

MySpace – A socio-academic site for Students

SOFTWARE REQUIREMENTS & SPECIFICATION DOCUMENT

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Version 1.0



विश्वजीवनामृतं ज्ञानम्

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1 Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of “Myspace – A socio-academic site for Students”. It will explain the purpose and features of the System, the interfaces of the System, what the System will do, the constraints under which it must operate and how the System will react to external stimuli. This document is intended for both the stakeholders – anyone who is interested or may get affected by the outcome of the project and the developers of this project.

1.2 Scope of the Project

MySpace is a socio-academic portal for the Students of ABV-IIITM Gwalior where Students can not only get organized with their class schedule, get informed with the upcoming college events organised by various clubs, access helpful resources like books, notes, previous-year papers, etc., but also ask their academic, technical or career related doubts and get clarified by their seniors. Students can also read and post technical blogs and rate them.

MySpace attempts to make the life of Students simpler by organizing all of the things they need in one place.

1.3 Glossary

Term	Definition
Student	An undergraduate Student of ABV-IIITM, Gwalior studying in BCS, IMT or IMG batch. For simplicity, he pronoun is used in this document instead of he/she.
Stakeholder	Any person with an interest in the project who is not a developer.
Software Requirements Specification	A document that completely describes all of the functions of a proposed System and the constraints under which it must operate. For example, this document.
Website Managing Team	A team of developers who will manage the website and the contents of the website in the maintenance phase of System life-cycle.
Database	Collection of all the information monitored by this System.
Text-box	A rectangular area where Student can input strings.
Content	Includes posts like questions, answers and articles by the Students.
Browse	Selecting subsections, subsubsection and so on by subsequent drop down menus.
Institute e-mail	E-mail account provided to the students by ABV-IIITM, Gwalior Institute.

1.4 References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications*. IEEE Computer Society, 1998.

1.5 Overview of Document

The section 2, Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the section 3.

The section 3, Requirements Specification section, of this document is written primarily for the developers and describes the details of the functionality of the product in technical terms.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2 Overall Description

2.1 System Environment

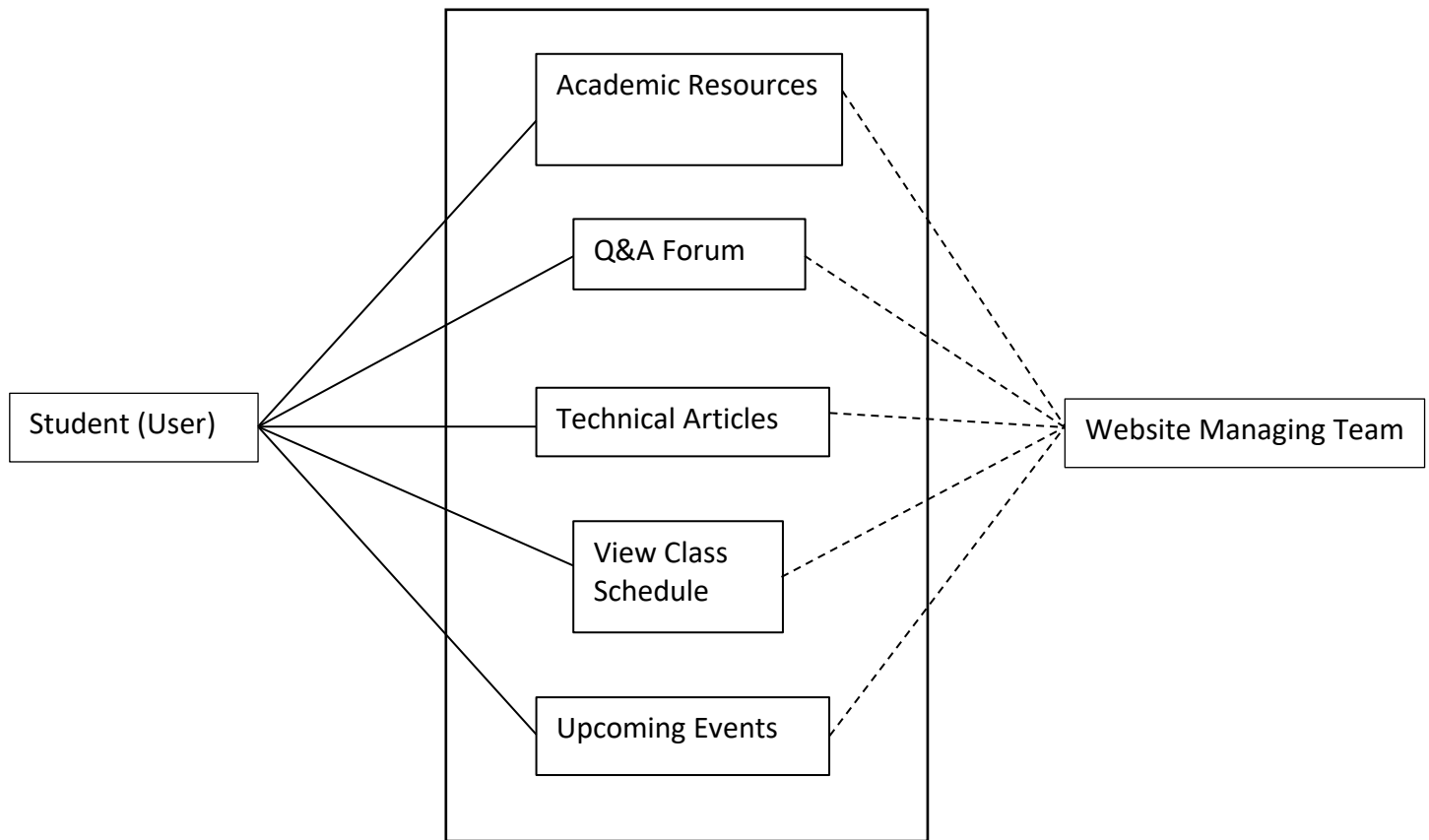


Fig 1: System Environment

MySpace System has two active actors viz. Student (user) and Website Managing Team. The Student accesses the MySpace website through the Internet. The website managing team undertakes the responsibility of revising the webpages i.e., uploading new academic resources, reviewing, and possibly removing reported contents which may include reported articles, reported questions, reported answers, revising the class schedule links if needed, and updating the details of events organized by the institute's clubs. In the initial stage of maintenance phase these will be done manually in the backend i.e., no front-end will be developed and hence these tasks come under website maintenance. To distinguish between frontend access and backend access of the System solid and dashed line is used for Student and website managing team respectively.

