also helped me to learn and explore on how to better design and analysis techniques needed for the development of the system in depth. In future, I can use and apply my newly gained knowledge in other system development.

While working with my team members I have learned how to communicate within a team contributed projects. Here we have to complete a group assessment by following scrum methodology where all team members have their own role to play as well as contributing and collaborating with each other properly, and if anyone of the team face problem then we will all have to try our best to help solve that problem as a whole. Also I have learned how to complete my assigned work within a time by full filling the entire requirement to the best of my ability. Furthermore I have learned how to analyze and understand the project from scenario and find out all the required requirement and make plan to complete the task properly to the best of everyone's ability.

Conclusion:

The system that we have successfully developed called the “UOG Forum”. It is a secure web-based system and the main aspect of this system is to for Students to submit Ideas under specific Topics and then to discuss these ideas among other students and maintain them. With help and collaboration of my team members, we have developed this system and tried to meets all the requirements to the best of our skill and ability.

The system that we have developed has its strength, and also some weakness, these weakness can be overcome by further development.

During the development of the system time, each and every member of our team tried to give their best efforts and worked really hard in completing the system. Due to the development of the system each and every one of us have learned and gained some new skills and have also gained some new knowledge about other skills, methods, system, diagrams, among other things and well as each other, all this helped us for the team to gain better collaboration and scrum methodology. By developing a system such as this, the knowledge and skill that we have gained will help the each team members in our future life and future project like this.

Appendix A:

Use Case Diagram & Description:

Use Case Diagram for Admin and Quality Assurance Manager

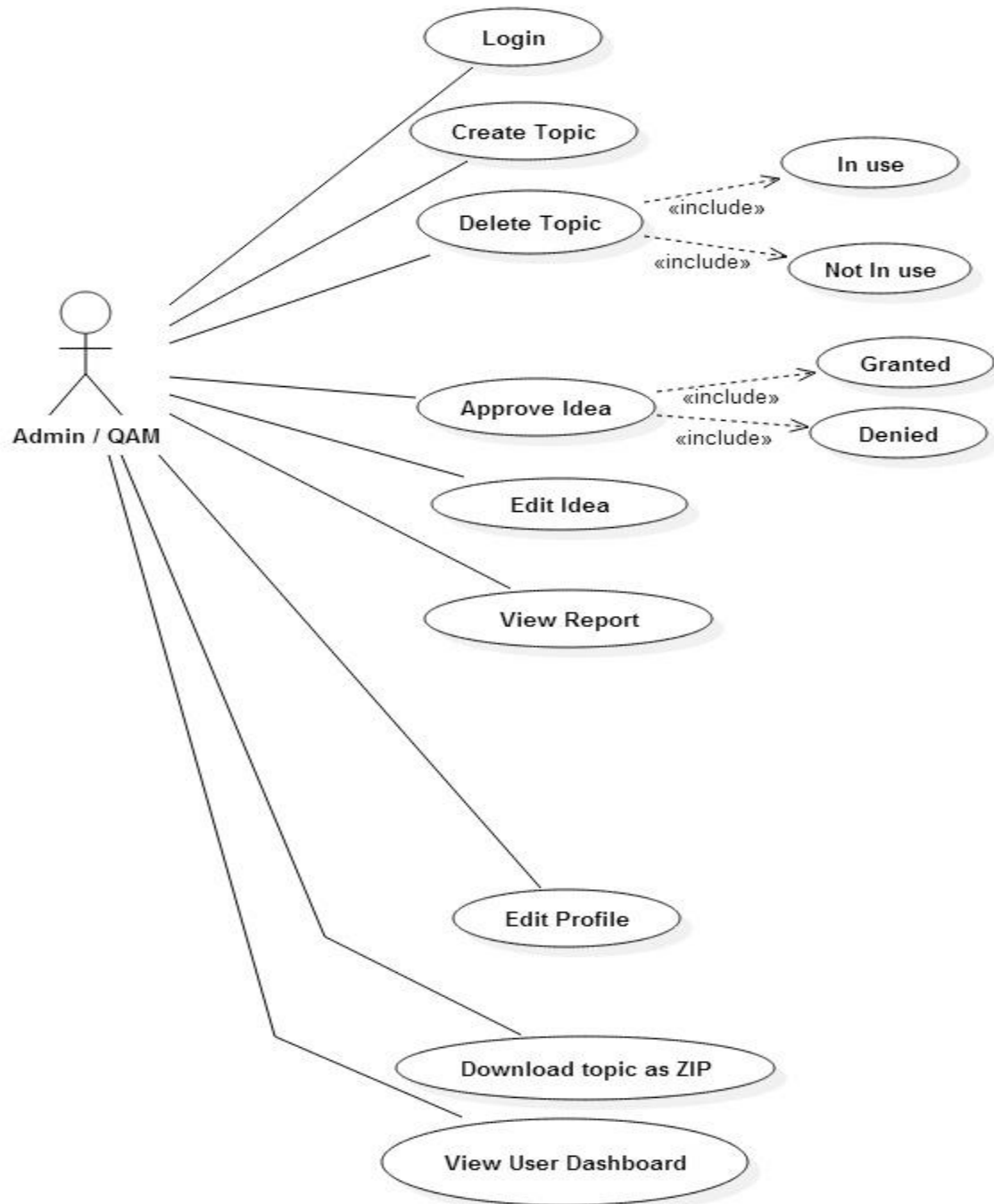


Figure 20: Use case diagram for Admin/QAM

Use Case Description for Admin and Quality Assurance Manager

Use Case 1	Login
Objective:	To log into the system
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to have user account which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none">1. Admin/QAM will provide email and password in login page.2. The System will validate the email and password.3. If incorrect login information the system will ask for correct information.
Post-condition:	<ol style="list-style-type: none">1. If correct login information then the user will be directed to the user dashboard page.2. The admin or QAM can now access the system.

Use Case 2	Create Topic
Objective:	The Admin or QAM will be able to add a new Topic into the System.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to Add a new Topic into the System 2. To Add new Topic the user will be directed to a page which contains the “Add Topic” form. 3. The Admin will now enter details regarding the new Topic in the form. 4. The Admin will also choose start, closer and final date for the new Topic. 5. All information can now be saved and stored.
Post-condition:	<ol style="list-style-type: none"> 1. After the new Topic information has been saved – a message will display that the Topic has been added successfully.

Use Case 3	Delete Topic
Objective:	The Admin or QAM will be able to delete a Topic from the System.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to Delete Topic from the System 2. To Delete a Topic from a System the Admin will need to go to the List of Topic page. 3. The Admin will now be able to delete a Topic from the lists of Topic.
Post-condition:	<ol style="list-style-type: none"> 1. The Topic has been successfully deleted.

