

# Software Engineering 2016



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Pooja Biyani, Simran Gupta

## <Group ID: B-11> - <Canny Campus>

**Screencast Video Link:** <https://youtu.be/EZyXlIyzaBM>

**Demo Link:** <http://www.cannycampus.16mb.com>

**User IDs/Passwords for Demo: Login as:**

Student: User ID- y14uc157@lnmiit.ac.in Password- 12345678

Faculty: User ID- narsibolluju@lnmiit.ac.in Password- 12345678

LH Supervisor: User ID- lhsupervisor@lnmiit.ac.in Password- 12345678

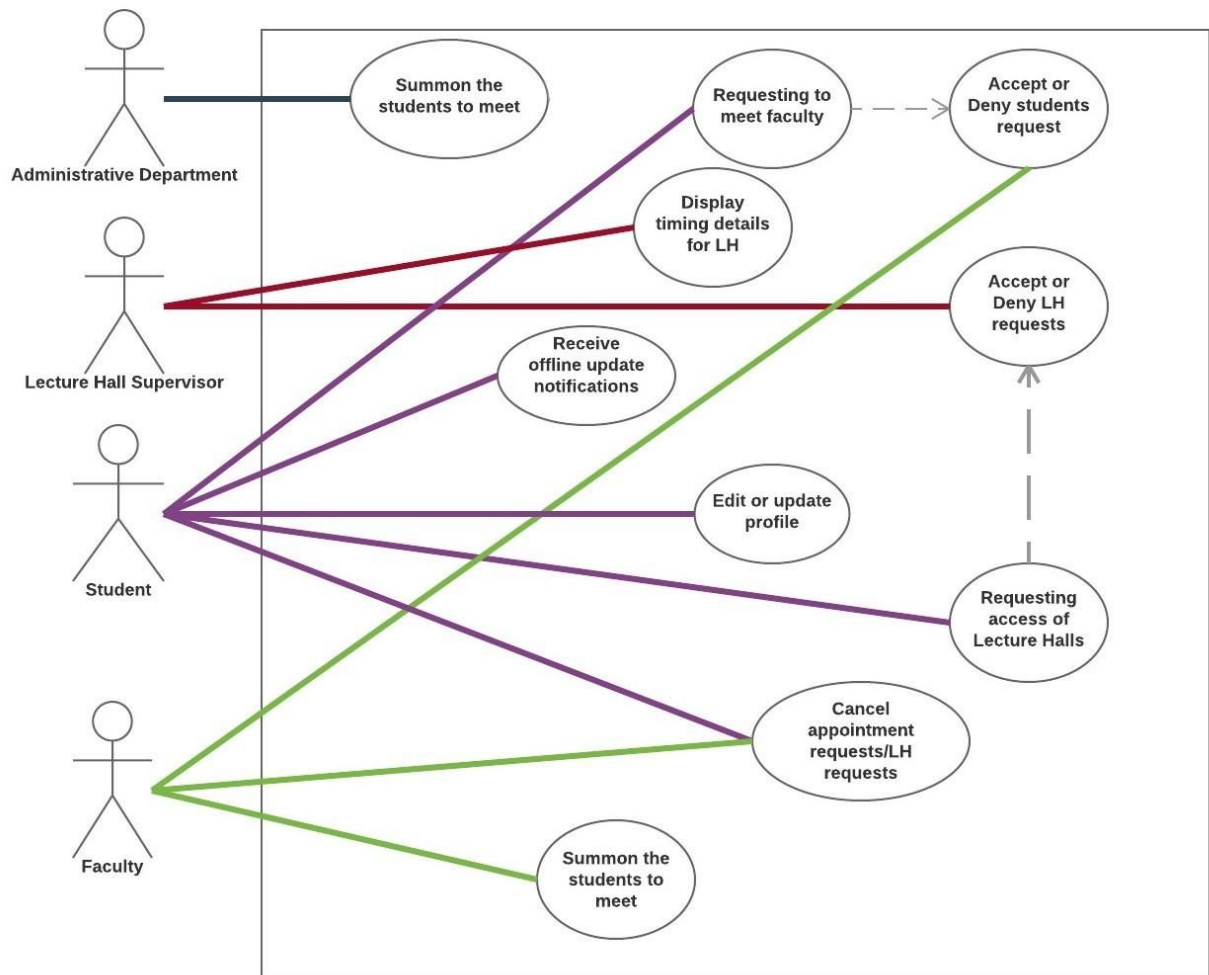
**Product Owner:** Simran Gupta and **Scrum Master:** Mudit Sharma

This app is about an efficient interaction way through between the faculty and students and acts as a multipurpose platform for students. It enables students to easily know about the availability of faculties and different lecture halls. It helps in reducing the time taken to commute to and fro, by teacher setting their status available or busy and students finding an apt time for meeting.