2.2 Functional Requirements Specification

This section outlines the various use cases of Students in different sections of the website. The Student has following categories of use cases:

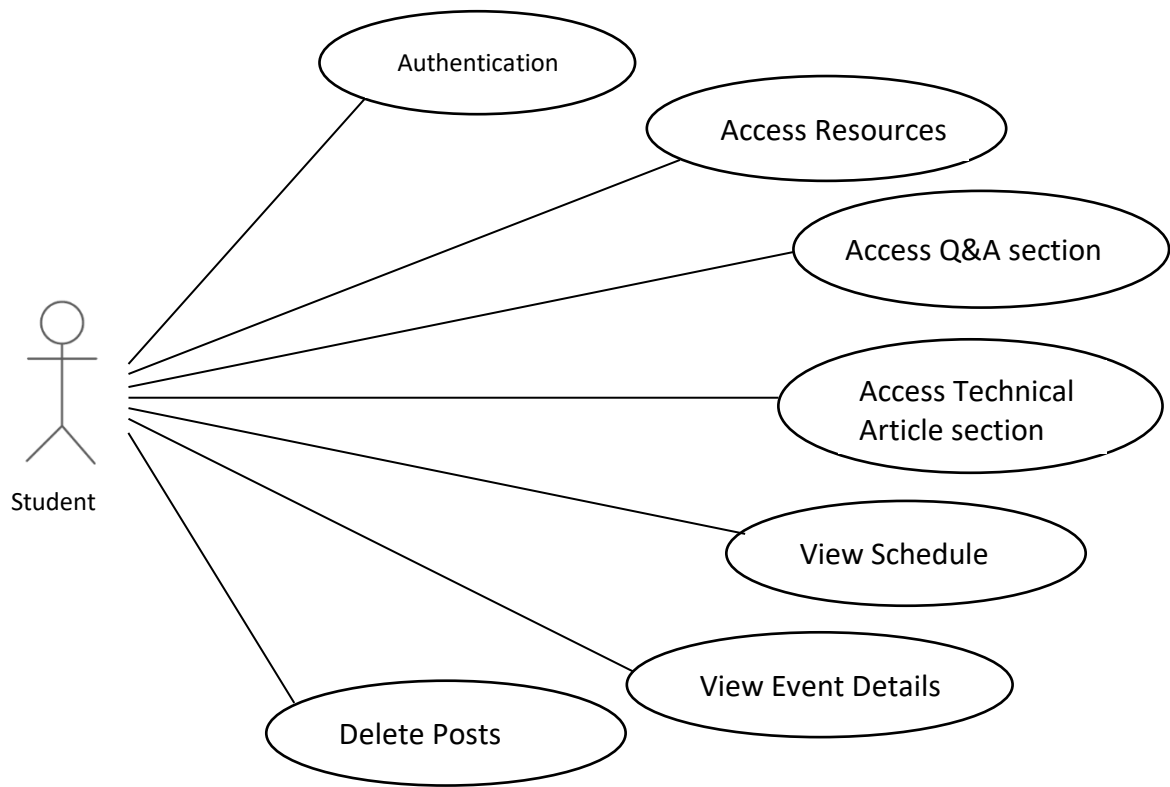


Fig 2: Student Use Case Categories

2.2.1 Student Authentication

2.2.1.1 Sign Up

Use Case: Sign Up

Diagram:



Brief Description

The Student accesses the MySpace website homepage, creates a new account using institute e-mail and activate the account using activation mail sent or creates a new account with Google Sign In.

Step-By-Step Description

Before this use case can be initiated, Student has already accessed the homepage of MySpace.

1. The Student chooses the "Sign Up" button from the homepage
2. The System displays Google Sign-In and Manual E-mail Sign Up option

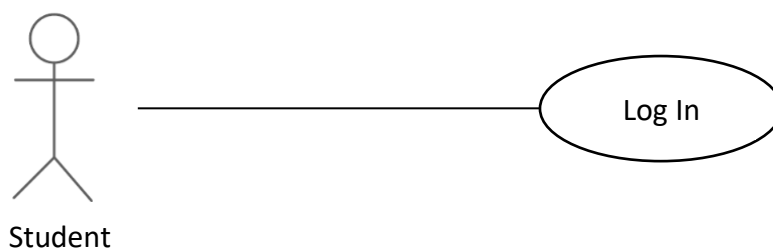
- a. Google Sign In
 - i. The Student selects Google Sign-In
 - ii. The System displays the list of Google Accounts
 - iii. The Student selects the Institute E-mail account
 - iv. The Student account is created successfully
 - v. The student is signed up and is signed in to the dashboard with the Google account
- b. Manual E-mail Sign Up
 - i. The Student enters the institute E-mail Id. Domain names other than iiitm.ac.in are not accepted.
 - ii. The User enters following details
 1. E-mail Id
 2. First Name
 3. Last Name
 4. Batch
 5. Year of Admission
 6. New Password
 - iii. The Student confirms the password.
 - iv. The System sends an activation link to entered e-mail Id.
 - v. The Student activates the account with activation link.
 - vi. The System displays the account activation successful message.
 - vii. The System reloads the homepage for Student to Log In.

Xref: Section 3.1.1, Sign Up

2.2.1.2 Log In

Use Case: Log In

Diagram:



Brief Description

The Student accesses the MySpace website homepage, selects the Log In button. He either selects the Google Sign In or manually enters the registered e-mail and password to log into the dashboard.

Step-By-Step Description

1. The Student chooses the Log In option
2. The System displays the two options – Google Sign-In or E-mail sign In
 - a. Google Sign In
 - i. The Student selects Google Sign In

- ii. The System Displays the list of Google Accounts
 - iii. The Student Selects the Institute E-mail account
 - iv. The Student is logged into the dashboard
- b. E-mail Log In
 - i. The Student enters the registered e-mail id and password
 - ii. The System matches the entered data with the database
 - iii. If an entry matches with entered data, the user is logged in
 - iv. If any entry does not match, then Student is displayed “Invalid E-mail or password” message.