Use Case 4	In Use
Objective:	The Admin or QAM will not be able to delete a Topic from the System when the said Topic is In Use.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	Delete Topic
Primary scenario:	<ol style="list-style-type: none"> 1. To Delete a Topic from a System the Admin will need to go to the List of Topic page. 2. The Admin will need to select a Topic from the List. 3. If the Topic is In Use by the Students, then that Topic Cannot be deleted. 4. When deleting an In Use Topic an Error message is shown.
Post-condition:	<ol style="list-style-type: none"> 1. The Topic cannot be deleted.

Use Case 5	Not In Use
Objective:	The Admin or QAM will be able to delete a Topic from the System.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	Delete Topic
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to Delete Topic from the System 2. To Delete a Topic from a System the Admin will need to go to the List of Topic page. 3. The Admin will need to select a Topic from the List. 4. If the Topic if not In Use by the Students, then that Topic can be deleted. 5. After deleting a Topic a message is shown of successful deletion of the Topic.
Post-condition:	<ol style="list-style-type: none"> 1. The Topic has been successfully deleted.

Use Case 6	Approve Idea
Objective:	The Admin or QAM will be able to approve an Idea which has been posted by the Student.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to approve an Idea which has been posted by the Student. 2. When a new Idea has been posted by a Student the Admin will get a System notification. 3. After getting the notification the Admin can now decide if the idea can be approved or not. 4. When the Idea has been approved by the Admin, the Student who posted the idea will get an email.
Post-condition:	<ol style="list-style-type: none"> 1. The Idea has either been successfully approved or denied.

Use Case 7	Granted
Objective:	The Admin or QAM will be able to approve an Idea which has been posted by the Student.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	Approve Idea
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to approve an Idea which has been posted by the Student. 2. After getting the notification the Admin can now decide if the idea can be approved or not. 3. When the approval of the Idea has been granted by the Admin, the Student who posted the idea will get an email.
Post-condition:	<ol style="list-style-type: none"> 1. The approval of the Idea has been successfully granted.

Use Case 8	Denied
Objective:	The Admin or QAM will be able to deny an Idea which has been posted by the Student.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	Approve Idea
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to deny an Idea which has been posted by the Student. 2. After getting the notification the Admin can now decide if the idea can be approved or denied.
Post-condition:	<ol style="list-style-type: none"> 1. The Idea has been denied.

Use Case 9	Edit Idea
Objective:	The Admin or QAM will be able to edit an Idea which has been posted by a Student.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to edit an Idea which has been posted by the Student. 2. To Edit an Idea the Admin will have to select an idea from the list of Idea. 3. After clicking the Edit option the Admin will be directed to a form to edit the Idea. 4. The Admin can now enter the details to edit the idea. 5. After entering all the details it can now be saved and stored.
Post-condition:	<ol style="list-style-type: none"> 1. The Idea has been edited successfully.

Use Case 10	View Report
Objective:	The Admin or QAM will be able to View some Reports which can be generated by a System.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to view some Reports which have been posted by the System. 2. To View the reports the Admin will have to select the report, provided from a list of options in the dashboard. 3. After clicking the Report from the list option the System will generate said Report.
Post-condition:	<ol style="list-style-type: none"> 1. The Reports have been viewed successfully.

Use Case 11	Edit Profile
Objective:	The Admin or QAM will be able to edit a Profile of an User.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to edit a Profile of an User. 2. To Edit an Idea the Admin will have to select an User from the list of Users. 3. After clicking the Edit option the Admin will be directed to a form to edit the User Profile. 4. The Admin can now enter the details to edit the User details. 5. After entering all the details it can now be saved and stored.
Post-condition:	<ol style="list-style-type: none"> 1. The Profile of an User has been edited successfully.

Use Case 12	Contribution as ZIP
Objective:	The Admin or QAM will be able to download files provided by the Students for its Idea as ZIP.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to download files provided by the Students for its Idea as ZIP. 2. To download the contributed files for the Idea the Admin will have to select Idea from the list of Ideas. 3. After clicking the download option the Admin will be download the said files of the Idea.
Post-condition:	<ol style="list-style-type: none"> 1. The contributed files of an Idea have been edited successfully downloaded.

Use Case 13	View User Dashboard
Objective:	The Admin or QAM will be able View their Dashboard.
Actor:	Admin or Quality Assurance Manager
Pre-Condition:	User have to be logged into the system which is admin status
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Admin will be able to download View their dashboard. 2. The Admin can now use the System from their dashboard.
Post-condition:	<ol style="list-style-type: none"> 1. The Admin can now use the System through the Dashboard.