# Use case diagram-Revised

<without nested boundary>

## USE CASE DIAGRAM



## Product Backlog-Revised

Story ID	As a/an	I want to ...	so that ...	Priority (H/M/L)
1		<i>Booking/Appointment(Master User Story)</i>		
(a)	Student	Get an appointment with any faculty as per my convenience and also book available free slot	I can manage my time efficiently and other events don't clash at the same time.	H
(b)	Student	Book Lecture Halls	I can book the best available LH as per my requirement.	H
(c)	Faculty	Book Lecture Halls for extra classes	I can conduct an extra class as and when required.	H
2		<i>Profile and Notification Settings (Master User Story)</i>		
(a)	Student	Update my profile details	I can give my current contact details for receiving notifications.	M
(b)	Student	Receive email notification	I can change my password.	H
(c)	Faculty	Respond to notifications of students	Students can get their appointment.	H
(d)	Student	Receive email notifications	I can receive updates about requests made to faculty.	H
3	Student	View all possible LHs, available/free for booking	I can see which LH I require as per my need.	M
4		<i>Cancellation(Master User Story)</i>		

(a)	Student	Cancel any LH permission if necessary	Other students can book that LH if required.	H
(b)	Student	Cancel any meeting/ appointment set with the faculty	I don't waste the waiting time of the faculty.	H
(c)	Faculty	Cancel any LH permission necessary	Others can use that LH if required.	H
(d)	Faculty	Cancel any meeting/ appointment with the students in case of work/meeting	Student does not face inconvenience when he does not find the teacher in office.	H
(e)	Faculty	Suggest modified meeting timings to students	In case I am busy in that time, Student can meet me some time after	M
5	Lecture Hall Supervisor	Maintain(accept/deny) LH requests according to the timing details	No two requests for the same LH for the same time clashes.	H
6	Faculty	Summon the students as and when required	My classes do not clash with my schedule or the student meeting hours.	M
7	Administrative Department	Summon the students to meet whenever required	Important information could be conveyed to them timely.	L
8	User	Change my password	my account does not become vulnerable to security issues.	H



## Sprint 3 Plan - Backlog

Story ID	As a/an	I want to ...	so that ...	estimate	actual
1.(a)	Student	Update my profile details	I can give my current contact details for receiving information.	01:00	01:30
(b)	Student	Receive email notification	I can change my password.	01:00	01:00
2.(a)	Faculty	Respond to notifications of students	Students can get their appointment.	03:00	02:45
(b)	Student	Receive email notifications	I can receive updates about requests made to faculty.	01:00	02:00
3.	Visitor	Access social links	I can stay updated and connected with the app.	00:30	00:15

## Sprint 3 Plan - Acceptance criteria and test result

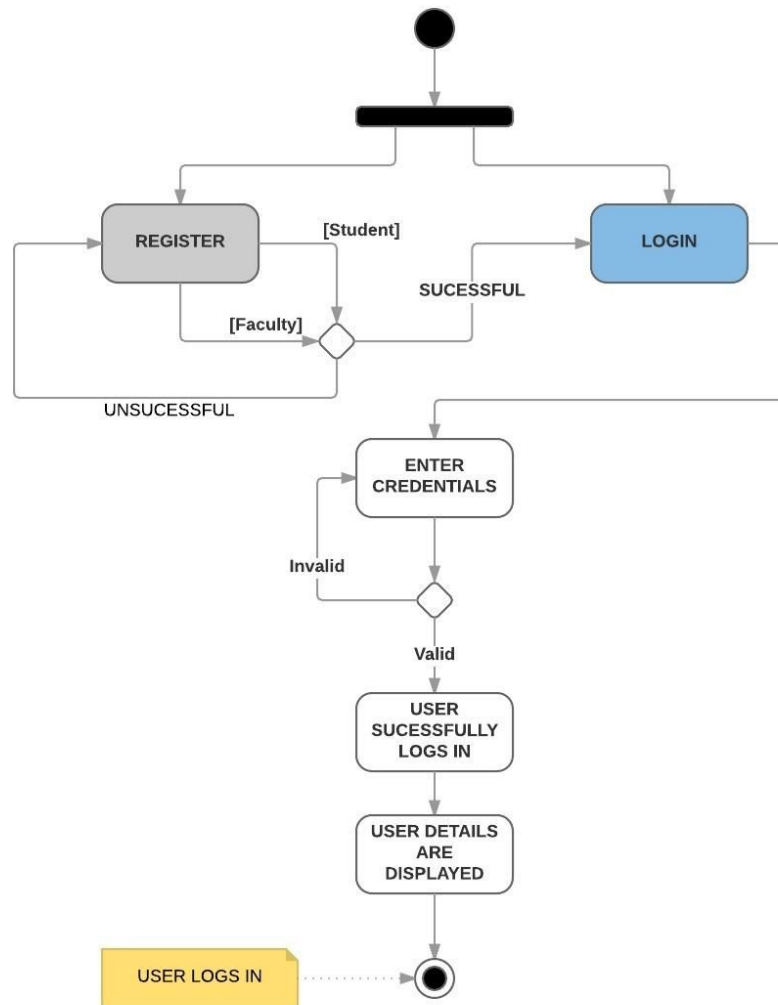
Story ID	Acceptance criteria	Test Result
1.	As a user, I can set the password for my account with the restriction that it is of minimum 8 char length and not consist of certain symbols as specified in the form.	Successful passwords are created.
2.	While registering as a student or as a faculty, I must fill up at least those field which are mandatory and marked by an asterisk.	Registration is successful only when the mandatory fields are filled up.
3.	As a user, I must make sure that I edit and update my contact details if any change.	Notification will not be received if contact details are not up to date.

