

Mini Project Report

I-INTERACT

Submitted by

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Certificate

It is certified that the work contained in this report titled “I-Interact” is the original work done by Vamsi Chaitanya Vankalapati (B121107), Venu Gajji (B121515), Venkatesh Batthini (B121330), Rajender Eslavath (B121907), Naveen Kumar Kammari (B121250) and has been carried out under our supervision.

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We are also grateful to respected **Mr. Ranjith Kumar HOD (CSE)** for permitting us to utilize all the necessary facilities of the institution.

Lastly, we would like to express our deep gratitude towards classmates and our indebtedness to our parents for providing us the moral support and encouragement.

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ABSTRACT

In a well digitalized campus like RGUKT Basar, there is no particular web application or webpage for faculty and students to interact with each other. The students are seeking for healthy environment between faculty and them. Not all the students can go to the faculty and discuss regarding the subject, and also no faculty will be available all the time. So, this website creates an environment for students and faculty to have discussions, debates, live chat session, notices and private chat.

Our motto is “TO ENLIGHT THE ABILITY” in students to achieve greater heights and to gain knowledge. This software would store all the information posted by the user. And it also stores user's profile and preferences to get the users more benefit out of it. This application can be accessed by all the students and staff of our University where they are provided with certain rights to access the data.

Introduction

1.1 About I-Interact

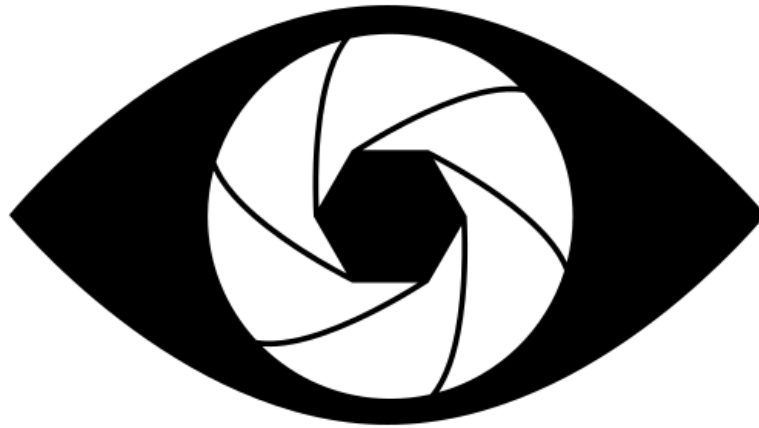
I-Interact is a web based application where an environment is created for both the students and faculty to come together and interact with each other, empower their knowledge by asking doubts, clarifying doubts, and to participate in debate sessions and to interact in a private chat box with the faculty.

Additionally, this project includes building a productive environment to acquire knowledge through sharing. This software would store all the information posted by the user. And it also stores user's profile and preferences to get the users more benefit out of it. This application can be accessed by all the students and staff of our University where they are provided with certain rights to access the data. They can register, with the help of unique ID (say college ID No.) It is also provided with key functionalities like Debate sessions and Assignment submission, where it reduces the load for the faculty.

VERSION 2.0

FEBRUARY 1, 2017

SOFTWARE REQUIREMENTS SPECIFICATION FOR



I-INTERACT

PLATFORM TO ENLIGHTEN YOUR ABILITY

By

(Group-II)

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REVISION HISTORY

NAME	DATE	REASON FOR CHANGES	VERSION
I-Interact	22-01-2017	<ul style="list-style-type: none"> Initial Document 	1.0
I-Interact	27-01-2017	<ul style="list-style-type: none"> Some functional requirements are missing Lack of complete description 	1.1
I-Interact	1-02-2017	<ul style="list-style-type: none"> Use case Diagrams Included 	2.0

1.Introduction

1.1 Purpose

The purpose of this web based application is to provide a platform for both the students and the faculty(s) to interact with each other, empower their knowledge by asking doubts, clarifying doubts, and to participate in debate sessions and to interact in a private chatbox with the faculty.

1.2 Scope

The scope of this project includes building a productive environment to acquire knowledge through sharing. This software would store all the information posted by the user. And it also stores user's profile and preferences to get the users more benefit out of it. This application can be accessed by all the students and staff of our University where they are provided with certain rights to access the data. They can register, with the help of unique ID (say college ID No.) It is also provided with key functionalities like Debate sessions and Assignment submission, where it reduces the load for the faculty.

1.3 Intended Audience and Reading Suggestions

The major user classes in the System would be

1) Administrator

The Administrator has the supreme power of the application. Admin is responsible for maintaining and updating the whole system. Admin has the responsibility to give current notifications. Admin has the access to create LIVE DEBATE SESSIONS where the registered users will participate.

2)Student

Students need to login with his/her username and password to interact with the faculty, to pose questions, to participate in debates, to view the details of faculty members, to give feedback and to submit assignments and to personally for GO LIVE chat with the faculty.

3)Faculty

Almost all the features that are available for the students are applicable for the faculty too. In addition, they are given special rights to post notices in notice board. The assignments submitted by the students can be viewed by faculty and they evaluate and give marks.

1.3 Document Conventions

IEEE (Institute of Electrical and Electronics Engineers) format. Size of main headings are Calibri(Head)-BOLD 22 and sub headings are Calibri(Head)-BOLD 18 respectively. The font size of the remaining description is Calibri(Head) 14.

2. Overall Description

2.1 Product Perspective

The I-Interact Software would exhibits a platform so that students and faculty will come under one platform for online discussion and faculty can help students to be more aware of subject. This helps the students to gain more knowledge & save time.

2.2 Product Features

The key features of the application are listed below-

- a. Students Interaction with Faculty.

- b. Live Debate Sessions
- c. Q&A forum
- d. Notice Board

2.3 Operating Environment

- This I-Interact is a web based application. It can be operated in all browsers.

2.4 User Classes and Characteristics

- Users: Two types of users exist here.
 - i) Who can only view the data
 - ii) Who are given access only to certain functionalities where they can view as well as edit the data.
- Administrator: He/she can change the database and enter, remove the data.

2.5 Design and Implementation Constraints

- The information of all user details must be stored in database.
- Users must register to engage with the faculties and to pose questions.
- Users should give proper details in order to maintain the application in a smooth manner.
- This site will be available for the users with the Internet connection.
- Administrator have all rights to modify the data and he/she can remove and enter the data.

2.6 Assumptions and Dependencies

The users must have sufficient knowledge of computer basics. The users should know the English language, as the user interface will be provided in English language.

3. External Interface Requirements

3.1 User Interfaces

- User interface is designed in a User-friendly manner so that User can access easily.
- This application provides effective GUI (Graphical User interface), so that users can make use of this application in a better way.

3.2 Hardware Interfaces

The Client Machines:

- Processor – 1.00GHZ, RAM – 520MB , Hard Disk - 2GB (minimum required).

The Server Machines:

- Processor – 1.7GHZ, RAM - 2GB, Hard Disk – 4GB (minimum required).

3.3 Software Interfaces

- Operating system: Linux, windows etc.
- This web based software uses HTML ,CSS , bootstrap(framework) for front end design.
- The application uses Javascript, php, MySql database and can run on web browser.

3.4 Communications Interfaces

- Web browser, network server communication protocols, http protocols, emails and mobile numbers.

4. System Features

This application provides the security for users by providing user name, password.

4.1 Stimulus/Response Sequences:

- Firstly, the user access the site through the web browser.
- If the user credentials are correct. Then only, he'll be allowed to enter the site.
- User can ask the questions/answer the questions displayed right on the home screen and the system will respond according to the users selection.
- If the user search for a particular faculty profile. The system shows the faculty profile among existing profiles.
- In the debate session. For every 10 seconds, the page will automatically refresh if the user is not typing anything. If he is typing something, the page waits until he finishes.
- In the assignment submission functionality, the assignments submitted in a softcopy will be sent to faculty database.

5. Specific Requirements

5.1 Functional Requirements

5.1.1 LOGIN

- The students login to website using their credentials.
- If the credentials matches, then redirect to homepage.
- If the credentials doesn't match display error.