Use Case Diagram for Quality Assurance coordinator

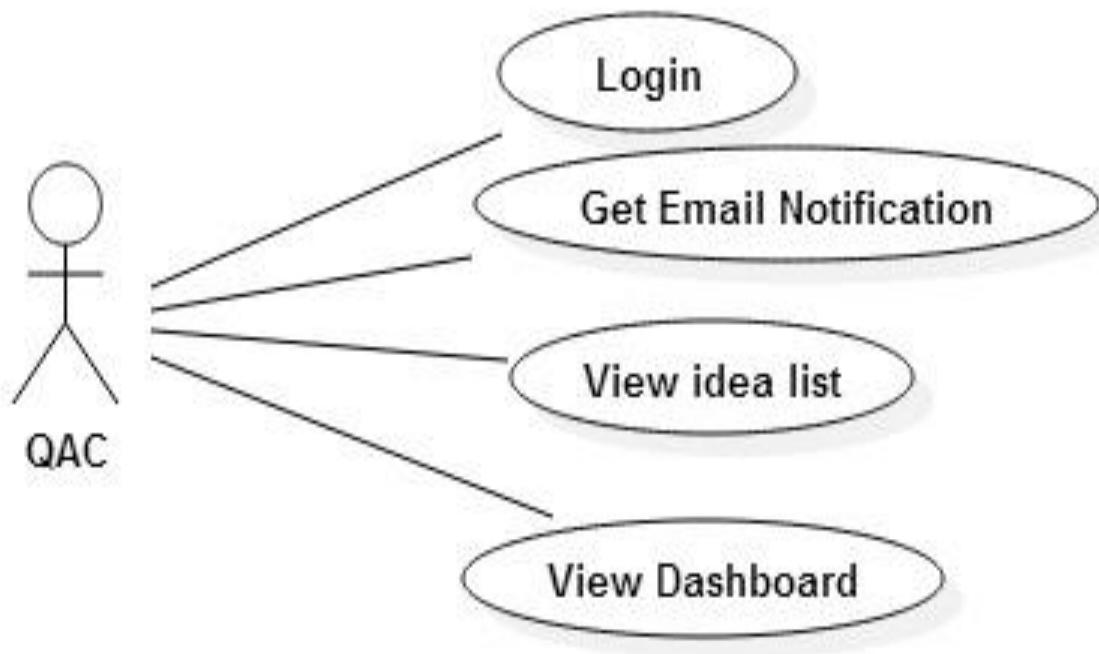


Figure 21: Use case diagram for QAC

Use Case Description for Quality Assurance coordinator

Use Case 1	Login
Objective:	To log into the system
Actor:	Quality Assurance Coordinator
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none">1. QAC will provide email and password in login page.2. The System will validate the email and password.3. If incorrect login information the system will ask for correct information.
Post-condition:	<ol style="list-style-type: none">1. If correct login information then the user will be directed to the user dashboard page.2. The QAC can now access the system.

Use Case 2	Get Email Notification
Objective:	To get email after an idea has been submitted by a Student from their department.
Actor:	Quality Assurance Coordinator
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	1. QAC will get email after an Idea has been submitted by a student from their own department.
Post-condition:	1. Will get an Email after submission of an Idea by a Student.

Use Case 3	View Idea
Objective:	QAC will be able to View Ideas which have been submitted by Students.
Actor:	Quality Assurance Coordinator
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. QAC will be able to view Ideas which have been posted by the Students. 2. To View the Ideas the QAC will have to select the Idea, from a list of Ideas in the dashboard.
Post-condition:	<ol style="list-style-type: none"> 1. The selected Idea have been viewed successfully.

Use Case 4	View Dashboard
Objective:	QAC will be able View their Dashboard.
Actor:	Quality Assurance Coordinator
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. QAC will be able to download View their dashboard. 2. The QAC can now use the System from their dashboard.
Post-condition:	<ol style="list-style-type: none"> 1. The QAC can now use the System through the Dashboard.

Use Case Diagram for Staff:

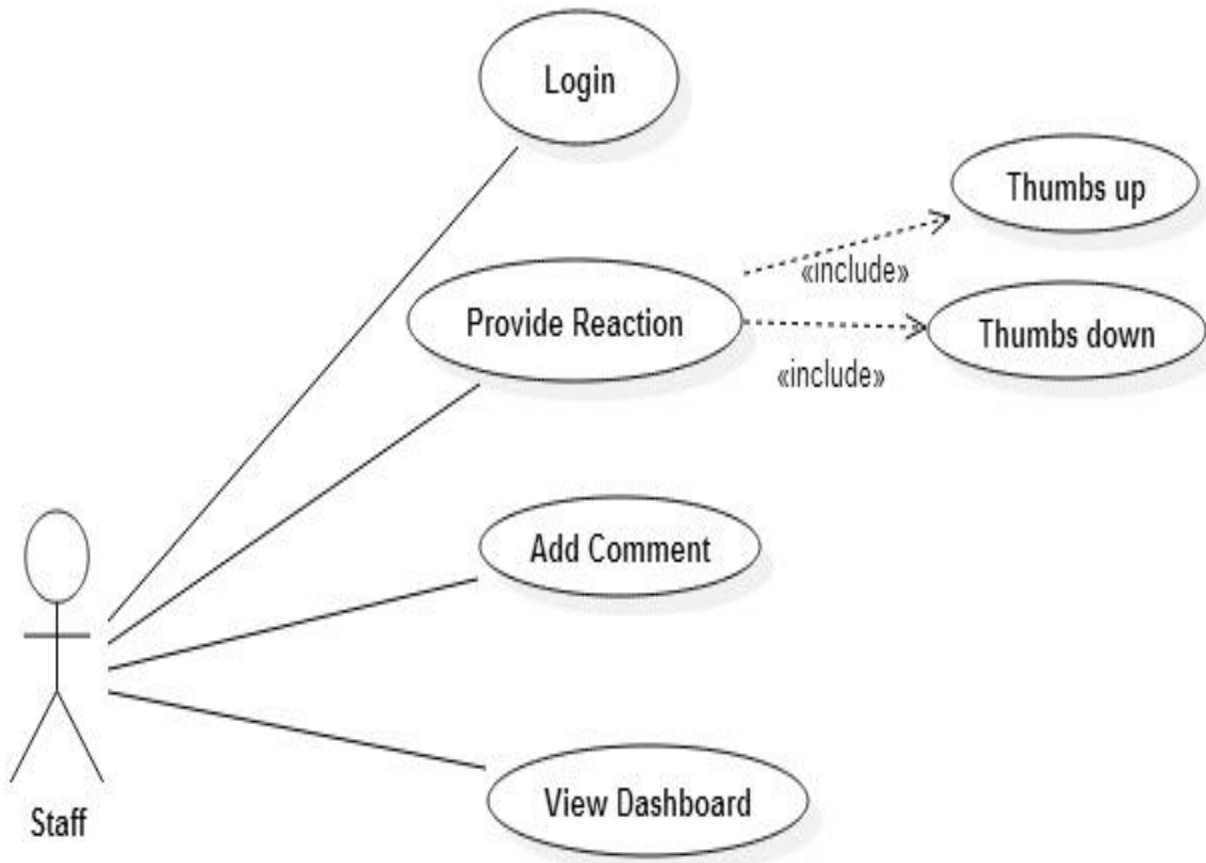


Figure 22: Use case diagram for Staff

Use Case Description for Staff:

Use Case 1	Login
Objective:	To log into the system
Actor:	Staff
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none">1. Staff will provide email and password in login page.2. The System will validate the email and password.3. If incorrect login information the system will ask for correct information.
Post-condition:	<ol style="list-style-type: none">1. If correct login information then the user will be directed to the user dashboard page.2. The Staff can now access the system.

Use Case 2	Provide Reaction
Objective:	To provide a reaction to an Idea
Actor:	Staff
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Staff will be able to provide a reaction to the Idea posted under a Topic. 2. The Staff can use Thumbs up or Thumbs down as reaction.
Post-condition:	<ol style="list-style-type: none"> 1. The Staff has reacted to an idea.

Use Case 3	Thumbs UP
Objective:	To provide a reaction to an Idea
Actor:	Staff
Pre-Condition:	Will have to have user account.
Dependent use case:	Provide Reaction
Primary scenario:	<ol style="list-style-type: none"> Staff will be able to provide a reaction to the Idea posted under a Topic as either Thumbs up or Thumbs down.
Post-condition:	<ol style="list-style-type: none"> The Staff has reacted to an idea with Thumbs UP.