# Activity diagrams - Revised

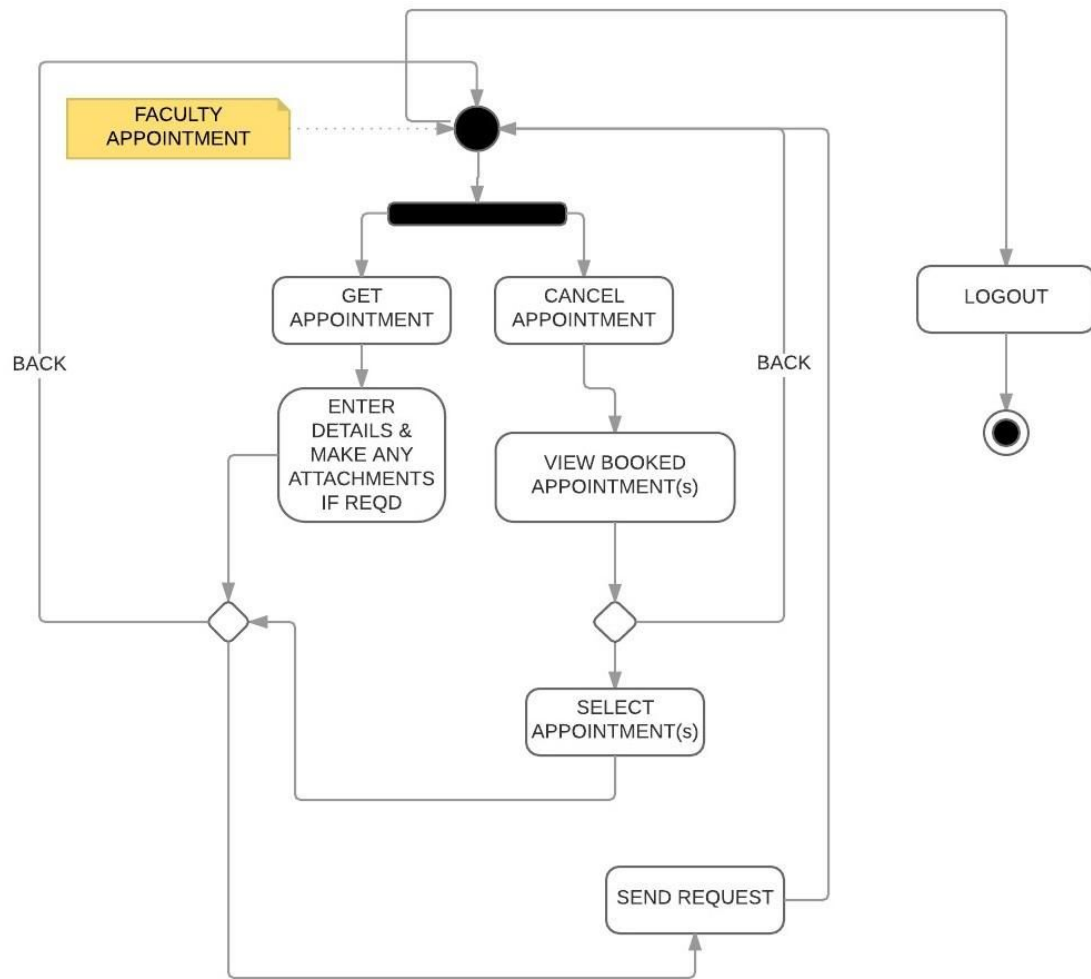
Approximately one for each team member with correct notation; diagrams should include business activities/operations – not UI navigation and concepts