Use case name	<i>Login</i>
Actors	<i>User</i>
Brief Description	<i>This use case user can login with his/her login credentials.</i>
Goals	<i>Logging into his/her HOMEPAGE.</i>
Triggers	<i>User should click the login/go button.</i>
Pre-Condition	<i>User should be in login page.</i>
Post-Condition	<i>User should submit login credentials.</i>
Basic Flow	<i>User click the submit button then go to HOME page.</i>
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user enters wrong details.</i>
Quality	<i>Login time is very less.</i>

5.1.2 REGISTRATION

- If a student want to register as a user, he can use the registration functionality, where he must use his mail ID and university ID to create an account where an OTP is sent to gmail.
- He can login to website after he completes his registration.

Use case name	<i>Registration</i>
----------------------	---------------------

Actors	User
Brief Description	This use case user can sign up this website by entering his/her details.
Goals	Signing up with particular account.
Triggers	User should click the submit button.
Pre-Condition	User should be in sign up page.
Post-Condition	After verifying account will be created and stored.
Basic Flow	User click the submit button then go to Login page.
Alternative Flow	No alternative flow.
Exception	Exception will handled if user enters wrong details.
Quality	Completion time will depend on the internet speed.

5.1.3 MY PROFILE

- This functionality consists logged in user personal information.
- He can reset the password.
- Update the profile.

Use case name	MyProfile
Actors	User
Brief Description	This use case user can provide the different functionalities after logged in with his/her details.
Goals	To Provide platform for different functionalities.
Triggers	User should click the buttons to use other functionalities.
Pre-Condition	User should login the page.
Post-Condition	User will come to know the functionalities.
Basic Flow	User clicks the buttons and get respective functionality page.
Alternative Flow	No alternative flow.
Exception	Exception will handled if user not logged in.

Quality	<i>It depends on internet speed.</i>
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5.1.4 SEARCH

- Students and Faculties are given access to search others profile, it may be a student or a Faculty.

Use case name	<i>Search</i>
Actors	<i>Users</i>
Brief Description	<i>This use case results the other users details based on the permissions given to the user.</i>
Goals	<i>Searching for a particular user.</i>
Triggers	<i>User has to type the user name in the search bar and should hit the search button.</i>
Pre-Condition	<i>User has to be in Home Page</i>
Post-Condition	<i>Search results will be displayed in HomePage</i>
Basic Flow	<i>User click the search button it searches for user details in database and display the details of particular user.</i>
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not login.</i>
Quality	<i>It depends on internet speed.</i>

5.1.5 Q&A

- This functionality allows both student and faculty to pose questions and given permission to both to answer. The faculties answer will be further highlighted and students can also give eye(upvote) to the answers and also for the questions.

Use case name	<i>Q&A</i>
Actors	<i>Users</i>
Brief Description	<i>This use case user can ask the questions and can</i>

	<i>able to answers the questions.</i>
Goals	<i>To Allow the user to build up his knowledge.</i>
Triggers	<i>User should click the ask button.</i>
Pre-Condition	<i>User should be in Home Page</i>
Post-Condition	<i>Question/Answer will be posted.</i>
Basic Flow	
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not logged in</i>
Quality	<i>It depends on internet speed.</i>

5.1.6 GO DEBATE

The particular timings of when a debate session is going to be conducted is given in advance.

- The students must register in advance to participate in debate session.
- Assigned faculty will be monitoring the session and will award marks.

Use case name	<i>Debate</i>
Actors	<i>Users</i>
Brief Description	<i>User can participate in debate session through this use case.</i>
Goals	<i>To gain more knowledge.</i>
Triggers	<i>User has to participate in debate session by triggering post button.</i>
Pre-Condition	<i>User has to login with his credentials.</i>
Post-Condition	<i>It usually communicates with database.</i>
Basic Flow	--
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not login.</i>

Quality	<i>It depends on internet speed.</i>
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5.1.7 GO LIVE

This functionality helps students to chat with faculty in a private chat box.

- Only the chat is enabled between student and faculty, but not between students.

Use case name	<i>Chat</i>
Actors	<i>Users</i>
Brief Description	<i>This provides platform for personal communication between the users.</i>
Goals	<i>To personally chat.</i>
Triggers	<i>User should click send button.</i>
Pre-Condition	<i>User should be login in the page.</i>
Post-Condition	<i>Use case will interact with database.</i>
Basic Flow	<i>It remains in the same page until user quits</i>
Alternative Flow	<i>Home Page</i>
Exception	<i>Exception will handled if user is not login</i>
Quality	<i>It depends on internet speed.</i>

5.1.8 ASSIGNMENT

- The students can upload the softcopy of assignments to the respective faculty.
- The faculty receives the assignments class wise, evaluates and assign marks.

Use case name	<i>Assignment</i>
Actors	<i>User</i>
Brief Description	<i>This use case will allow users to submit the</i>

	<i>assignments and to view the assignments.</i>
Goals	<i>To submit and receive assignments.</i>
Triggers	<i>User should click submit button.</i>
Pre-Condition	<i>User should be login in the page.</i>
Post-Condition	<i>The assignments will be stored in database.</i>
Basic Flow	<i>Home Page.</i>
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not login</i>
Quality	<i>It depends on internet speed.</i>

5.1.9 NOTICE BOARD

- Both the faculty and Administrators can update information in Notice board.

Use case name	<i>Notice Board</i>
Actors	<i>User</i>
Brief Description	<i>This use case will display the notices which are posted by admin and users who will have permissions to post the notice.</i>
Goals	<i>To inform the users to particular notices.</i>
Triggers	<i>User should click notices button.</i>
Pre-Condition	<i>User should be login in the page.</i>
Post-Condition	<i>It fetches notices from database.</i>
Basic Flow	<i>It goes to the noticeboard page to display the notices.</i>
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not login</i>
Quality	<i>It depends on internet speed.</i>

5.1.10 FEEDBACK

- Students can give feedback to the faculty and also to their Q&A.

Use case name	<i>Feedback</i>
Actors	<i>User</i>
Brief Description	<i>This use case will be used to collect the ratings and displays the rating for corresponding user.</i>
Goals	<i>To get the feedback for the user.</i>
Triggers	<i>User should click the rate buttons.</i>
Pre-Condition	<i>User should be login in the page.</i>
Post-Condition	<i>Fetch the feedback from database and display them.</i>
Basic Flow	<i>None</i>
Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not login</i>
Quality	<i>It depends on speed of the internet.</i>

5.1.11 Logout

- Users end the current session using logout button.

Use case name	<i>Feedback</i>
Actors	<i>User</i>
Brief Description	<i>Logout the application and restricts the other users to enter in their accounts.</i>
Goals	<i>Logout the application to protect.</i>
Triggers	<i>User clicks on the logout button.</i>
Pre-Condition	<i>User should be Logged in.</i>
Post-Condition	<i>The driver clicks on logout the session must be terminated.</i>
Basic Flow	<i>No basic flow.</i>

Alternative Flow	<i>No alternative flow.</i>
Exception	<i>Exception will handled if user is not login</i>
Quality	<i>Depends on the Internet speed.</i>

5.2 Non-functional requirements

5.2.1 User Interface Requirements

The user interface of the application must be user-friendly and good looking, easy to use, implementing the well standards.

5.2.2 Performance Requirements

- The performance of the system should be fast and accurate. The system should be able to handle large amount of data as there are Q&A and Debate sessions.
- The system shall allow simultaneous use by several users, without data corruption.

5.2.3 Reliability & Availability

The server may fail at some point of time due to technical reason. So, it is required to take backup of the data time to time.

5.2.4 Security Requirements

- Data is to be protected from unauthorized users. It is to be secured from the hackers.
- Secured password pattern is to be enabled and to change the password a link will be redirected to users gmail.
- A confirmation message is sent to the users gmail while registration.