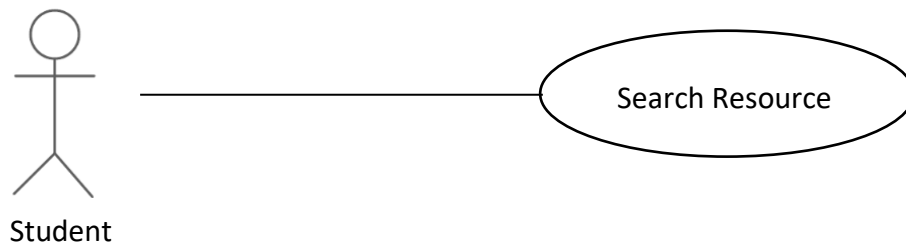
Xref: Section 3.1.2, Log In

2.2.2 Accessing Academic Resources

2.2.2.1 Search Resource

Use Case: Search Resource

Diagram:



Brief Description

The Student has accessed the MySpace website and logged in. The Student searches for academic resources and downloads it to his local machine.

Step-By-Step Description

Before this use case can be initiated, the Student has already logged into the MySpace website and is in the resource section of the website.

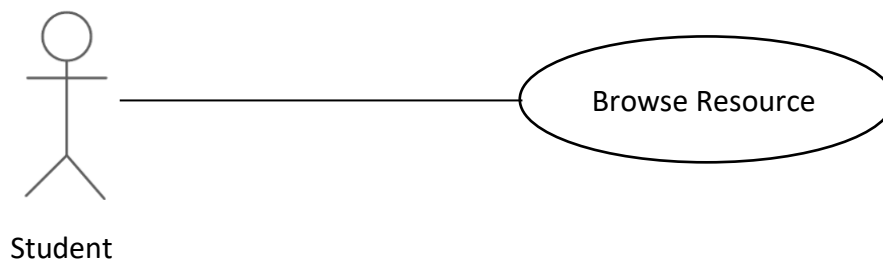
1. The Student selects the search option
2. The System prompts the user to enter the keywords
3. The Student enters the keywords
4. The System displays the details of all the books, lecture slides, notes, and previous year papers whose descriptive metadata (like title, type, description) matches the searched keywords.
5. The Student selects the resource desired.
6. The System loads the downloadable link, and the resource gets downloaded to the Student's local machine.

Xref: Section 3.1.3, Search Resource

2.2.2.2 *Browse Resource*

Use case: Browse Academic Resources

Diagram:



Brief Description

The academic resources present in the resource section of the website are organized in subsections (like semester-wise), subsubsections (like type of resource) and so on. The Student can browse through difference subsections and subsubsections, find, and download the resource.

Step-By-Step Description

The academic resources present in the resource section of the website are organized in subsections (like semester-wise), subsubsections (like type of resource) and so on. The Student has already logged into the website and is accessing the resource section of the website.

1. The Student selects the Academic Resource section from navigation bar
2. The System displays the list of batches.
3. The Student selects the desired batch
4. The System displays the list of semesters from 1 to 8 or 1 to 10
5. The Student selects the desired semester
6. The System displays the list of categories of resources
7. The Student selects the desired category of resource
8. The System displays the details of all the available resources in that category.
9. The Student selects the desired resource
10. The System loads the downloadable link, and the resource gets downloaded to the Student's local machine.

Xref: Section 3.1.4, Browse Resource

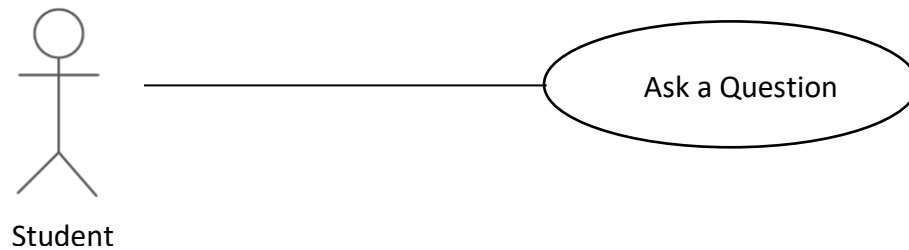
2.2.3 *Accessing Q&A section*

The Q&A section is the section of MySpace website where Students can ask and answer academic questions, technical and coding related doubts, etc.

2.2.3.1 *Ask Question*

Use Case: Ask a Question

Diagram:



Brief Description

The Students can create and post questions in the Q&A section of the MySpace website.

Step-by-step Description

The Student has already logged into the website and has selected the Q&A section from the navigation bar.

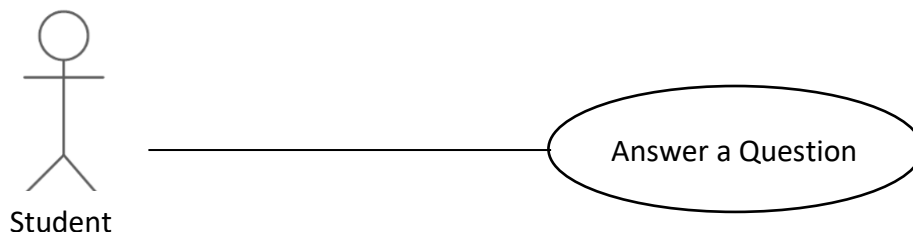
1. The Student selects *Ask a Question* button from the current webpage.
2. The System generates an inbuilt word processor.
3. The Student writes and formats the question. He can anytime select the cancel button to abandon the operation.
4. The Student after formatting the desired question selects the *Ask* button.
5. The System saves the question in the database and displays it in the list of unsolved questions.

Xref: Section 3.1.5, Ask Question

2.2.3.2 *Answer a Question*

Use Case: Answer a Question

Diagram:



Brief Description

The Students can answer a question either unsolved or already answered by selecting it in the Q&A section of the MySpace website.

Step-By-Step Description

The Student has already logged into the website and selected the Q&A section from the navigation bar.

1. The Student selects a question which is either solved or unsolved.
2. The System displays the answers available if present any. Additionally, the System displays the *Add Answer* button at the bottom of the question.
3. The Student selects the *Add Answer* button.