## LOGIN AD(LOGIN)

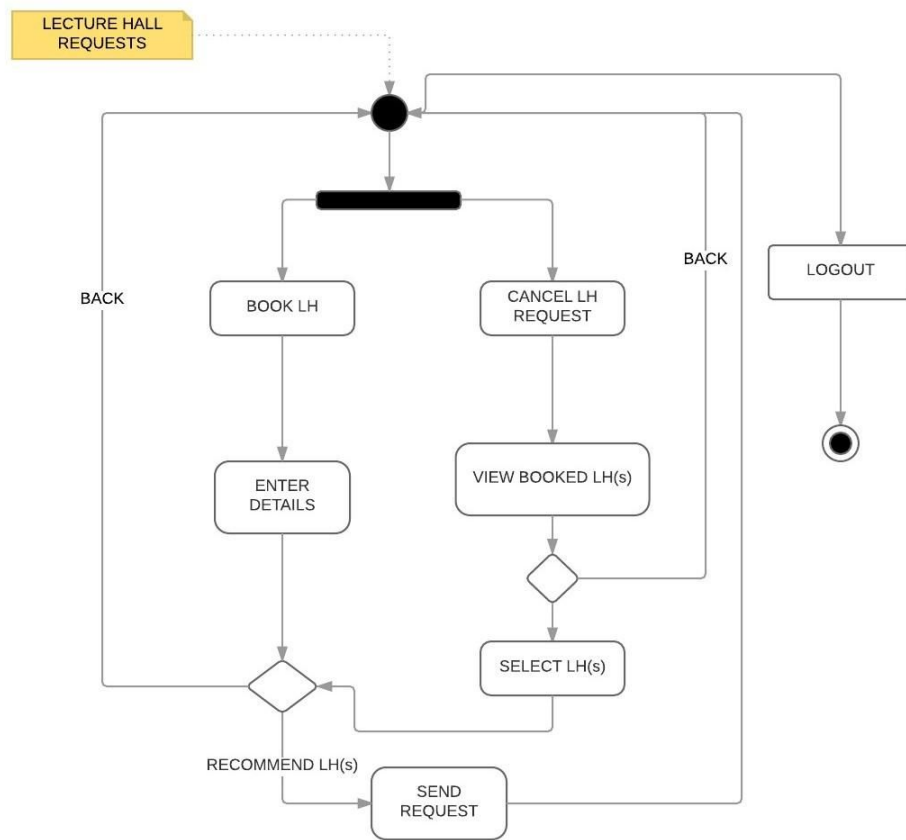
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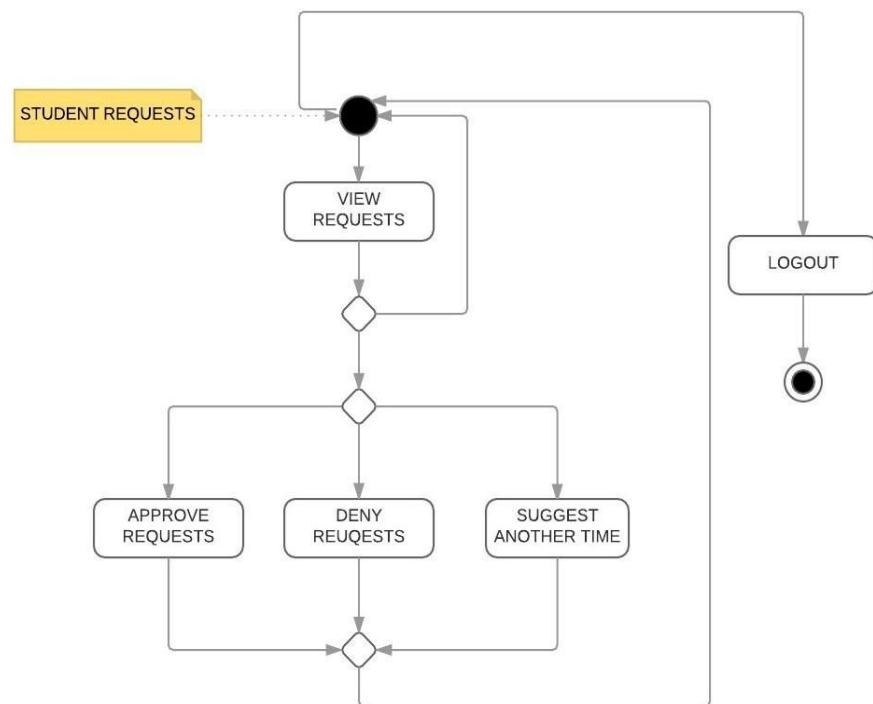


## LECTURE HALL REQUESTS AD(BOTH)



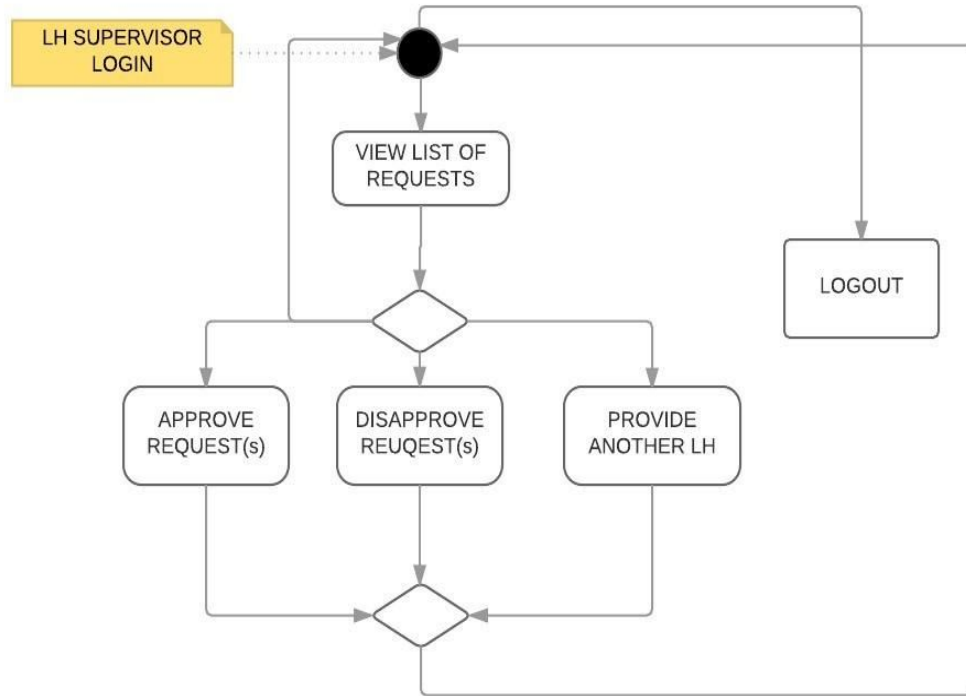
## FACULTY(STUDENT REQUESTS)