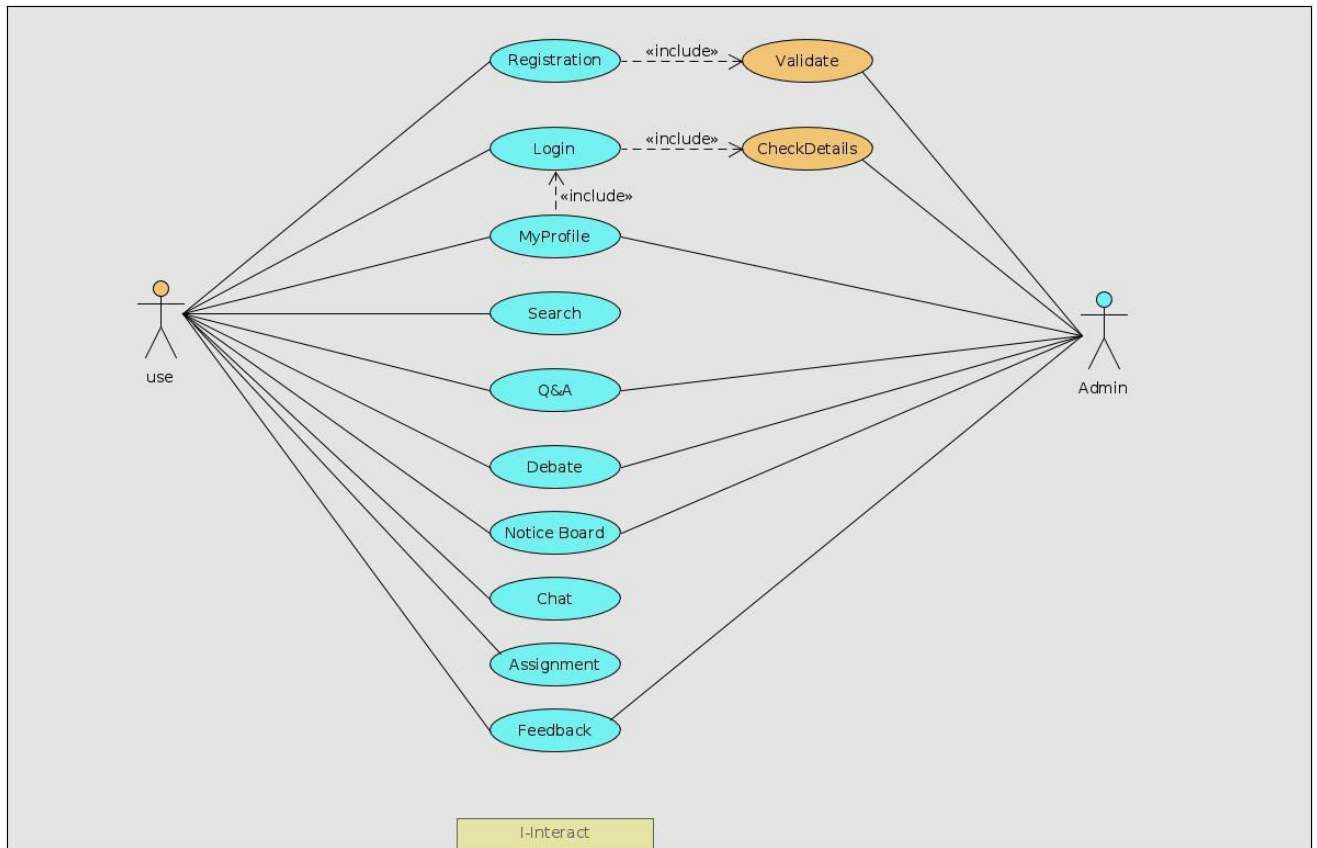
5.2.5 Maintenance

- The database failures are resolved and further functionalities can be added in later versions by the administrators.
- As the faculties are also given permission to update certain functionalities like NOTICE BOARD, they are also a part of maintenance phase.

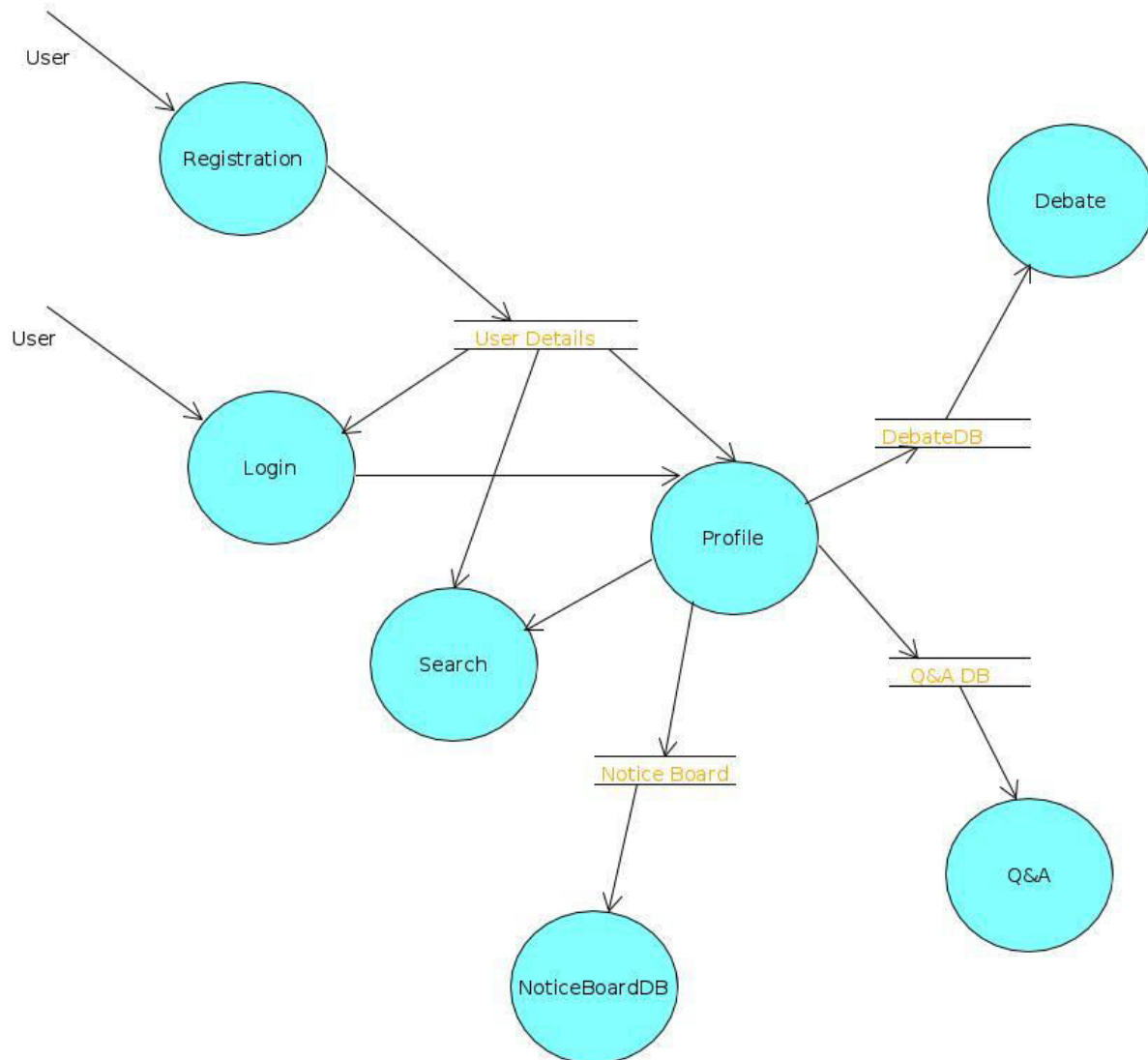
5.2.6 Compatibility

This web based application is compatible in almost all the web browser (like Firefox45.0 or higher, chrome 30.0+, Microsoft Edge) and it is also compatible with mobile view.