Use Case 4	Thumbs Down
Objective:	To provide a reaction to an Idea
Actor:	Staff
Pre-Condition:	Will have to have user account.
Dependent use case:	Provide Reaction
Primary scenario:	<ol style="list-style-type: none"> Staff will be able to provide a reaction to the Idea posted under a Topic as either Thumbs up or Thumbs down.
Post-condition:	<ol style="list-style-type: none"> The Staff has reacted to an idea with Thumbs down.

Use Case 5	Add Comment
Objective:	To log into the system
Actor:	Staff
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Staff will be able to comment on an Idea. 2. First an Idea will have to be selected from the list of Ideas. 3. The Staff can now comment on an Idea in the text box under the Idea,
Post-condition:	<ol style="list-style-type: none"> 1. A comment has been successfully commented on an Idea.

Use Case 6	View Dashboard
Objective:	Staff will be able View their Dashboard.
Actor:	Staff
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Staff will be able to download View their dashboard. 2. The Staff can now use the System from their dashboard.
Post-condition:	<ol style="list-style-type: none"> 1. The Staff can now use the System through the Dashboard.

Use Case Diagram for Student:

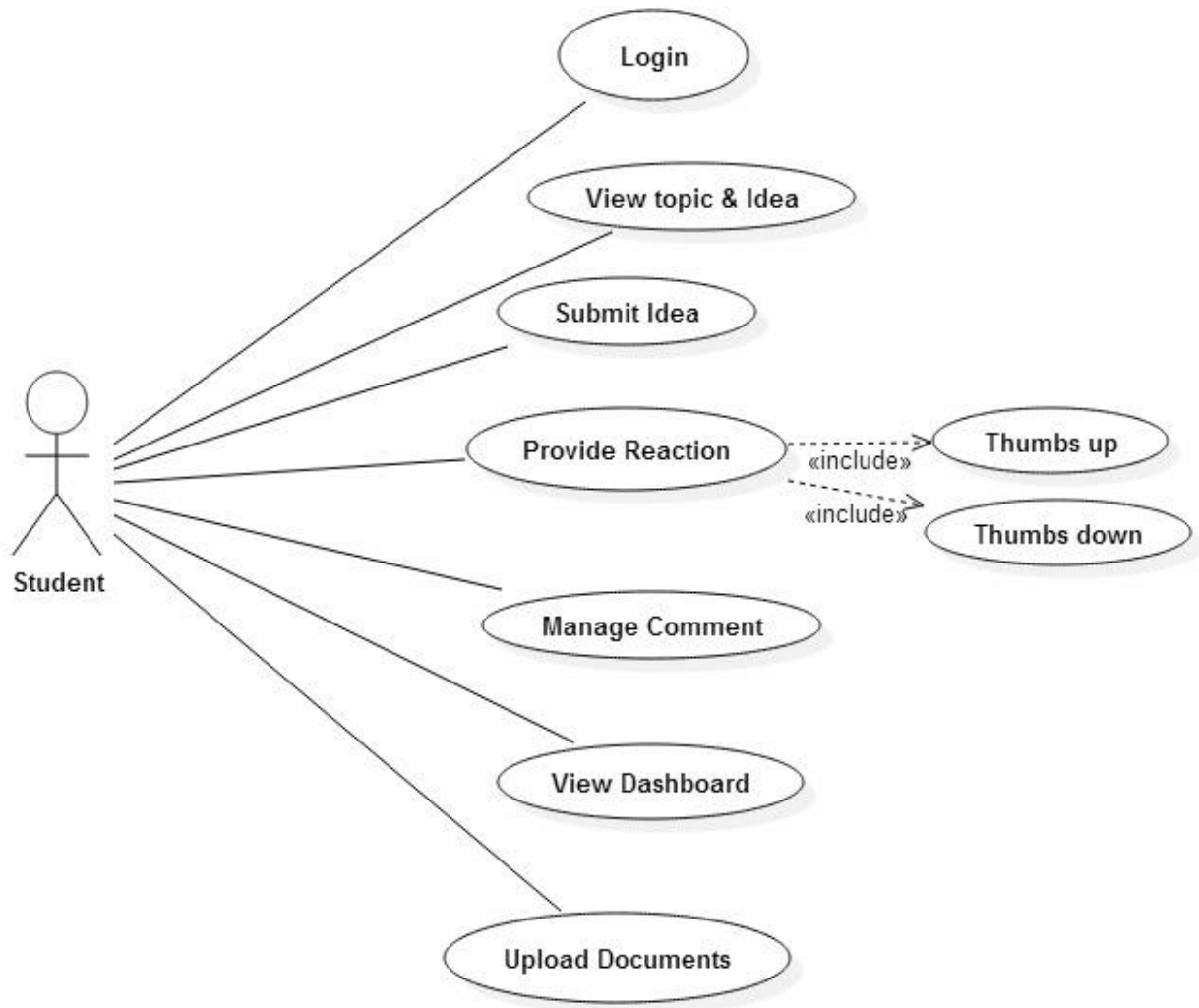


Figure 23: Use case diagram for student

Use Case Description for Student:

Use Case 1	Login
Objective:	To log into the system
Actor:	Student
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none">1. Student will provide email and password in login page.2. The System will validate the email and password.3. If incorrect login information the system will ask for correct information.
Post-condition:	<ol style="list-style-type: none">1. If correct login information then the user will be directed to the user dashboard page.2. The Student can now access the system.

Use Case 2	View Topic and Idea
Objective:	Students will be able to View topic and Ideas which have been submitted by Students.
Actor:	Students
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Students will be able to view topic and Ideas which have been posted by the Students. 2. To View the topic and Ideas the Students will have to select the topic and Idea, from a list of topic and Ideas in the dashboard.
Post-condition:	<ol style="list-style-type: none"> 1. The selected topic and Idea have been viewed successfully.

Use Case 3	Submit Idea
Objective:	Students will be able to Submit Ideas under a selected Topic.
Actor:	Students
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Students will be able to submit an idea under a selected Topic. 2. To submit an idea the Student will first have to select an Idea. 3. Under the selected Idea the Student will now be able to submit an Idea. 4. To submit an Idea the system will direct to a Idea Submission Form. 5. The Student will now be able to fill up all the details for the Idea in the form. 6. The filled up form is now save and stored. 7. The submitted Idea is now awaiting Admin approval.
Post-condition:	<ol style="list-style-type: none"> 1. The Idea have been submitted successfully.