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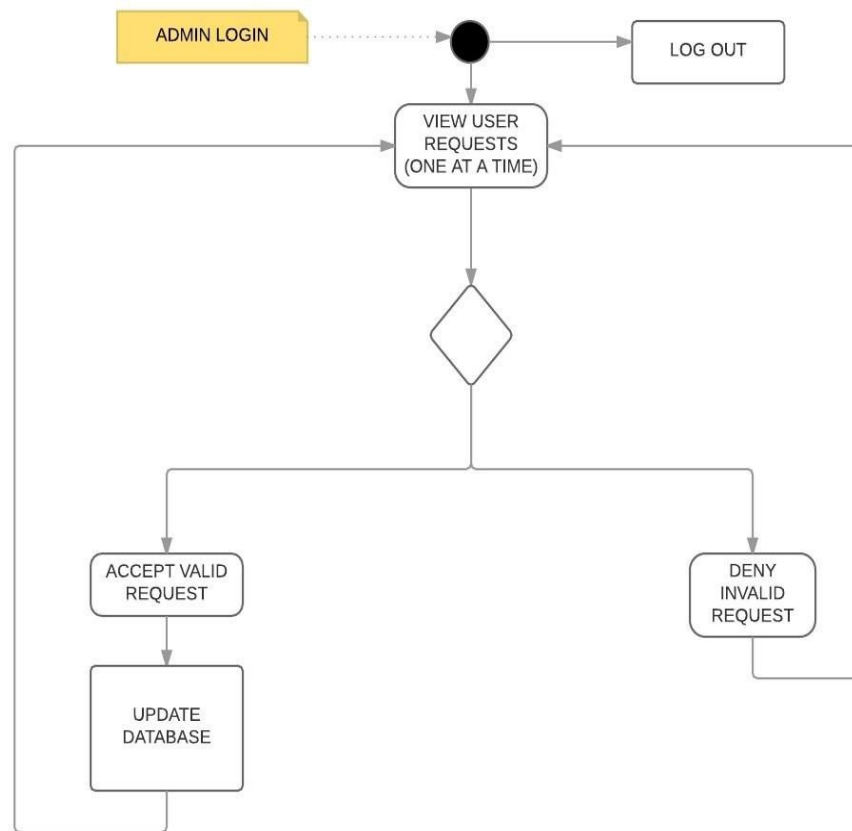
## LH SUPERVISOR LOGIN AD

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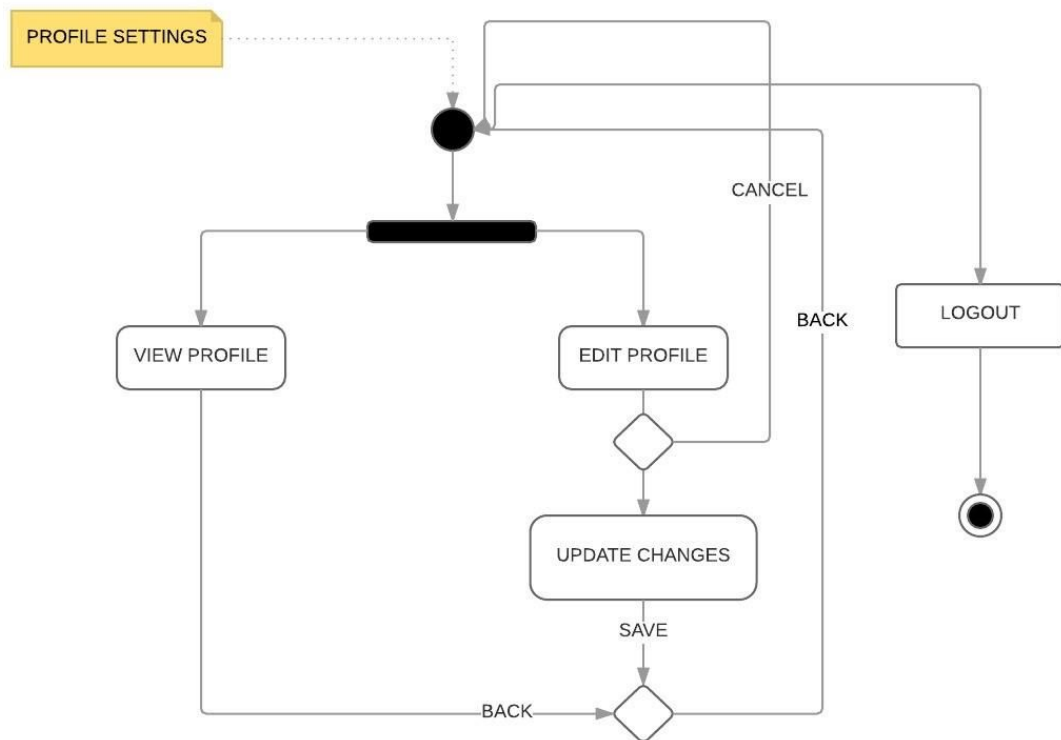


## ACTIVITY DIAGRAM (ADMIN)

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## PROFILE SETTINGS AD(BOTH)



# <UI/UX Designs (Wireframes)>

For the Sprint 3 functionality

Diagram 1.1  
(Home Page)