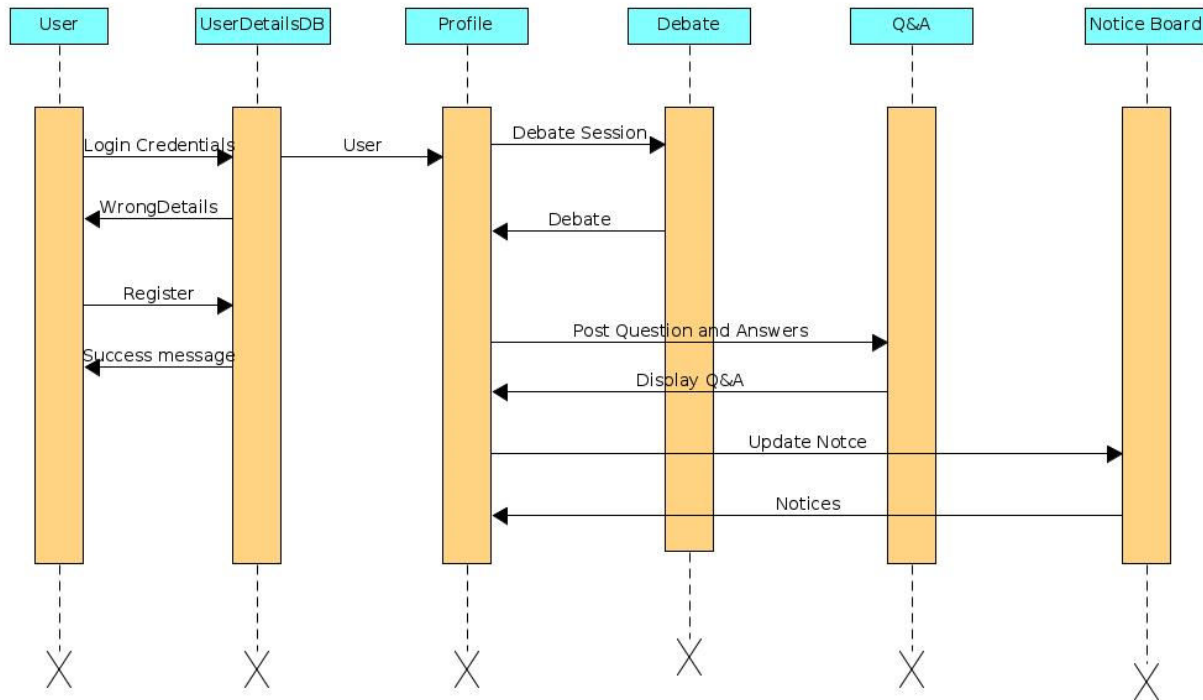
6. USE CASE Diagram



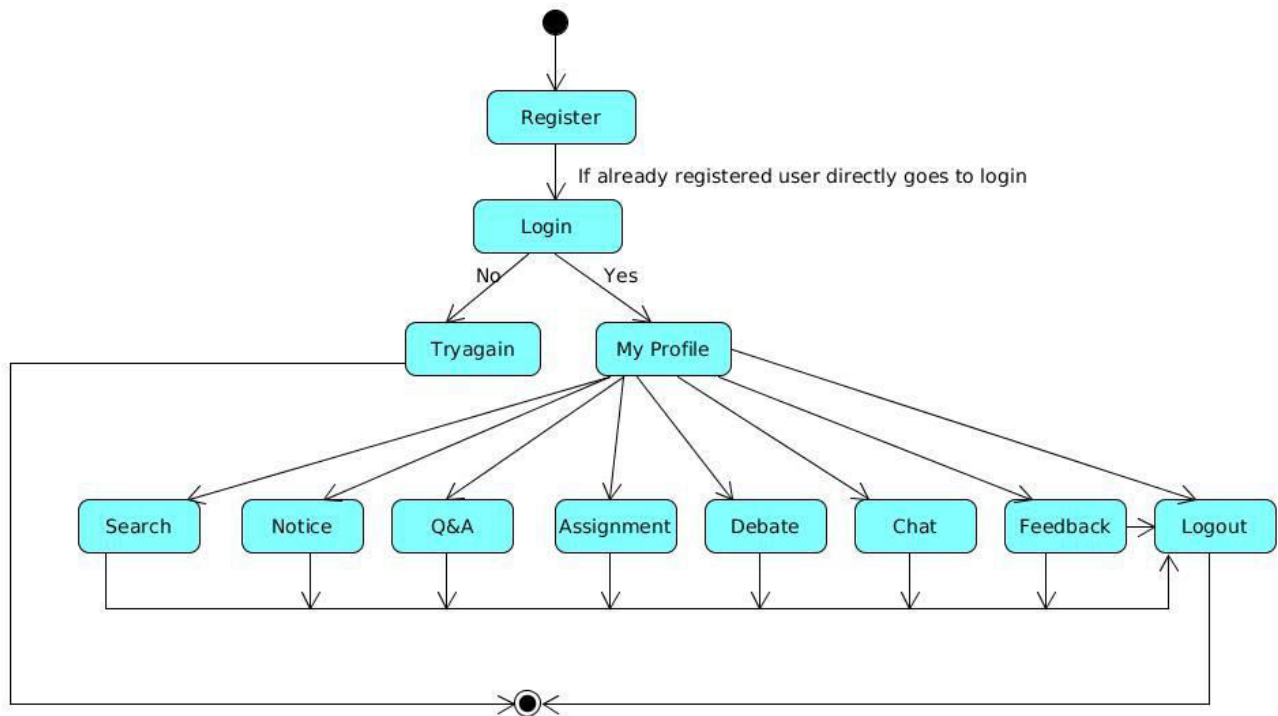
7. DATAFLOW Diagram



8. SEQUENCE Diagram



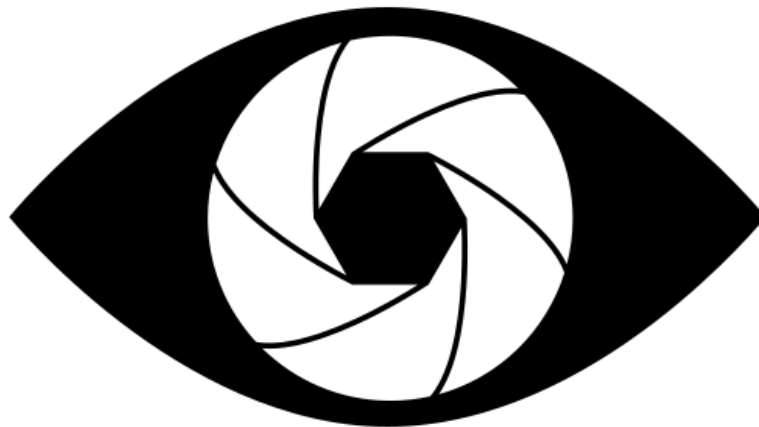
9. STATE CHART Diagram



VERSION 1.0

APRIL 11, 2017

DETAILED DESIGN DOCUMENT FOR



I-INTERACT

PLATFORM TO ENLIGHT YOUR ABILITY

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1.Introduction

This section provides an overview of the entire design document. This document describes all data, architectural, interface and component-level design for the software.

1.1 Goals and Objectives

The purpose of this web based application is to provide a platform for both the students and the faculty(s) to interact with each other, empower their knowledge by asking doubts, clarifying doubts, and to participate in debate sessions and to interact in a private chat box with the faculty.

1.2 Scope of Solution

The scope of this project includes building a productive environment to acquire knowledge through sharing. This software would store all the information posted by the user. And it also stores user's profile and preferences to get the users more benefit out of it. This application can be accessed by all the students and staff of our University where they are provided with certain rights to access the data. They can register, with the help of unique ID (say college ID No.) It is also provided with key functionalities like Debate sessions and Assignment submission, where it reduces the load for the faculty.

2. Architecture Overview

2.1 Product Perspective

The I-Interact Software would exhibit a platform so that students and faculty will come under one platform for online discussion and faculty can help students to be more aware of subject. This helps the students to gain more knowledge & save time.

2.2 Product Features

The key features of the application are listed below-

- a. Students Interaction with Faculty.
- b. Live Debate Sessions
- c. Q&A forum
- d. Notice Board

2.3 Operating Environment

- This I-Interact is a web based application. It can be operated in all browsers.