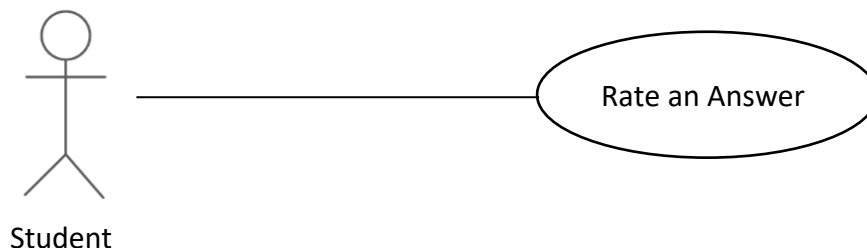
4. The System generates an inbuilt word processor.
5. The Student writes and formats the answer. He can anytime select the cancel button to abandon the operation.
6. The Student after formatting the desired answer selects the *Post* button.
7. The System saves the answer in the database and displays it in the list of answers for selected question.

Xref: Section 3.1.6, Answer a Question

2.2.3.3 *Rate an Answer*

Use Case: Rate an Answer

Diagram:



Brief Description

The Students can express their opinion for a particular answer by selecting like or dislike button. One Student can only once either like or dislike an answer.

Step-By-Step Description

The Student has already accessed the Q&A section of the MySpace website. He has selected and is viewing a particular question.

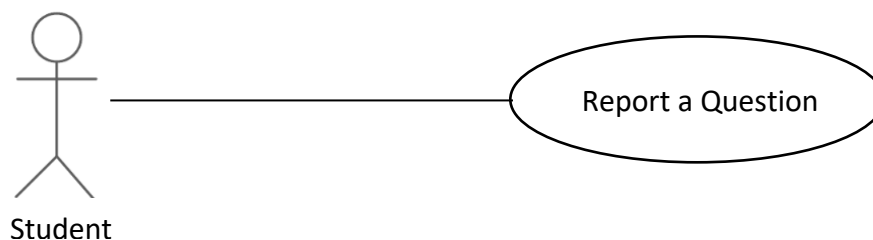
1. The System displays a list of brief versions of the answers for the selected question.
2. The Student browse through the brief answers and selects a desired answer.
3. The System expands the whole answer.
4. The Student selects the like or dislike button.
5. The System increases the corresponding count by 1 and saves the response of that Student for that specific question in the database.

Xref: Section 3.1.7, Rate an Answer

2.2.3.4 *Report a Question*

Use Case: Report a Question

Diagram:



Brief Description

The Student can report a question by selecting *Report this Question* button displayed near the question. This link will take the Student to his E-mail composer through which he can compose and send a report e-mail to the official e-mail id of website managing team containing the details of the content to be reported.

Step-By-Step Description

Before this use case can be initiated, the Student has already accessed the MySpace website. The Student is in the Q&A section and is viewing question and answers.

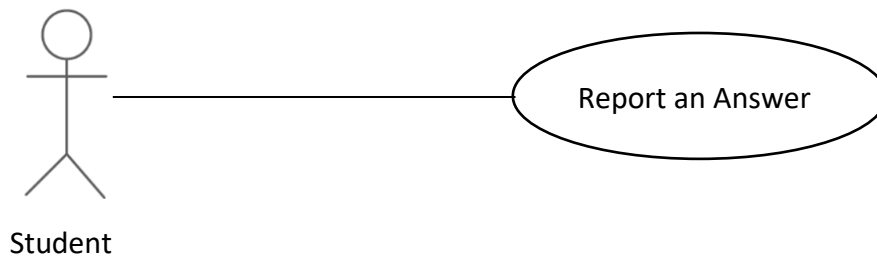
1. The Student selects *Report this Question* button.
2. The System opens the Student's e-mail account's composer. The 'To' field is already filled with the official e-mail.
3. The Student fills the subject and the body of e-mail with the details of the question to be reported and sends the e-mail.
4. The website managing team receives the e-mail.
5. The reported content is reviewed by the team and removed if required.

Xref: Section 3.1.8, Report a Question

2.2.3.5 *Report an Answer*

Use Case: Report an Answer

Diagram:



Brief Description

The Student can report a question by selecting *Report this Answer* button displayed near the answer. This link will take the Student to his E-mail composer through which he can compose and send a report e-mail to the official e-mail id containing the details of the answer to be reported.

Step-By-Step Description

Before this use case can be initiated, the Student has already accessed the MySpace website. The Student is in the Q&A section and is viewing solved questions and their corresponding answers.

1. The Student selects *Report this Answer* button
2. The System opens the Student's e-mail account's composer. The 'To' field is already filled with the official e-mail.

3. The Student fills the subject and the body of e-mail with the details of the answer to be reported and reason of reporting and sends the e-mail.
4. The website managing team receives the e-mail.
5. The reported answer is reviewed by the team and removed if required.

Xref: Section 3.1.9, Report an Answer

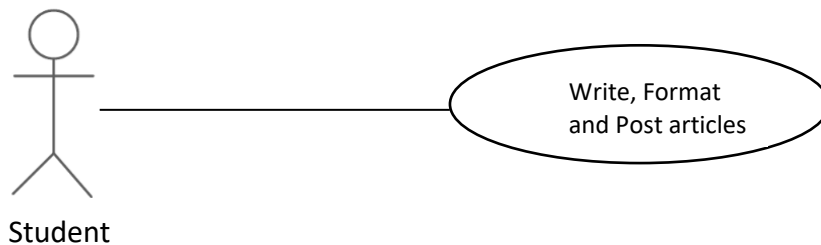
2.2.4 Accessing Technical Article section

The Technical Article section is the section of MySpace website where Students can post articles related to their technical interests. Other Students can read and rate the articles using like or dislike button.

2.2.4.1 Write, Format and Post articles

Use case: Write, Format and Post Articles

Diagram:



Brief Description

The Student can write, edit the article using inbuilt word processing tools and post the articles on the *Technical Article* section of MySpace website.

Step-By-Step Description

Before this use case can be initiated, the Student has already logged into the MySpace website and is present in the *Technical Article* section.