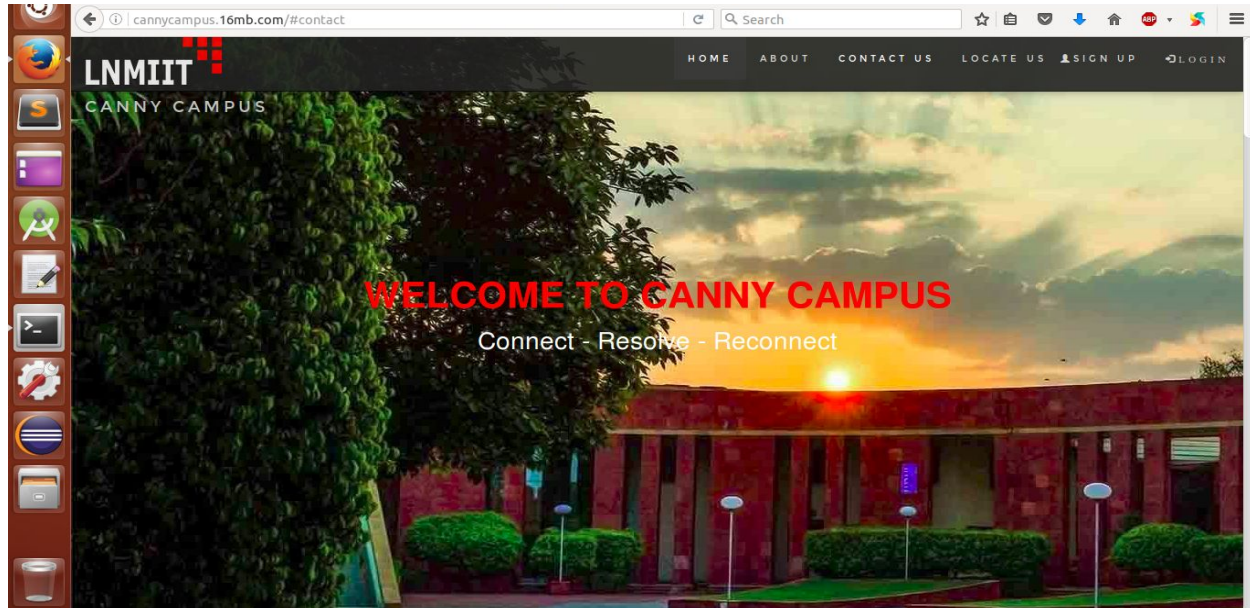
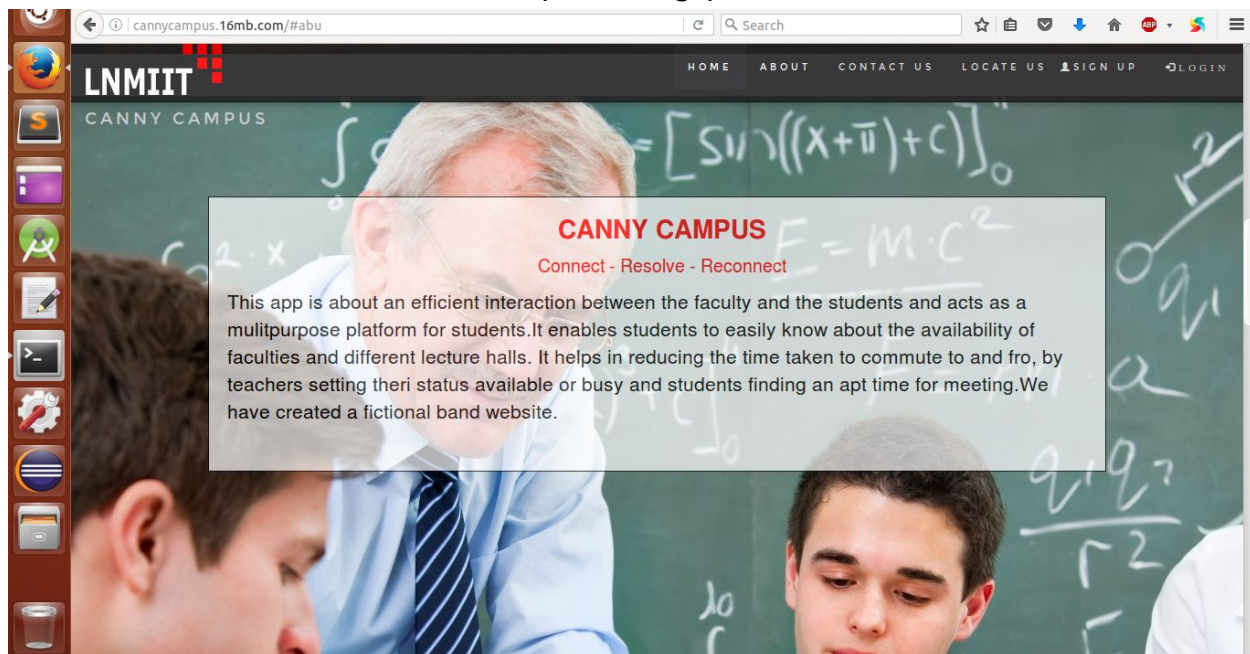