2.4 User Classes and Characteristics

- Users: Two types of users exist here.
 - i) Who can only view the data
 - ii) Who are given access only to certain functionalities where they can view as well as edit the data.
- Administrator: He/she can change the database and enter, remove the data.

2.5 Design and Implementation Constraints

- The information of all user details must be stored in database.
- Users must register to engage with the faculties and to pose questions.
- Users should give proper details in order to maintain the application in a smooth manner.
- This site will be available for the users with the Internet connection.
- Administrator have all rights to modify the data and he/she can remove and enter the data.

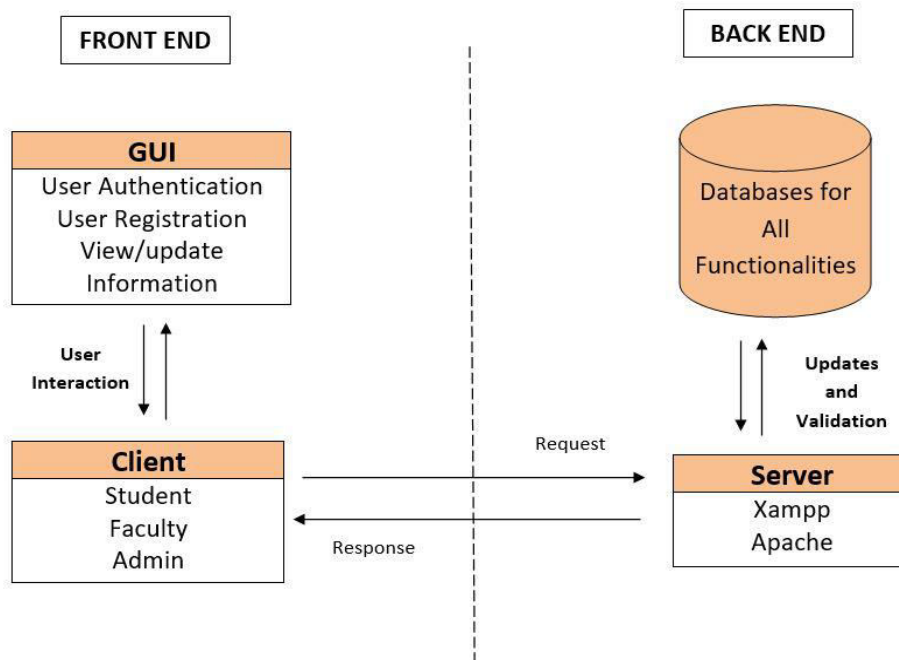
2.6 Assumptions and Dependencies

The users must have sufficient knowledge of computer basics. The users should know the English language, as the user interface will be provided in English language.

3. Detailed design modules description

This project was divided into four(4) modules.

1. Graphical user interface
2. Database
3. Server
4. Client



3.1 Graphical User Interface

- **Home page** : This component describes layouts like home page that is providing login/registration and about us on our website, etc. This can be viewed by user and administrator.



Username:

Password:

[Register](#) [Forgot Password](#)

[Are you faculty? Click here](#)

- **Login** : Login has to enter his/her credentials to access all the functionalities.



Username:

Password:

[Register](#) [Forgot Password](#)

[Are you faculty? Click here](#)

Attributes: Username, Password

Method#1: Login

Pre condition: User must have username and password

Post condition: Logged into the profile page

Algorithm:

```
flag=login(username, password)
```

```
if flag is true
```

```
    return "profile page"
```

```
else
```

```
    return "either username or password is invalid"
```

Error checking: Entered details will be validate with the regular expressions

- **Registration :** User can fill all his details to register our website

I-INTERACT
[About Us](#) [Contact US](#)

Name:	<input type="text" value="Username"/>
ID No:	<input type="text" value="B111111"/>
DoB:	<input type="text" value="15 04 1997"/>
E-mail id:	<input type="text" value="naveen97.kammani@gmail.com"/>
Password	<input type="password" value="*****"/>
Confirm Password	<input type="password" value="*****"/>
Mobile No:	<input type="text" value="8877998877"/>
Choose:	<input checked="" type="radio"/> Student <input type="radio"/> Faculty
Year:	<input type="text" value="E3"/>
Branch:	<input type="text" value="CSE"/>
Class:	<input type="text" value="ABI-007"/>
<input type="button" value="Register"/> <input type="button" value="Reset"/>	

Attributes : Name, Id no, Branch, Gender, Mobile No, Email

Method#2 : Register

Precondition : User should be student/faculty

Post condition: Created account for user

Algorithm:

```
flag = register(name, id no, branch, gender, mobile no, email, branch, class, year, dob)
```

```
if flag is true
```

```
    return "registered successfully"
```

```
else
```

```
    return "enter details properly"
```

Error Checking: Input fields must validate with regular expressions

- **Profile Page :**

Attributes: Name, Id, Class, Branch, Year, Gmail, Upload

Method#1: Profile page Links

Precondition: User must exist

Post Condition: Profile page will displayed

Algorithm:

```
if I-Profile()
```

```
    return "Details of students or Faculty"
```

```
else if Q_A()
```

```
    return "Questions and Answers session page"
```

```
else if Go_Debate()
```

```
    return "Debate registration session page"
```

```
else if GO_Live()
```

```
    return "Go to live session page"
```

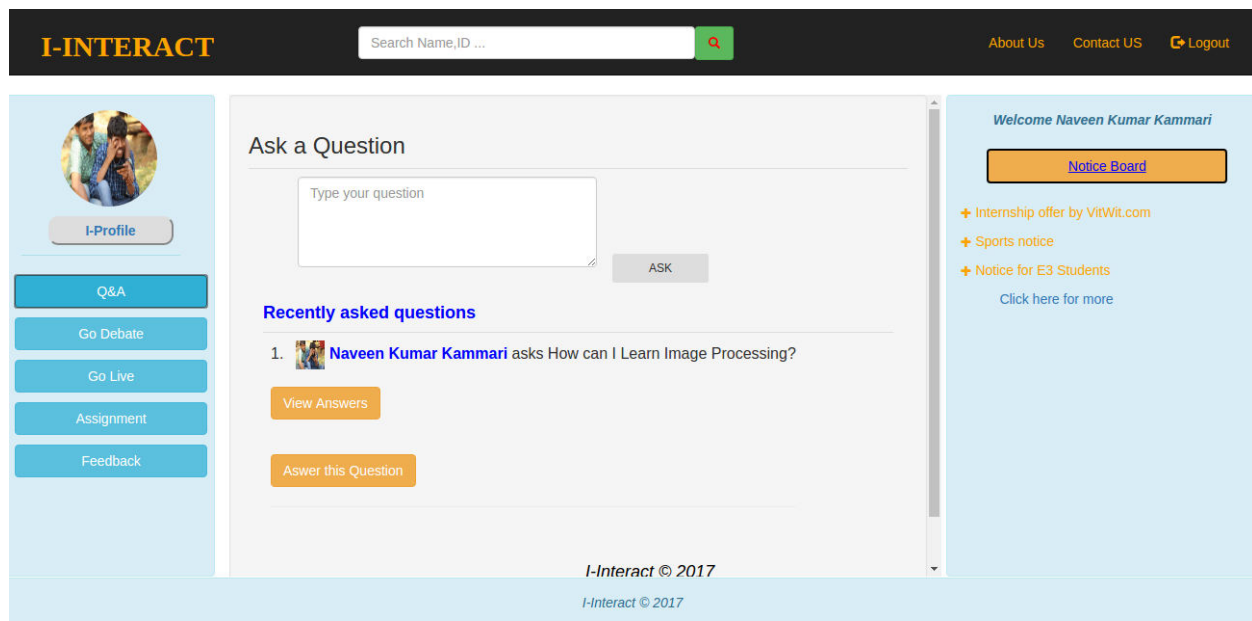
```

else if Assignment()
    return "Assignments session spage"
else if FeedBack()
    return "Feedback session page"
else if NoticeBoard()
    return "Displays notices page"