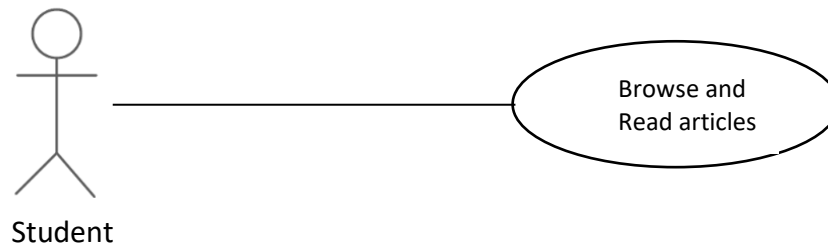
1. The Student selects the *Write an Article* button from the current webpage.
2. The System generates an inbuilt word processor with *Title* and *Body* text-boxes.
3. The Student writes and formats the *Title* and *Body*. He can anytime select the cancel button to abandon the operation.
4. The Student after writing and formatting the article as desired selects the *Post* button.
5. The System saves the posted article in the database and renders it in the list of articles and in the Student dashboard as the article posted by him.

Xref: Section 3.1.10, Write, Format and Post articles

2.2.4.2 Browse and Read articles

Use case: Browse and Read articles

Diagram:



Brief Description

The Student can browse and read articles after logging into the MySpace website in the *Technical Article* section of the website.

Step-By-Step Description

Before this use case can be initiated, the Student has already been logged In the MySpace website and is present in the *Technical Article* section webpage containing the available articles.

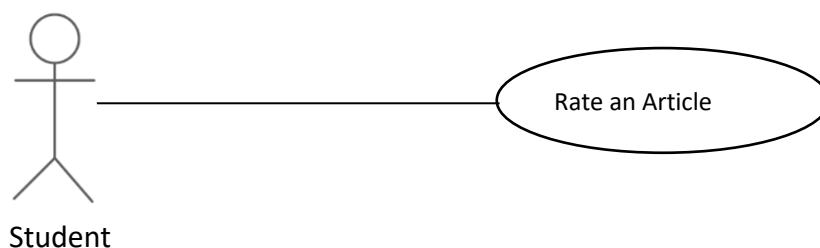
1. The Student chooses the *Technical Article* section from his dashboard
2. The System displays a list of article abstracts arranged on the basis of ratings received.
3. The Student selects a desired article abstract.
4. The System loads the selected article in the next page with all the relevant metadata useful to the reader like author, word count, date of post, views, etc.
5. The Student reads the article.

Xref: Section 3.1.11, Browse and Read articles

2.2.4.3 *Rate an article*

Use case: Rate an article

Diagram:



Brief Description

The Students can express their opinion on a specific article by selecting like or dislike button. One Student can only once either like or dislike an article.

Step-By-Step Description

The Student has already accessed the *Technical Article* section of the MySpace website. He has selected and is viewing a particular article.

1. The System displays a list of article abstracts arranged based on ratings received.
2. The Student browses through the article abstracts and selects a desired article.
3. The System expands the whole article.

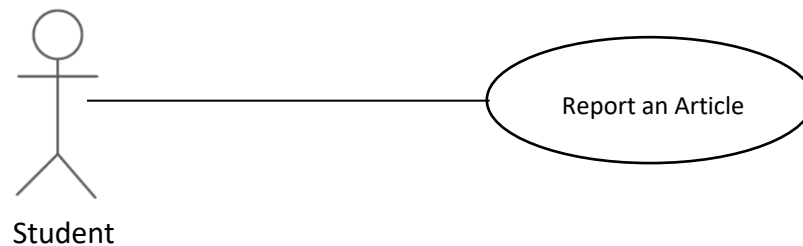
4. The Student selects the like or dislike button after reading the article as desired.
5. The System increases the corresponding count by 1 and saves the response of that Student for that specific article in the database.

Xref: Section 3.1.12, Rate an article

2.2.4.4 *Report an article*

Use case: Report an article

Diagram:



Brief Description

The Student can report an article by selecting *Report this Article button* displayed at the bottom of the article. The link will help the Student to report an article to the website managing team via e-mail.

Step-By-Step Description

Before this use case can be initiated, the Student has already accessed the MySpace website. The Student is in the *Technical Article* section and is viewing a specific article.

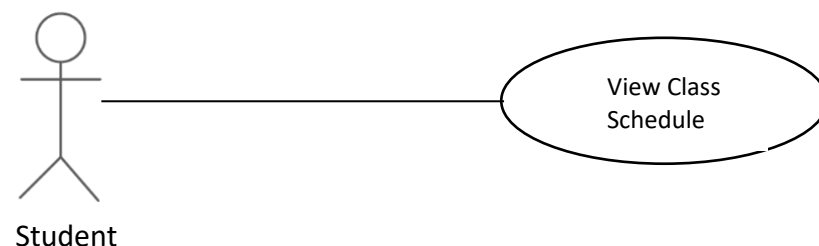
1. The Student selects *Report this Article* button.
2. The System opens the Student's e-mail account's composer. The 'To' field is already filled with the official e-mail of the website managing team.
3. The Student fills the subject and the body of e-mail with the details and reason of the article to be reported and sends the e-mail.
4. The website managing team receives the e-mail.
5. The reported content is reviewed by the team and removed if required.

Xref: Section 3.1.13, Report an article

2.2.5 *View Class Schedule*

Use case: View Class Schedule

Diagram:



Brief Description

The Students can view the details of their scheduled classes.

Step-By-Step Description

Before this use case can be initiated, the Student has already been logged In to the MySpace website.

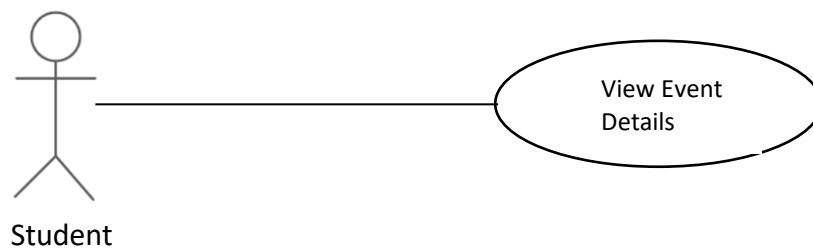
1. The Student selects *View Schedule* option from his dashboard.
2. The System provides a list of batches to choose from.
3. The Student selects his batch.
4. The System provides a list of semesters to choose from.
5. The Student selects his semester.
6. The System displays the schedule of the selected semester.