Use Case 4	Provide Reaction
Objective:	To provide a reaction to an Idea
Actor:	Student
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Student will be able to provide a reaction to the Idea posted under a Topic. 2. The Student can use Thumbs up or Thumbs down as reaction.
Post-condition:	<ol style="list-style-type: none"> 1. The Student has reacted to an idea.

Use Case 5	Thumbs UP
Objective:	To provide a reaction to an Idea
Actor:	Student
Pre-Condition:	Will have to have user account.
Dependent use case:	Provide Reaction
Primary scenario:	<ol style="list-style-type: none"> 1. Student will be able to provide a reaction to the Idea posted under a Topic as either Thumbs up or Thumbs down.
Post-condition:	<ol style="list-style-type: none"> 1. The Student has reacted to an idea with Thumbs UP.

Use Case 6	Thumbs Down
Objective:	To provide a reaction to an Idea
Actor:	Student
Pre-Condition:	Will have to have user account.
Dependent use case:	Provide Reaction
Primary scenario:	<ol style="list-style-type: none"> 1. Student will be able to provide a reaction to the Idea posted under a Topic as either Thumbs up or Thumbs down.
Post-condition:	<ol style="list-style-type: none"> 1. The Student has reacted to an idea with Thumbs down.

Use Case 7	Add Comment
Objective:	To log into the system
Actor:	Student
Pre-Condition:	Will have to have user account.
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Student will be able to comment on an Idea. 2. First an Idea will have to be selected from the list of Ideas. 3. The Student can now comment on an Idea in the text box under the Idea,
Post-condition:	<ol style="list-style-type: none"> 1. A comment has been successfully commented on an Idea.

Use Case 8	View Dashboard
Objective:	Student will be able View their Dashboard.
Actor:	Student
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Student will be able to download View their dashboard. 2. The Student can now use the System from their dashboard.
Post-condition:	<ol style="list-style-type: none"> 1. The Student can now use the System through the Dashboard.

Use Case 9	Upload Documents
Objective:	Students will be able to upload documents under a selected Idea.
Actor:	Students
Pre-Condition:	User have to be logged into the system
Dependent use case:	None
Primary scenario:	<ol style="list-style-type: none"> 1. Students will be able to submit a document under a selected Idea. 2. To submit a document the Student will first have to select an Idea. 3. Under the selected Idea the Student will now be able to submit a document. 4. To submit a document the system will direct to a Submission Form. 5. The Student will now be able to fill up all the details for the Submission form. 6. The filled up form is now save and stored.
Post-condition:	<ol style="list-style-type: none"> 1. The document has been submitted successfully.

Activity Diagram:

Activity Diagram of add topic:

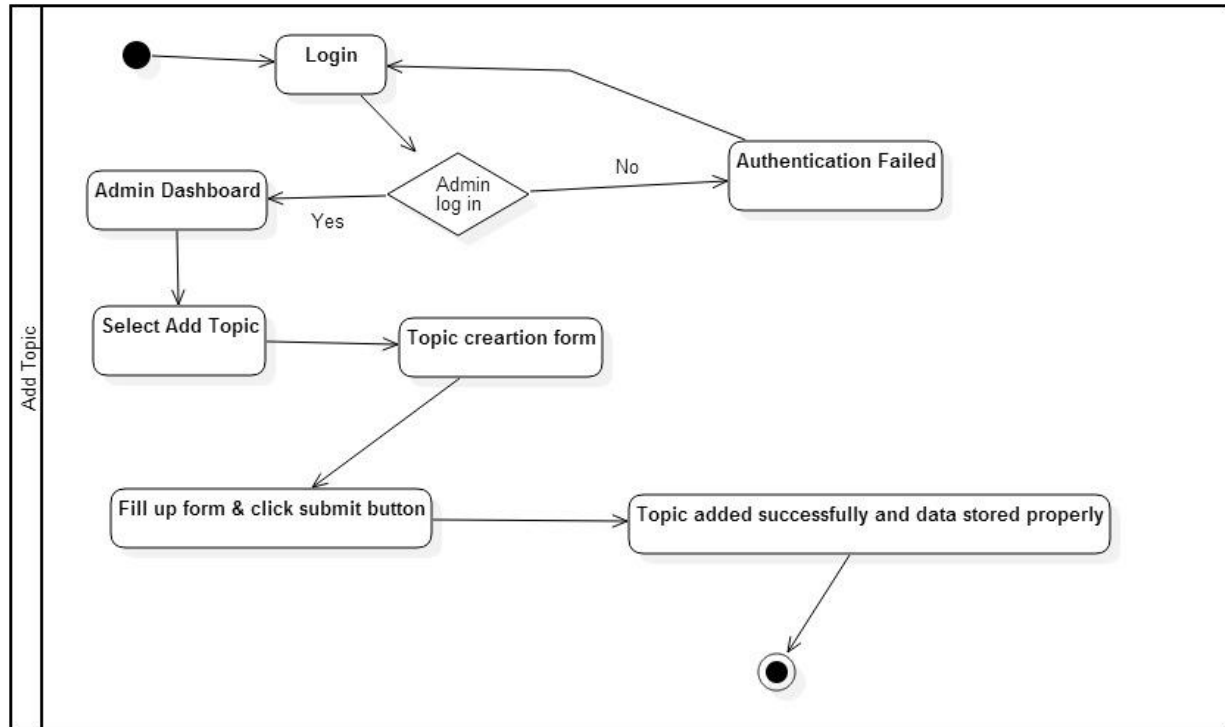


Figure 24: Activity diagram of add topic

Activity Diagram for Add Comment:

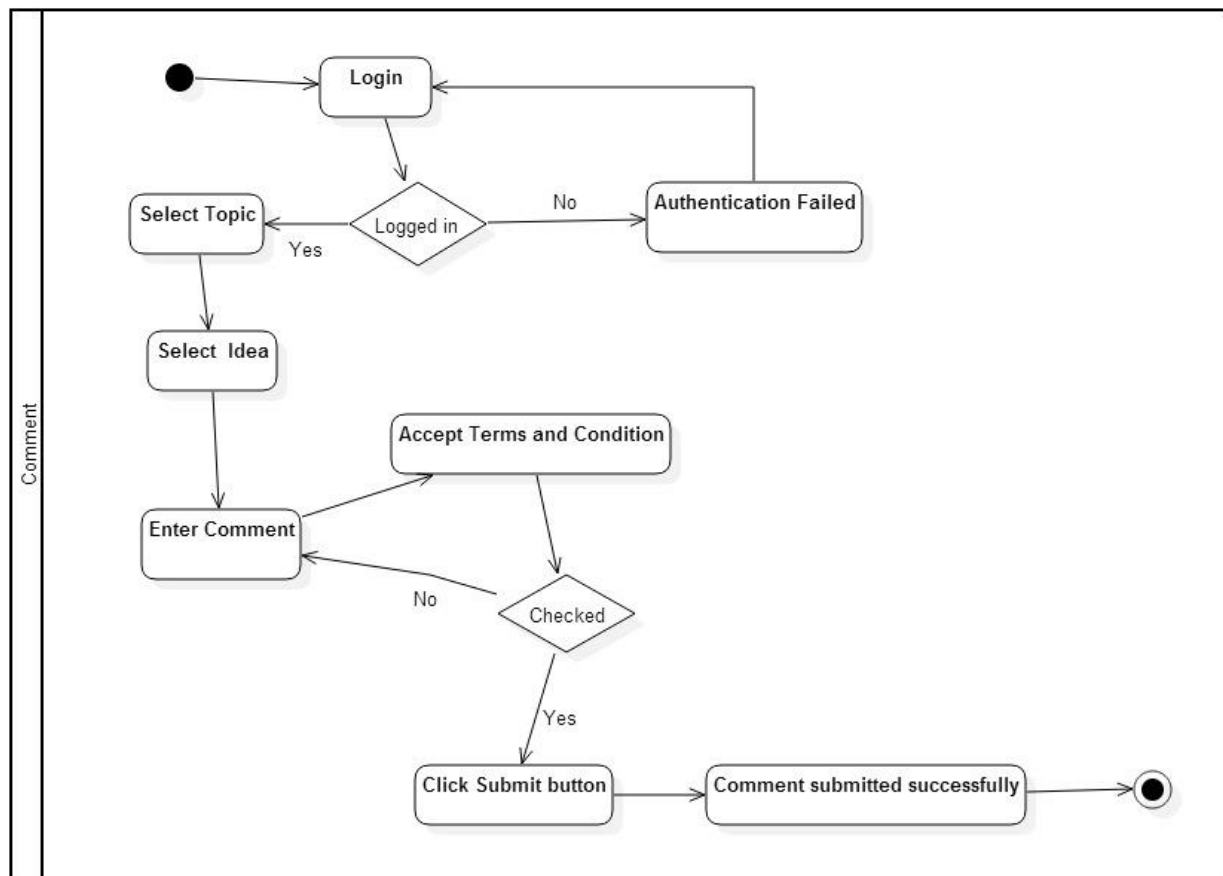


Figure 25: Activity diagram for add comment

[For More Sequence Diagram visit repository link:

https://github.com/mhmohon/the_ultimate/tree/master/System%20Analyst/Activity%20Diagram]

Sequence Diagram:

Sequence Diagram for Log in:

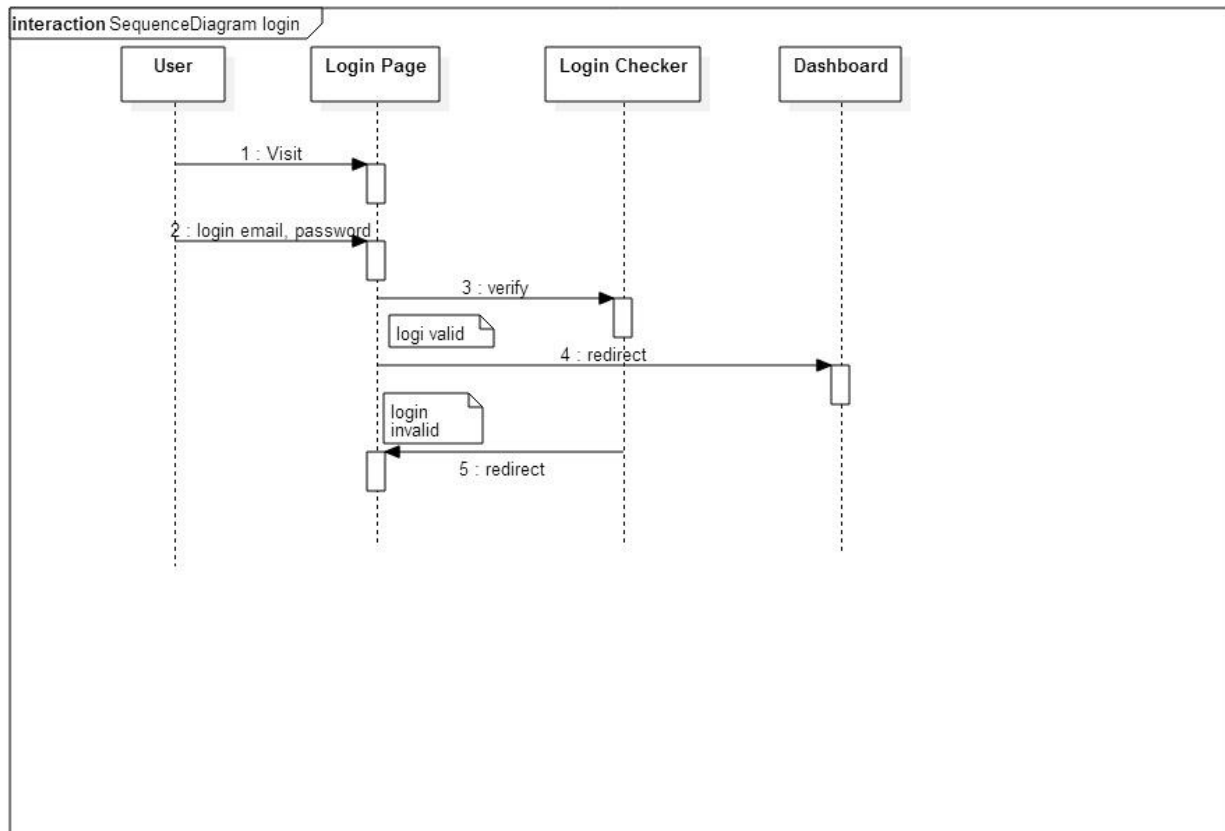


Figure 26: Sequence Diagram for log in

Sequence Diagram for Comment:

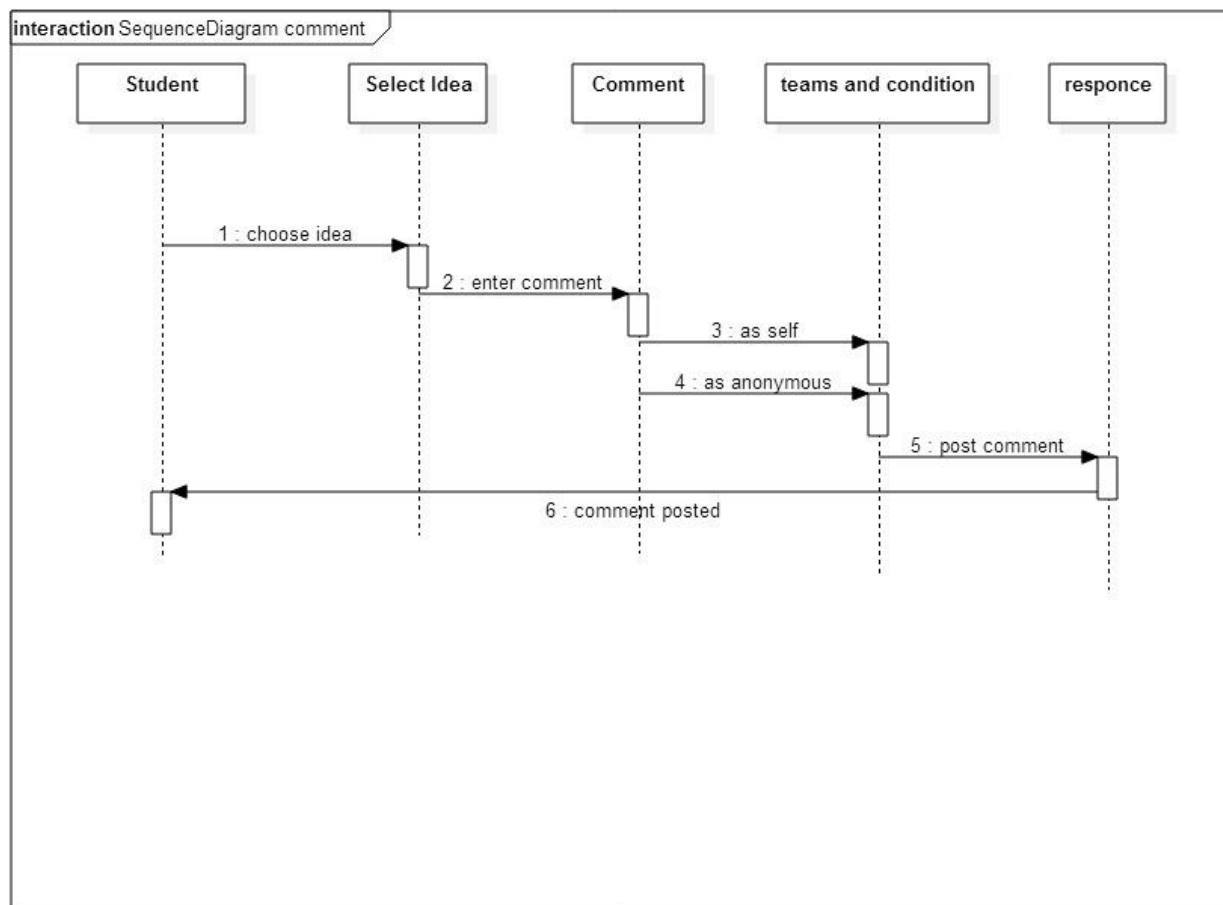


Figure 27: Sequence diagram for comment

[For More Sequence Diagram visit repository link:

https://github.com/mhmohon/the_ultimate/tree/master/System%20Analyst/Sequence%20Diagram]

Class Diagram:

Class Diagram of UOG Forum System:

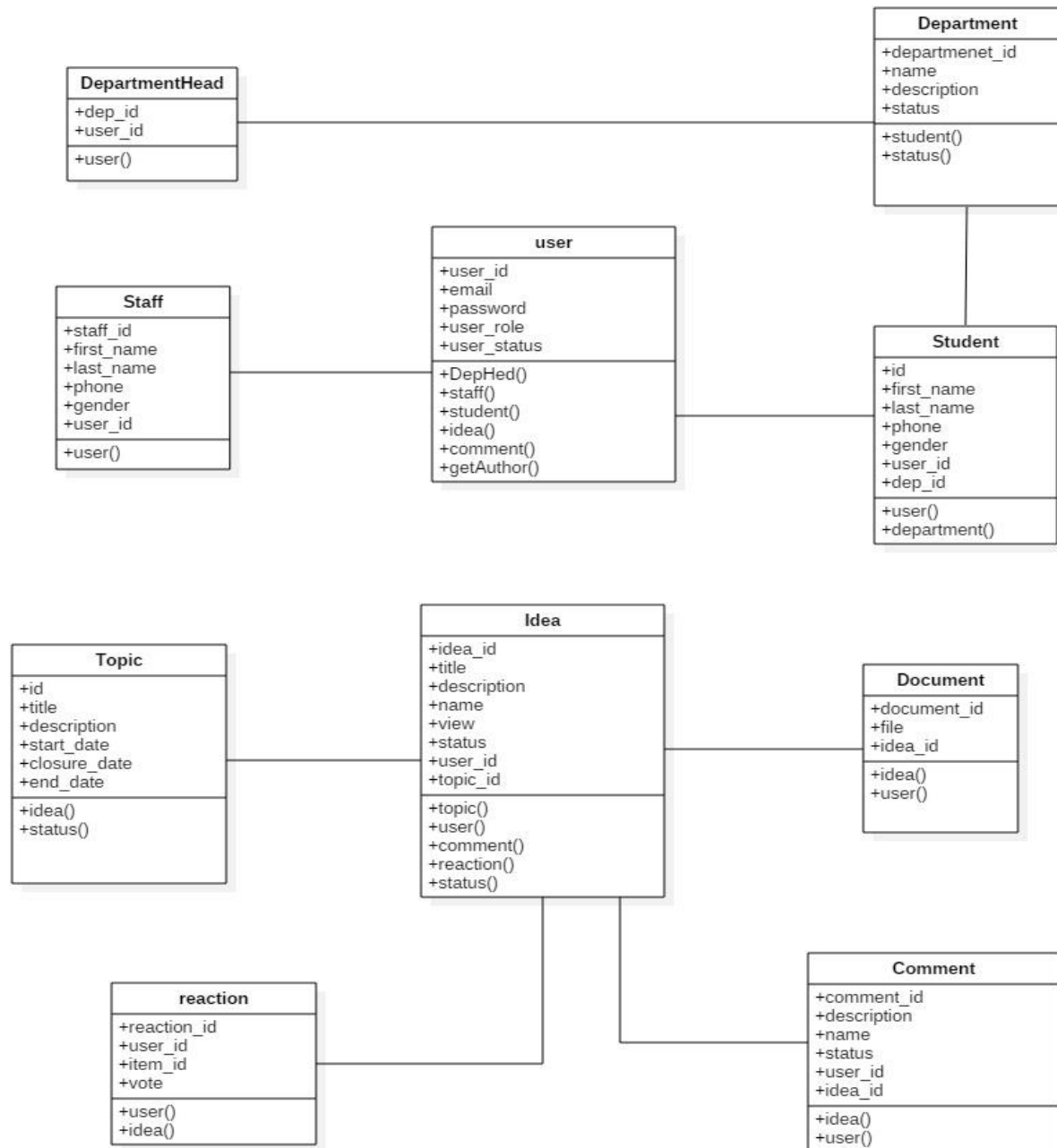


Figure 28: Class diagram for UOG Forum

Appendix B:

Scrum Artifacts:

User Story:

User story of the required system are given below.