```

Error Checking: If query results null, then user get warning message to update the Information

- **Q&A:**



Attributes: Ask Question, Recently asked questions

Method#2: Q&A

Precondition: User should login first

Post Condition : Question will be displayed for answers"

Algorithm:

```
flag=submit(userid, question)
```

```
if flag is true
```

```
    return "Question will be added to page"
```

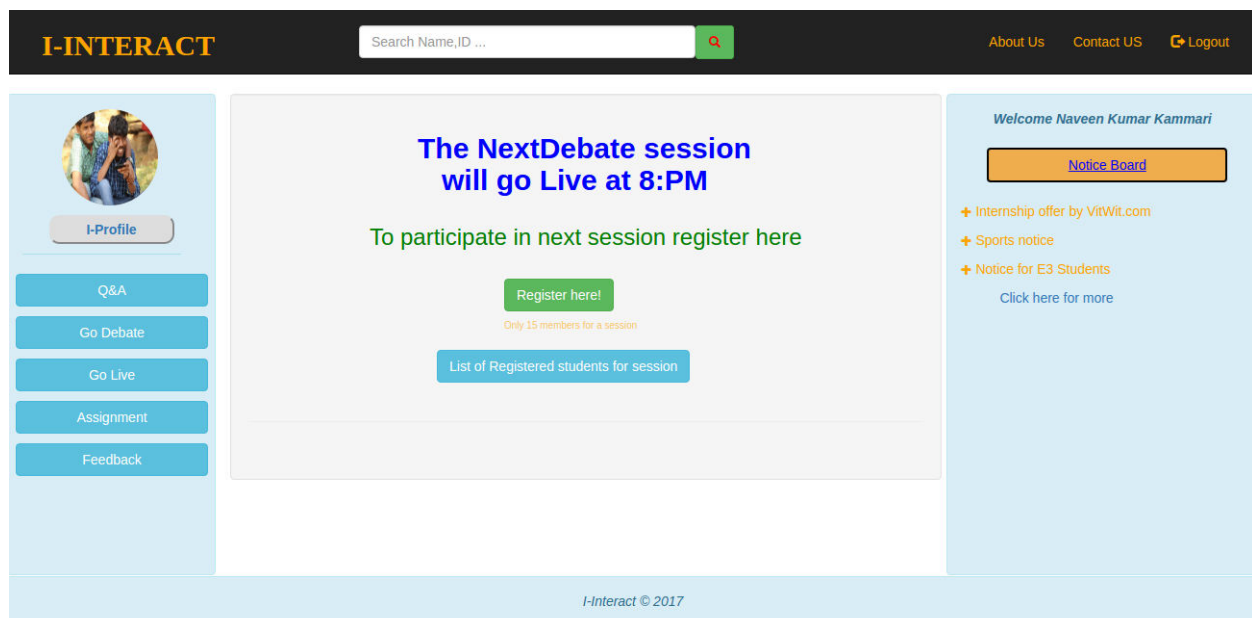
```

else
    return "null"
flag=submit(userid, answerid, userans)
if flag is true
    return "Answer will be added to particular questions"
else
    return "Shows error"

```

Error checking: If query send null, display error;

- **Debate:**



Attributes: Register

Method#3: GO Debate

Precondition: User should login first and register for debate

Post Condition: User will get chance to participate in debate"

Algorithm:

```
flag=submit(userid)
```

if flag is true

 return "User will be get registered successfully message"

else

 return "Error message"

Error checking: If query send null, display error;

- **Go Live:**

The screenshot displays the I-INTERACT web application interface. At the top, a dark navigation bar contains the I-INTERACT logo, a search bar with the placeholder text "Search Name,ID ...", and links for "About Us", "Contact US", and "Logout". The main content area is light blue and divided into three vertical sections. The left section features a user profile with a circular image and a button labeled "I-Profile", followed by a vertical list of buttons: "Q&A", "Go Debate", "Go Live", "Assignment", and "Feedback". The central section, titled "Go-Live", contains two dropdown menus: the first is set to "CSE" and the second to "Shekhar". A green "Start" button is positioned at the bottom right of this section. The right section displays a welcome message "Welcome Naveen Kumar Kamhari" and a "Notice Board" button, followed by a list of notices: "Internship offer by VitVit.com", "Sports notice", and "Notice for E3 Students", with a link "Click here for more". The footer of the page is a light blue bar with the text "I-Interact © 2017".

Attributes: Department, Faculty

Method#4: GO Live

Precondition: User should login first and select faculty for chat

Post Condition :User will get chance to chat with faculty "

Algorithm:

flag=submit(userid, facultyid, dept, message)

if flag is true

 return "Live chat "

else

 return "Error message"

Error checking: If query send null, display error;

- **Assignment:**

I-INTERACT Search Name, ID ... [About Us](#) [Contact US](#) [Logout](#)

Welcome Naveen Kumar Kamhari

[Notice Board](#)

- + Internship offer by VitWit.com
- + Sports notice
- + Notice for E3 Students
- [Click here for more](#)

Assignments

Shekhar

Software Engineering

Assignment2

[Choose file](#) | No file chosen
Choose your assignment only jpg, zip, tar, pdf files are acceptable

[Upload](#)

Your submissions: [View](#)

I-Interact © 2017

Attributes: Faculty, Subject, Assignment, file

Method#4: Assignment

Precondition: User should login first and select faculty , Subject and Assignment to submit

Post Condition: Student will submit assignment "

Algorithm:

```
flag=submit(userid, facultyid, assignment, file)
```

```
if flag is true
```

```
    return "Success message"
```

```
else
```

```
    return "Error message"
```

- **Feedback :**

The screenshot shows the I-INTERACT web application interface. At the top is a dark navigation bar with the I-INTERACT logo, a search bar, and links for About Us, Contact US, and Logout. Below this is a light blue sidebar with a user profile picture and buttons for Q&A, Go Debate, Go Live, Assignment, and Feedback. The main content area is divided into three sections: a Feedback form, a Remarks section, and a right-hand sidebar. The Feedback form includes a dropdown for 'Shekhar' and a rating of '5 out of 5'. The Remarks section has a text area with 'Good' and a 'Send' button. The right sidebar displays a welcome message for Naveen Kumar Kamhari, a 'Notice Board' button, and links to various notices.

I-INTERACT Search Name,ID ... [About Us](#) [Contact US](#) [Logout](#)

Feedback

Shekhar

5 out of 5

Remarks

Good

Send

Welcome Naveen Kumar Kamhari

[Notice Board](#)

+ Internship offer by VitWit.com

+ Sports notice

+ Notice for E3 Students

[Click here for more](#)

I-Interact © 2017

Attributes: Faculty, Rating, feedback

Method#5: Feedback

Precondition: User should login first and select faculty , rating and type feedback to submit

Post Condition :Student will submit feedback "

Algorithm:

```
flag=submit(userid, facultyid, rating, feedback)
```

```
if flag is true
```

```
    return "Success message"
```

```
else
```

```
    return "Error message"
```

Error checking: If query send null, display error;

- Search:

I-INTERACT Sh

[About Us](#) [Contact US](#) [Logout](#)

I-Profile

[Q&A](#)

[Go Debate](#)

[Go Live](#)

[Assignment](#)

[Feedback](#)

Student Details:

No, records found

Faculty Details

S.no	ID	Name	Gmail	Department	Mobile
1	RCIVIL12121	Harish	harish@gmail.com	CIVIL	8899887755
2	RCS1111	Shekhar	shekar@gmail.com	CSE	2233445544
3	REC2231	prashanth	prashanth@gmail.com	ECE	22339944
4	RMM1100	Ashok	asho@gmail.com	MME	22334455

Welcome Naveen Kumar Kammari

[Notice Board](#)

+ Internship offer by VitWit.com

+ Sports notice

+ Notice for E3 Students

[Click here for more](#)

I-Interact © 2017

Attributes: search bar, key

Method#5: Search

Precondition: User should login first and type name or id for searching

Post Condition : "User will get result "