Xref: Section 3.1.14, View Class Schedule

2.2.6 View Event Details

Use case: View Event Details

Diagram:



Brief Description

The Student can view the details of upcoming Events organised by various Institute Clubs.

Step-By-Step Description

Before this use case can be initiated, the Student is already logged into the MySpace website.

1. The Student selects *Events* link from the navigation bar in his dashboard.
2. The System renders a web page for *Events* section containing a list of upcoming events with details like date, time, venue, related posters, etc.

Xref: Section 3.1.15, View Event Details

2.2.7 Delete Posts

Use Case: Delete Posts

Diagram:



Brief Description:

The Students can remove their posts viz. technical articles, asked questions, provided answers, from his dashboard.

Initial Step-By-Step Description:

Before this use case can be initiated, the Student is already logged into the website. The Student is currently in his dashboard where the System has displayed all the technical articles, question that he has asked and answers that he has provided, all presented in an organized way. The Student can select a particular content and delete it.

1. The System provides a dashboard for the Student containing his contents of various categories (articles, questions, answers) posted on the website in an organized way.
2. The Student can choose any of the content posted by him and select *delete this post* option.
3. The Student selects the option to delete the post.
4. The System generates a pop-up asking the Student to proceed with deletion.
5. The System removes the deleted post from the database and hence from the website.

Xref: Section 3.1.16, Delete Posts

2.3 User characteristics

The Students of ABV-IIITM, Gwalior are the target users. The Student is expected to be Internet literate and be able to use a search engine.

The Homepage of the MySpace website will have Sign Up and Log In links and the Student is expected to use Institute e-mail for above purposes.

The Student is expected to be able to use e-mail with attachments and has general understanding of using buttons, pull-down menus, and similar tools on the website.

2.4 Non-Functional Requirements

As the traffic on the website will not exceed a couple thousands Students, a database management System that is available free of cost in the public domain should be used.

Considering the limited traffic, free website hosting platforms like Netlify, Heroku will be used.

Since MySpace is a website supported for modern web browsers, no changes needs to be made specifically for the operating system compatibility as all three windows, Linux and MacOS supports modern web browsers.

3 Requirement Specification

3.1 Functional Requirements

3.1.1 Sign Up

Use Case Name	Sign Up
Xref	Section 2.2.1.1, Sign Up
Precondition	The Student is on the Homepage of the MySpace website
Trigger	The Student selects Sing Up button in the Homepage
Basic Path	<ol style="list-style-type: none">1. The Student choses the Sign-Up button in the Homepage.2. The System displays Google Sign-In and Manual E-mail Sign Up option.3. The Student selects Google Sign-In.4. The System Displays the list of Google Accounts.5. The Student Selects the Institute E-mail account.6. The Student account is created successfully.7. The Student is logged in to the website with the above google account.
Alternative Paths	<p>In the step 2, the Student can also choose to create account manually using Institute e-mail.</p> <ol style="list-style-type: none">1. The Student enters the institute e-mail Id. Domain names other than iiitm.ac.in are not accepted.2. The Student enters following details to create account<ul style="list-style-type: none">• E-mail Id• First name• Last name• Batch• Year of Admission• New Password3. The Student confirms by re-entering the password.4. The System sends an activation link to entered e-mail id.5. The Student activates the account with the activation link.6. The System displays the account activation successful message.7. The System reloads the Homepage for Student to Log In.
Postcondition	The Student account is created using either Institute Google account or with iiitm.ac.in domain e-mail id. The System reloads the Homepage for Student to Log In.
Exception Paths	The Student may abandon the Sign-Up process at any time.
Other	The Student is restricted to only create account using Institute e-mail or Institute provided Google account.

3.1.2 Log In

Use Case Name	Log In
Xref	Section 2.2.1.2, Log In
Precondition	The Student is on the Homepage of the MySpace website
Trigger	The Student selects Log In button on the Homepage
Basic Path	<ol style="list-style-type: none">1. The Student chooses Log In button on the Homepage.2. The System displays Google Sign-In and E-mail sign-In option.

	<ol style="list-style-type: none"> The Student selects Google Sign-In. The System displays a list of Google Accounts. The Student selects the Institute E-mail account. The Student is logged in to the dashboard with above account.
Alternative Paths	<p>In the step 2, the Student can also choose to login with Institute e-mail.</p> <ol style="list-style-type: none"> The Student enters the registered e-mail id and password. The System matches the entered data with the database. If entry matches, the user is logged in, otherwise If any entry does not match, then System displays “Invalid e-mail or password” message to the Student.
Postcondition	The Student is logged in to the website and a dashboard appears to the Student.
Exception Paths	If the Student has not created an account or doesn't have access to institute e-mail, then this use case is abandoned. In addition, the Student may abandon the operation at any time.
Other	None

3.1.3 Search Resource

Use Case Name	Search Resource
Xref	Section 2.2.2.1, Search Resource
Precondition	The Student is logged in to the website and is present at his dashboard
Trigger	The Student selects the Resource section and clicks on the search bar
Basic Path	<ol style="list-style-type: none"> The Student selects the search option. The System prompts the user to enter the keywords. The Student enters the keywords. The System displays the details of all the books, lecture slides, notes, and previous year papers whose descriptive metadata (like title, type, description) matches the searched keywords. The Student selects the resource desired. The System loads the downloadable link, and the resource gets downloaded to the Student's local machine.
Alternative Paths	Instead of searching the resources through the search bar, Student can also browse for the resource and download it.
Postcondition	The selected resource is downloaded to the Student's local machine
Exception Paths	The Student may abandon the search at any time.
Other	None

3.1.4 Browse Resource

Use Case Name	Browse Resource
Xref	Section 2.2.2.2, Browse Resource
Precondition	The Student is logged in and is accessing the academic resource section
Trigger	The user starts selecting subsections and then subsubsections in the academic resource section.
Basic Path	<ol style="list-style-type: none"> The Student selects the Academic Resource section from the navigation bar in the Student dashboard. The System displays the list of batches.