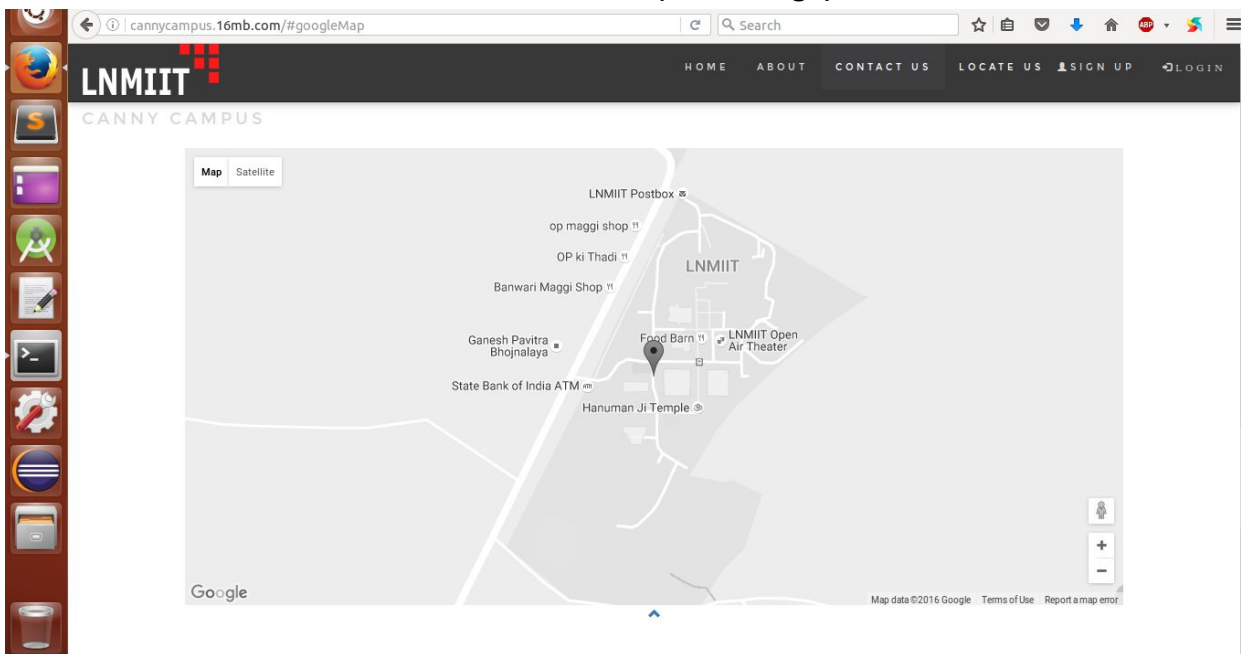
Diagram 1.2  
(Home Page)



**Diagram 1.3  
(Home Page)**

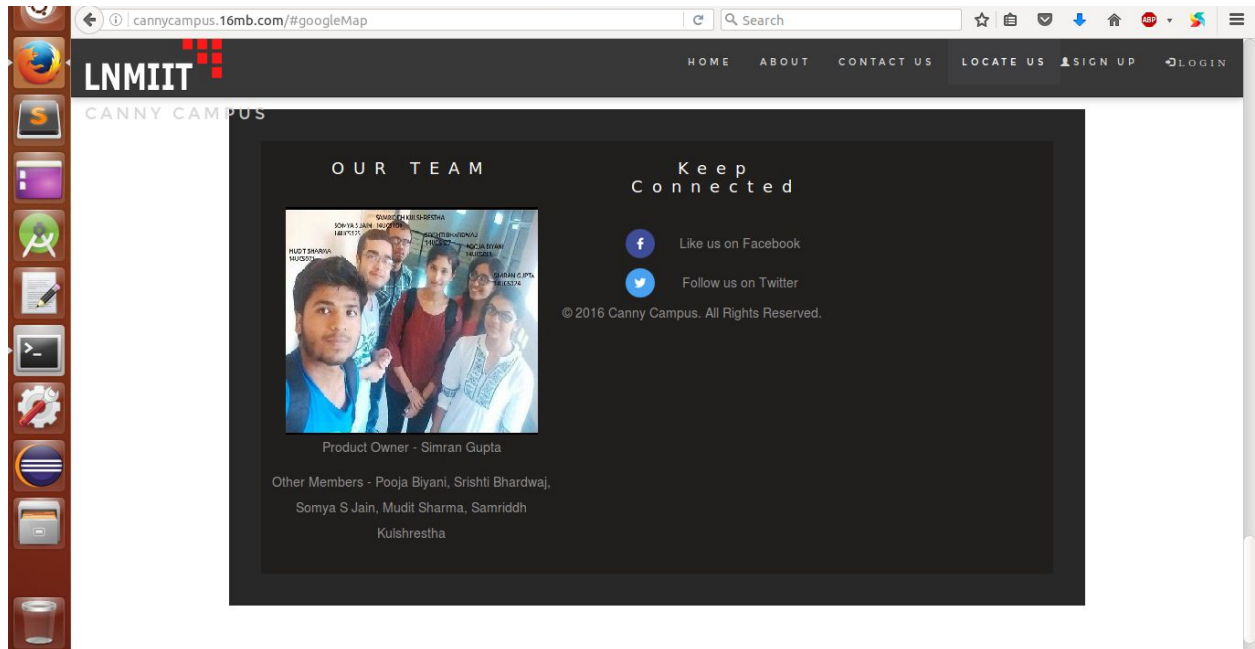
The screenshot shows a web browser window with the URL `cannycampus.16mb.com/#contact`. The page features a dark header with the LNMIIT logo and navigation links: HOME, ABOUT, CONTACT US, LOCATE US, SIGN UP, and LOGIN. Below the header, the text "CANNY CAMPUS" is displayed. The main content area is titled "Contact" and includes a form with fields for Name, Email, and a large text area for a Comment. A "SEND" button is located at the bottom right of the form. To the left of the form, contact information is listed: "Any Queries? -Drop a note.", "Jaipur, India", "Phone: +141 5191711/5191712/09", "Email: info@lnmiit.ac.in", and "Website: www.lnmiit.ac.in". At the bottom of the page, there is a map section with "Map" and "Satellite" tabs.