Algorithm:

flag=submit(key)

if flag is true

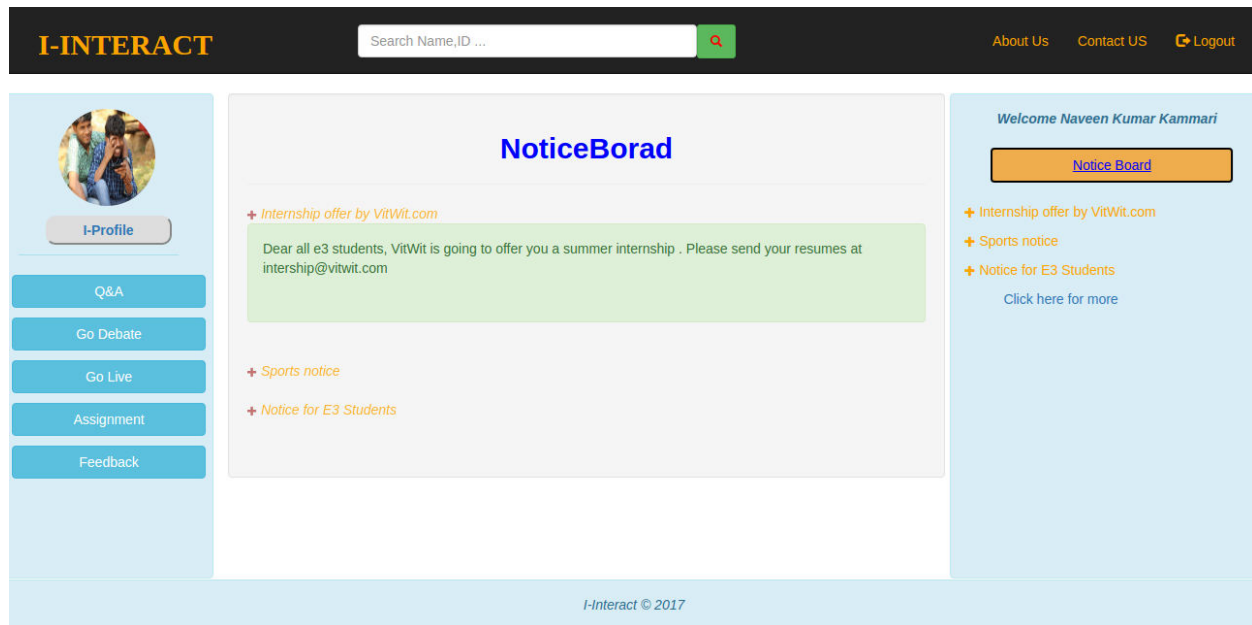
 return "Displays result"

else

 return "Error message"

Error checking: If query send null, display error;

- **Notice Board:**



Attributes: click

Method#6: Notice

Precondition: User should login first and click on more

Post Condition : "User will get all notices "

Algorithm:

flag=submit(click)

if flag is true

 return "Displays result"

else

 return "Error message"

Error checking: If query send null, display error;

- Faculty Notice Board:

Attributes: click, post

Method#6: Notice

Precondition: User should login first and click on more

Post Condition : "User will get all notices and can able to post notices"

Algorithm:

flag=submit(click)

if flag is true

 return "Displays result or post notices"

else

 return "Error message"

Error checking: If query send null, display error;

- Faculty Chat:

The screenshot displays the I-INTERACT web application interface. At the top, there is a dark header with the I-INTERACT logo, a search bar labeled 'Search Name, ID ...', and links for 'About Us', 'Contact Us', and 'Logout'. The main content area is divided into three sections. On the left, a sidebar contains a user profile icon, a button labeled 'I-Profile', and a vertical list of buttons: 'Q&A', 'Go Debate', 'Go Live' (highlighted), 'Assignment', and 'Notice Board'. The central section, titled 'Go-Live', features a table with student information:

Student ID	Student Name	Student Class
B121250	Naveen Kumar Kammari	AB-I 007

On the right, a sidebar shows a 'Welcome Shekhar' message, a 'Notice Board' button, and a list of notices: 'Internship offer by VitVit.com', 'Sports notice', and 'Notice for E3 Students', with a link 'Click here for more'. The footer of the page reads 'I-Interact © 2017'.

Attributes: student id, student name, class

Method#4: GO Live

Precondition: User should login first and select student for chat

Post Condition :User will get chance to chat with faculty "

Algorithm:

```
flag=submit(userid, facultyid, dept, message)
```

```
if flag is true
```

```
    return "Live chat "
```

```
else
```

```
    return "Error message"
```

Error checking: If query send null, display error;

- Assignment faculty:

I-INTERACT Search Name, ID ... [Q](#) [About Us](#) [Contact US](#) [Logout](#)

Welcome Shekhar

[Notice Board](#)

- + Internship offer by VitWit.com
- + Sports notice
- + Notice for E3 Students
- [Click here for more](#)

Assignments

Student ID:	Subject:	Class:	Assignment:	Year:	Date of submission:
+ B121250	Software Engineering	AB-I 007	assignment1	E3	2017-04-11 18:54:28

I-Interact © 2017

Attributes: student id, subject, class, assignment, year, date of submission

Method#4: Assignment

Precondition: User should login first and select student id to give marks

Post Condition : Marks will be given to student"

Algorithm:

```
flag=submit(studentid, facultyid, marks)
```

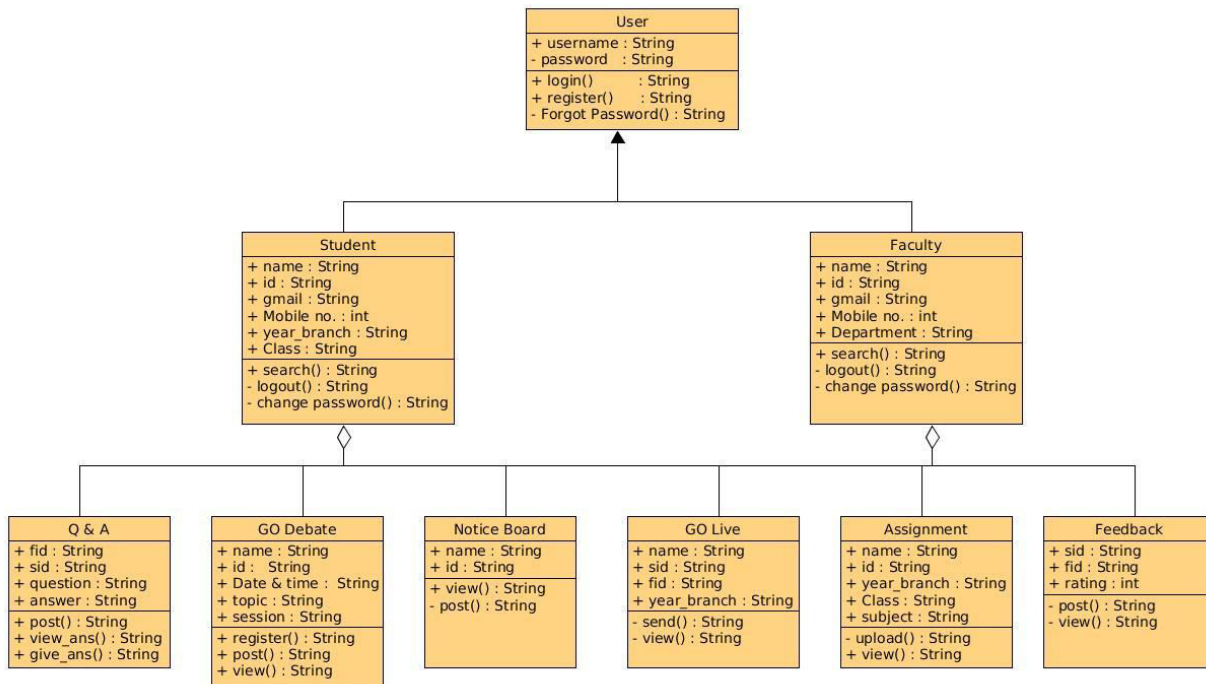
```
if flag is true
```

```
    return "Success message"
```

```
else
```

```
    return "Error message"
```