	<ol style="list-style-type: none"> The Student selects the desired batch. The System displays the list of semesters from 1 to 8 or 1 to 10. The Student selects the desired semester. The System displays the list of categories of resources. The Student selects the desired category of resource. The System displays the details of all the available resources in that category. The Student selects the desired resource. The System loads the downloadable link, and the resource gets downloaded to the Student's local machine.
Alternative Paths	Instead of browsing the academic resource section for resources, the Student can simply utilize the resource search functionality.
Postcondition	The selected resource is downloaded to the Student's local machine
Exception Paths	The Student may abandon the operation at any time
Other	None

3.1.5 Ask Question

Use Case Name	Ask Question
Xref	Section 2.2.3.1, Ask Question
Precondition	The Student is already logged in to the website and is currently in the Q&A section of the website
Trigger	The Student selects the Q&A section from the dashboard and clicks on the <i>Ask a Question</i> button
Basic Path	<ol style="list-style-type: none"> The Student selects <i>Ask a Question</i> button from the current webpage. The System generates an inbuilt word processor. The Student writes and formats the question. He can anytime select the cancel button to abandon the currently editing post. The Student after formatting the desired question selects the <i>Ask</i> button. The System saves the question in the database and displays it in the list of unsolved questions.
Alternative Paths	None
Postcondition	A question is posted on the website along with Student's name, date, Student Id in the Q&A section.
Exception Paths	The Student can abandon the operation at any time.
Other	None

3.1.6 Answer a Question

Use Case Name	Answer a Question
Xref	Section 2.2.3.2, Answer a Question
Precondition	The Student is already logged in to the website and is currently in the Q&A section of the website.
Trigger	The Student selects the question and selects <i>Add Answer</i> button at the bottom of the question.
Basic Path	<ol style="list-style-type: none"> The Student selects a question which may be solved or unsolved.

	<ol style="list-style-type: none"> The System displays the answers available if present any. Additionally, the System displays the <i>Add Answer</i> button at the bottom of the question. The Student selects the <i>Add Answer</i> button. The System generates an inbuilt word processor. The Student writes and formats the answer. He can anytime select the cancel button to abandon the currently editing post. The Student after formatting the desired answer selects the <i>Post</i> button. The System saves the answer in the database and displays the answer in the list of answers for that question.
Alternative Paths	None
Postcondition	The Student's answer for specific question is posted on the website.
Exception Paths	The Student may abandon the operation at any time.
Other	None

3.1.7 Rate an Answer

Use Case Name	Rate an Answer
Xref	Section 2.2.3.3, Rate an Answer
Precondition	The Student has already accessed the Q&A section of the website after logging in and is viewing a particular answer to a question.
Trigger	The Student clicks like or dislike button at the bottom of the answer.
Basic Path	<ol style="list-style-type: none"> The System displays a list of brief versions of the answers for the selected question. The Student browse through the brief answers and selects a desired answer. The System expands the whole answer. The Student selects the Like or Dislike button. The System increases the corresponding count by 1 and saves the response of that Student for that specific question in the database.
Alternative Paths	None
Postcondition	The opinion of the Student (like or dislike) for a particular answer is stored in the database and the total like or dislike count is incremented by one. This total count is visible to all.
Exception Paths	The Student can re-click the same button (like or dislike) to revoke his opinion.
Other	None

3.1.8 Report a Question

Use Case Name	Report a Question
Xref	Section 2.2.3.4, Report a Question
Precondition	The Student has already logged in to the website and is currently in Q&A section viewing questions and answers.
Trigger	The Student selects <i>Report this Question</i> button.
Basic Path	<ol style="list-style-type: none"> The Student selects <i>Report this Question</i> button.

	<ol style="list-style-type: none"> The System opens the Student's e-mail account's composer. The 'To' field is already filled with the official e-mail of the website managing team. The Student fills the subject and the body of e-mail with the details of the question to be reported and sends the e-mail. The website managing team receives the e-mail. The reported content is reviewed by the team and removed if required.
Alternative Paths	The Student can also report a content by contact us e-mail provided in the footer of website.
Postcondition	The content is reported for review and possibly removal from the website.
Exception Paths	The Student may abandon the operation at any time.
Other	None

3.1.9 Report an Answer

Use Case Name	Report an Answer
Xref	Section 2.2.3.5, Report an Answer
Precondition	The Student has already logged in and is currently in Q&A section viewing questions and their corresponding answers.
Trigger	The Student selects <i>Report this Answer</i> button.
Basic Path	<ol style="list-style-type: none"> The Student selects <i>Report this Answer</i> button. The System opens the Student's e-mail account's composer. The 'To' field is already filled with the official e-mail of website managing team. The Student fills the subject and the body of e-mail with the details of the answer to be reported and reason of reporting and sends the e-mail. The website managing team receives the e-mail. The reported answer is reviewed by the team and removed if required.
Alternative Paths	The Student can also report a content by contact us e-mail provided in the footer of website.
Postcondition	The content is reported for review and possibly removal from the website.
Exception Paths	The Student may abandon the operation at any time.
Other	None

3.1.10 Write, Format and Post articles

Use Case Name	Write, Format and Post articles
Xref	Section 2.2.4.1, Write, Format and Post articles
Precondition	The user has already logged in and is currently in <i>Technical Article</i> section.
Trigger	The Student selects <i>Write an Article</i> button from the current webpage.
Basic Path	<ol style="list-style-type: none"> The Student selects the <i>Write an Article</i> button from the current webpage. The System generates an inbuilt word processor with <i>Title</i> and <i>Body text-boxes</i>.

	<ol style="list-style-type: none"> The Student writes and formats the <i>Title</i> and <i>Body</i>. The Student after writing and formatting the article as desired selects the <i>Post</i> button. The System saves the posted article in the database and renders it in the list of articles and in the Student dashboard as the article posted by him.
Alternative Paths	None
Postcondition	The article is posted on the website in the <i>Technical Article</i> section with Student's name and in the Student dashboard as the article posted by him.
Exception Paths	The Student may abandon the operation at any time by clicking the cancel button.
Other	Before submission of the article the System must ensure that none of the text-boxes remains left (i.e. <i>Title</i> and <i>Body</i>), if left empty then, System displays a warning message.