User Story	User Login
As a/an	Authorized user
I Want to	Log in to the system
So That	I could be able to survey to the system.
I N V E S T	
Acceptance Criteria	
<ul style="list-style-type: none">• Must insert valid ID and Password.• Showing own dashboard after login to the system.	

User Story	Idea submission
As a/an	Student
I Want to	Submit one or more ideas against given topic
So That	I could share my ideas with everyone
I N V E S T	
Acceptance Criteria	
<ul style="list-style-type: none"> • Must agree terms and condition. • Idea length must be in limited words. • Upload document for related ideas if have any. • Idea can be posted anonymously. • One Student can provide reaction in one idea only for once r 	

[More User Story will be found in Repository

https://github.com/mhmohon/the_ultimate/tree/master/Scrum%20Artifact]

Product Backlog:

Product	Story Name	Size	Priority	Status
Backlog ID				
01	As an authorized user I want to log in so that I could be able to survey the system.	7	High	Completed
02	As a student submit one or more ideas against given topic so that I could share my ideas with everyone	5	High	Completed
03	As student I want to see all the submitted ideas so that I could be able to know everyone's thought.	4	High	Completed
04	As a student I want to see, comment or give reaction on ideas so that I could share my opinion against the posted ideas.	7	High	Completed
05	As a staff I want to See, comment or give reaction on ideas so that my opinion could	3	Medium	Completed

	be known by others.			
06	As a user I want to submit ideas or leave comment anonymously so that my identity would not be seen by others.	5	Medium	Completed
07	As an administrator I want to get notification against submitted ideas so that I would be aware of the given ideas information's are accurate.	7	High	Completed
08	As a QA Coordinator I want to get notification against submitted ideas of my student so that I could be able to know how many of them are sharing their ideas.	5	High	Completed
09	As a QA Manager I want to oversee the whole process as well as downloading them so that I could be able to see the progress and reports of every processes that are happening.	4	High	Completed

10	As an Administrator I want to add topic and set deadline of the topic as well as deleting those topic so that New ideas could be shared under the given topic.	5	Medium	Completed
11	As an Admin I want to maintain the system so that all things inside the system like date, personal information etc. become okay and secure.	9	Medium	Completed
12	As an administrator I want to oversee all the generated reports I might have a clear concept about everything like department wise contributor, percentages of contributors etc.	7	Medium	Completed

Burn Down Chart:

Burn down chart based on the work flow:

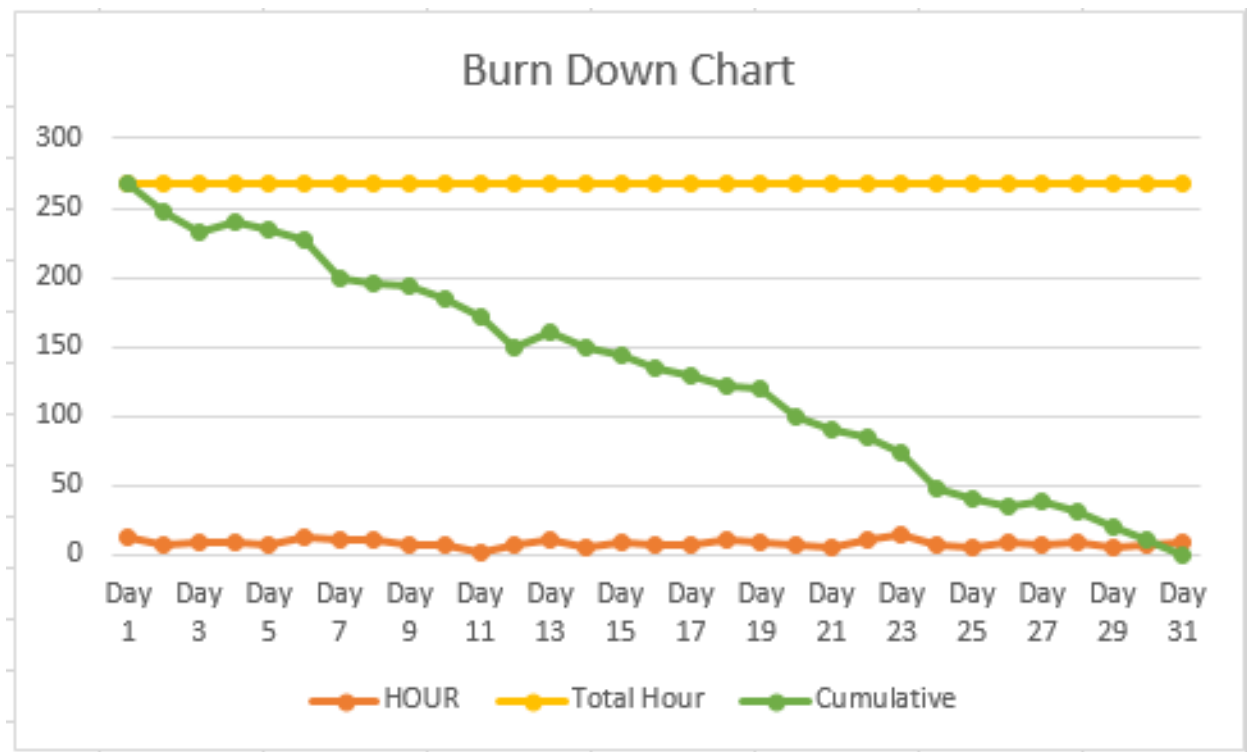


Figure 29: Burn down Chart

[More Scrum Artifacts will be found in Repository:

https://github.com/mhmohon/the_ultimate/tree/master/Scrum%20Artifact]