3.2 Class Diagram:

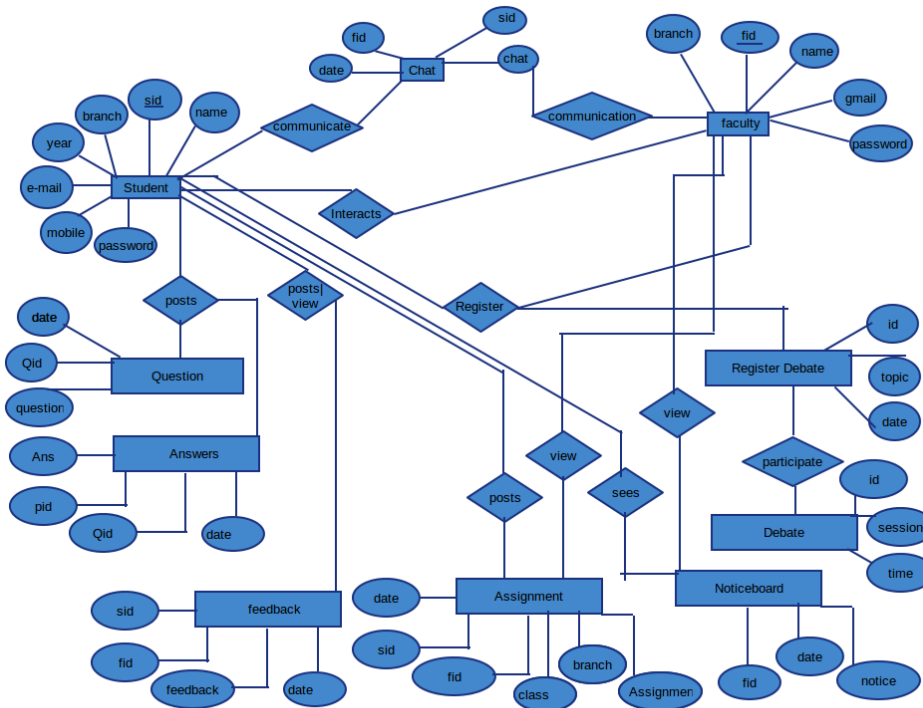


Class Description:

- **User** : Contains basic information of the User details
- **Student** : It is deals about the authentication of student
- **Faculty** : It is deals about the authentication of faculty
- **Organization** : contains information about all the organizations
- **Q&A** : It deals with Questions and Answers session.
- **GO Debate**: It deals with Debate Session for all users.
- **Notice Board**: It deals with notices.
- **GO Live**: It deals with live chat.
- **Assignment**: It deals with all assignments of students
- **Feedback**: It deals with feedback.

4. Data Architecture

4.1 ER Diagram:



5. Client-Server Module Description

Client and server communication:

A service is an abstraction of computer resources and a client does not have to be concerned with how the server performs while fulfilling the request and delivering the response. The client only has to understand the response based on the well-known application protocol, i.e. the content and the formatting of the data for the requested service.

Clients and servers exchange messages in a request–response messaging pattern. The client sends a request, and the server returns a response. This exchange of messages is an example of inter-process communication. To communicate, the computers must have a common language, and they must follow rules so that both the client and the server know what to expect. The language and rules of communication are defined in a communications protocol. All client-server protocols operate in the application layer. The application layer protocol defines the basic patterns of the dialogue. To formalize the data exchange even further, the

server may implement an application programming interface (API). The API is an abstraction layer for accessing a service. By restricting communication to a specific content format, it facilitates parsing. By abstracting access, it facilitates cross-platform data exchange.

A server may receive requests from many distinct clients in a short period of time. A computer can only perform a limited number of tasks at any moment, and relies on a scheduling system to prioritize incoming requests from clients to accommodate them. To prevent abuse and maximize availability, server software may limit the availability to clients. Denial of service attacks are designed to exploit a server's obligation to process requests by overloading it with excessive request rates.

attacks are designed to exploit a server's obligation to process requests by overloading it with excessive request rates.

6. Database Tables

Assignment:

Field Name	Field Type	Other Information
S.No	varchar	Composite attribute size:11
Student_id	Varchar	Primary key size:10(multivalued attribute)
Faculty_id	varchar	Size:20
subject	varchar	Composite attribute size:200
Class	Varchar	Composite attribute size:200
Year	Varchar	Composite attribute size:20
Date	Datetime	Single Attribute
Path	Varchar	Composite attribute size:1000
Assignment	varchar	Composite attribute size:300
marks	varchar	Composite attribute

		size:100
--	--	----------

Chat:

Field Name	Type	Other Information
S.No	Int	Single attribute size:11
From_id	Varchar	Composite attribute size:100
To_id	Varchar	Composite attribute size:100
Chat	Varchar	Composite attribute size:1000
Date	Datetime	Single Attribute

Debate:

Field Name	Type	Other Information
S.No	int	Single attribute size:11
id	Varchar	Composite attribute size:1000
post	Varchar	Composite attribute size:1000
Date	Datetime	Single Attribute

Debate Register:

Field Name	Type	Other Information
S.No	int	Single attribute size:11
id	Varchar	Composite attribute size:200
name	Varchar	Composite attribute size:200
branch	Varchar	Composite attribute size:200

Date	Datetime	Single Attribute
winner	varchar	Composite attribute size:200

Faculty Details:

Field Name	Type	Other Information
S.No	Int	Single attribute size:11
faculty_id	Varchar	Composite attribute size:100
name	Varchar	Composite attribute size:200
gmail	Varchar	Composite attribute size:200
password	varchar	Composite attribute size:100
department	varchar	Composite attribute size:50
mobile	varchar	Composite attribute size:15
dob	varchar	Composite attribute size:20
path	varchar	Composite attribute size:1000

Feedback:

Field Name	Type	Other Information
S.No	Int	Single attribute size:11
student_id	Varchar	Composite attribute size:10
faculty_id	Varchar	Composite attribute size:20
rating	int	Single attribute

		size:200
remark	varchar	Composite attribute size:1000
branch	varchar	Composite attribute size:50
date	date	Single attribute

Notice Board:

Field Name	Type	Other Information
S.No	int	Single attribute size:11
id	Varchar	Composite attribute size:200
purpose	Varchar	Composite attribute size:1000
Notice	varchar	Composite attribute size:1000
path_attachment	varchar	Composite attribute size:1000
date	datetime	Composite attribute size:50

Questions:

Field Name	Type	Other Information
sno	Int	Single attribute size:11
id	Varchar	Composite attribute size:20
question	Varchar	Composite attribute size:1000

date	datetime	single attribute
count	int	Single attribute size:11

Question Answers:

Field Name	Type	Other Information
id	varchar	Single attribute size:20
aid	Varchar	Composite attribute size:20
answer	Varchar	Composite attribute size:300
date	datetime	single attribute
count	int	Single attribute size:11

Student Details:

Field Name	Type	Other Information
S.No	int	Single attribute size:11
Student_ID	char	Composite attribute size:7
name	Varchar	Composite attribute size:200

year	char	Single attribute size:10
class	varchar	Composite attribute size:200
branch	varchar	Composite attribute size:10
gmail	varchar	Composite attribute size:200
DateofBirth	varchar	Composite attribute size:30
mobile	varchar	Composite attribute size:15
password	varchar	Composite attribute size:200
path	varchar	Single attribute size:1000

Subjects:

Field Name	Type	Other Information
S.No	int	Single attribute size:11
branch	varchar	Composite attribute size:50
subject	Varchar	Composite attribute size:100
subject_ID	varchar	Single attribute size:100

Conclusion

If all of these offerings, faculty, students and supporters alike say that university continues to establish itself as leader and innovator by delivering cutting-edge, real world experiences that provide an unparalleled range of opportunities and effect positive change globally.

“We need to bridge the gap between academia and industry”, by I-Interact

References

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