3.1.11 Browse and Read articles

Use Case Name	Browse and Read articles
Xref	Section 2.2.4.2, Browse and Read articles
Precondition	The user has already logged in and is currently in <i>Technical Article</i> section viewing articles
Trigger	The Student clicks on a particular article abstract to expand and read the article.
Basic Path	<ol style="list-style-type: none"> The Student chooses the <i>Technical Article</i> section from his dashboard. The System displays a list of article abstracts arranged on the basis of number of likes received. The Student selects a desired article abstract. The System loads the selected article in the next page with all the relevant metadata useful to the reader like author, word count, date of post, views, etc. The Student reads the article.
Alternative Paths	None
Postcondition	The article is read by the Student
Exception Paths	The Student may abandon the operation at any time.
Other	Every time a Student expands an article abstract, the view count is increased by one.

3.1.12 Rate an article

Use Case Name	Rate an article
Xref	Section 2.2.4.3, Rate an article
Precondition	The Student is accessing the <i>Technical article</i> section and has selected and currently viewing a particular article.
Trigger	The Student selects like or dislike button at the bottom of the article.
Basic Path	<ol style="list-style-type: none"> The System displays a list of article abstracts arranged based on the ratings. The Student browses through the article abstracts and selects a desired article.

	<ol style="list-style-type: none"> The System expands the whole article. The Student selects the Like or Dislike button after reading the article as desired. The System increases the corresponding count by 1 and saves the response of that Student for that specific article in the database.
Alternative Paths	None
Postcondition	The opinion of the Student (like or dislike) for a particular article is stored in the database and the total like or dislike count is incremented by one. This total count is visible to all.
Exception Paths	The Student may abandon the operation at any time.
Other	None

3.1.13 Report an article

Use Case Name	Report an article
Xref	Section 2.2.4.4, Report an article
Precondition	The Student has accessed the <i>Technical Article</i> section and is currently viewing a particular article.
Trigger	The Student selects <i>Report this Article</i> button.
Basic Path	<ol style="list-style-type: none"> The Student selects <i>Report this Article</i> button. The System opens the Student's e-mail account's composer. The 'To' field is already filled with the official e-mail of the website managing team. The Student fills the subject and the body of e-mail with the details and reason of the article to be reported and sends the e-mail. The website managing team receives the e-mail. The reported content is reviewed by the team and removed if required.
Alternative Paths	The Student can also report a content by contact us e-mail provided in the footer of the website.
Postcondition	The article is reported for review and possibly removal from the website.
Exception Paths	The Student may abandon the operation at any time.
Other	None

3.1.14 View Class Schedule

Use Case Name	View Class Schedule
Xref	Section 2.2.5, View Class Schedule
Precondition	The Student is accessing his dashboard
Trigger	The Student selects <i>View Schedule</i> option from his dashboard
Basic Path	<ol style="list-style-type: none"> The Student selects <i>View Schedule</i> option from his dashboard. The System provides a list of batches to choose from. The Student selects his batch. The System provides a list of semesters to choose from. The Student selects his semester. The System displays the schedule of the selected semester.
Alternative Paths	None

Postcondition	The Student is able to view his class schedule.
Exception Paths	The Student may abandon the operation at any time
Other	None

3.1.15 View Event Details

Use Case Name	View Event Details
Xref	Section 2.2.6, View Event Details
Precondition	The Student is accessing his dashboard.
Trigger	The Student selects <i>Upcoming Events</i> option from the dashboard.
Basic Path	<ol style="list-style-type: none"> 1. The Student selects <i>Events</i> link from the navigation bar in his dashboard. 2. The System renders a web page for <i>Events</i> section containing a list of upcoming events with details like date, time, venue, related posters, etc.
Alternative Paths	None
Postcondition	The Student is able to view the details of upcoming events
Exception Paths	The Student may abandon the operation at any time
Other	All the information of a particular event is shown in the form of a card.

3.1.16 Delete Posts

Use Case Name	Delete Posts
Xref	Section 2.2.7, Delete Posts
Precondition	The Student is accessing his dashboard.
Trigger	The Student selects <i>Delete this Post</i> option at the bottom of a particular post in his dashboard.
Basic Path	<ol style="list-style-type: none"> 1. The System provides a dashboard for the Student containing his contents of various categories (articles, questions, answers) posted on the website, in an organized way. 2. The Student selects the option to delete the post shown at the bottom of that post. 3. The System generates a pop-up asking the Student to proceed with deletion. 4. The System removes the deleted post from the database and hence from the website.
Alternative Paths	None
Postcondition	The desired post of the Student is deleted from the database and hence from the website.
Exception Paths	The Student may abandon the operation at any time
Other	None

3.2 Detailed Non-Functional Requirements

3.2.1 Performance

As the traffic on the website will not exceed a couple thousands Students in any case, a database management System that is available free of cost in the public domain should be used. Considering the limited traffic, free website hosting platforms like Netlify, Heroku will be used. These platforms, although free of cost can deliver the enough performance needed to handle this amount of traffic.

3.2.2 Security

3.2.2.1 **User authentication:** In order to access the resources and other functionalities on MySpace website, Students need to create an account. For this Google Sign-In and Institutional e-mail Sign Up option will be provided. This will ensure that the Student belongs to this institute. In case the Student has forgotten his password, he can reset the password using a reset link sent directly to his e-mail. Furthermore, passwords will be hashed in the database to ensure the their security.

3.2.2.2 **Login details:** Each user's login time and logout time along with Network IP Address will be recorded in the System, to make the tractability process easy in case of a faulty action.

3.2.2.3 **Website-functional security:** Users will have to login in order to post questions or reply to posted questions or access resources. Also, no Student can access the dashboard of any other Student. This will ensure privacy and secure control for users. In Q&A and *Technical Article* section, Students can create posts and these posts will be visible to all with their name, Student Id and date.

3.2.3 Platform

Since MySpace will be a website supported by modern web browsers, so no specific changes needs to be made for the operating System compatibility as all three windows, Linux and MacOS supports modern web browsers.

3.2.4 Maintainability

In the maintenance phase, if a Student encounters a bug while using the website, he can report the bug to our official e-mail handle provided on the website.

Further tasks like new resource uploading, removing reported contents, updating event details, etc. will be done by the website managing team regularly in the backend. No frontend will be developed for executing these tasks considering the limited time and resources for this project.