**Diagram 1.4  
(Home Page)**





**Diagram 1.5**  
**(Home Page)**



**Diagram 2**  
**(Login Page)**

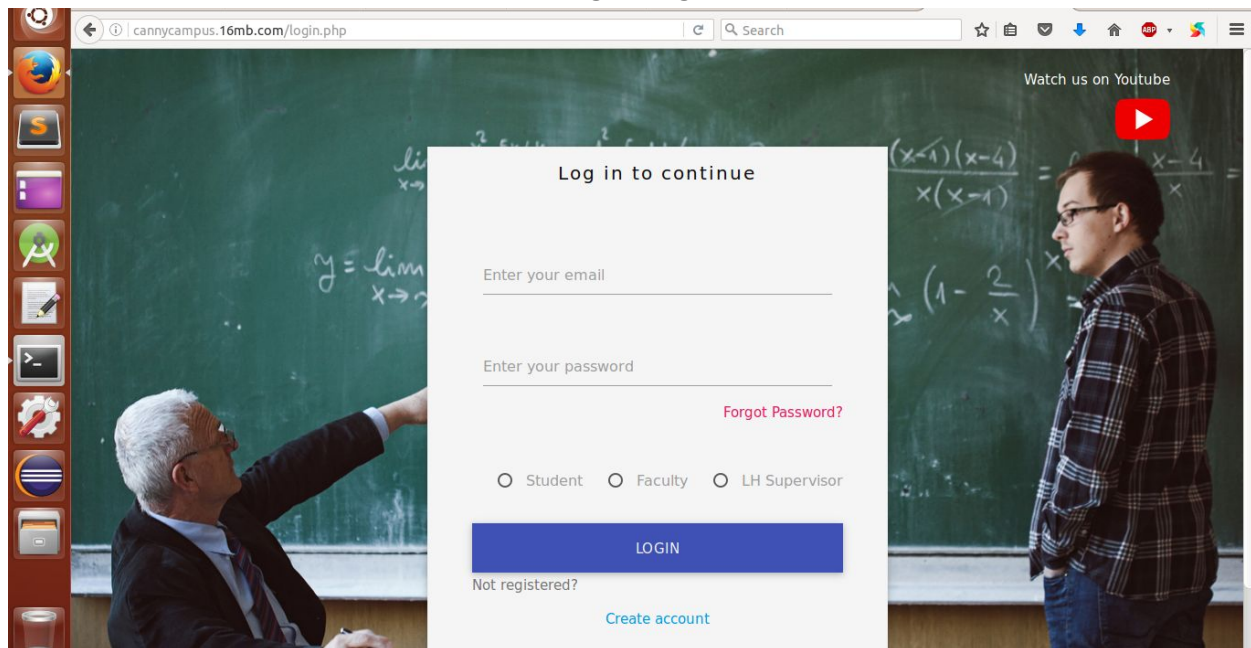


Diagram 3  
(Register)

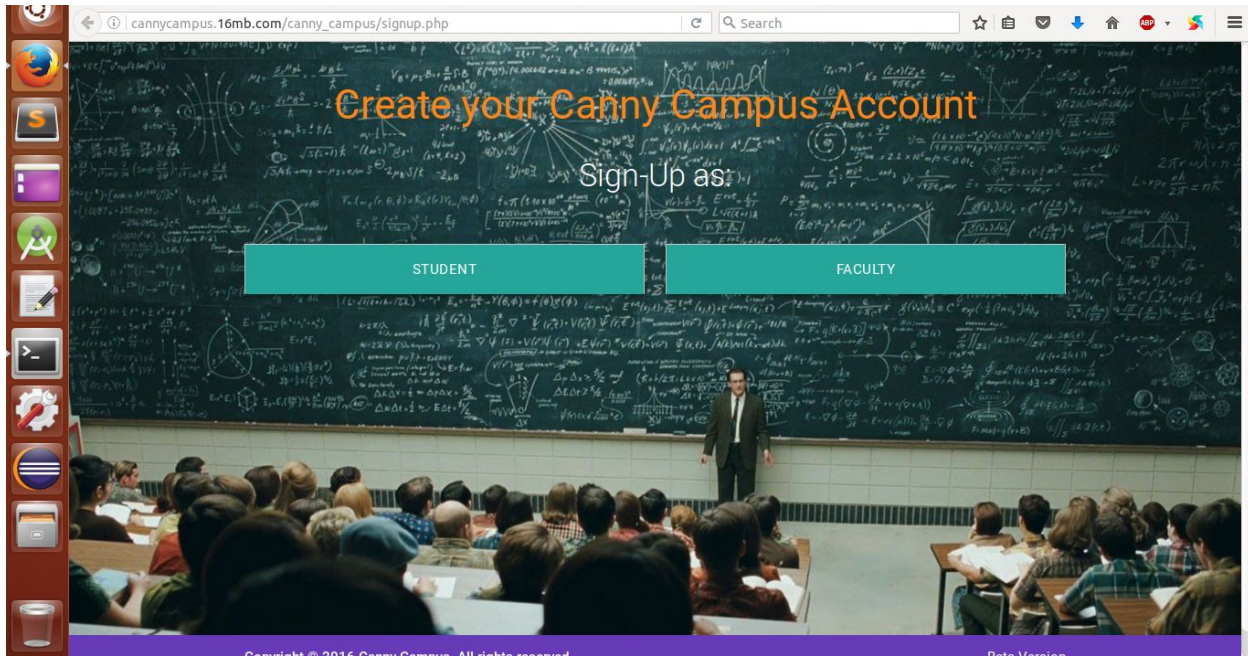
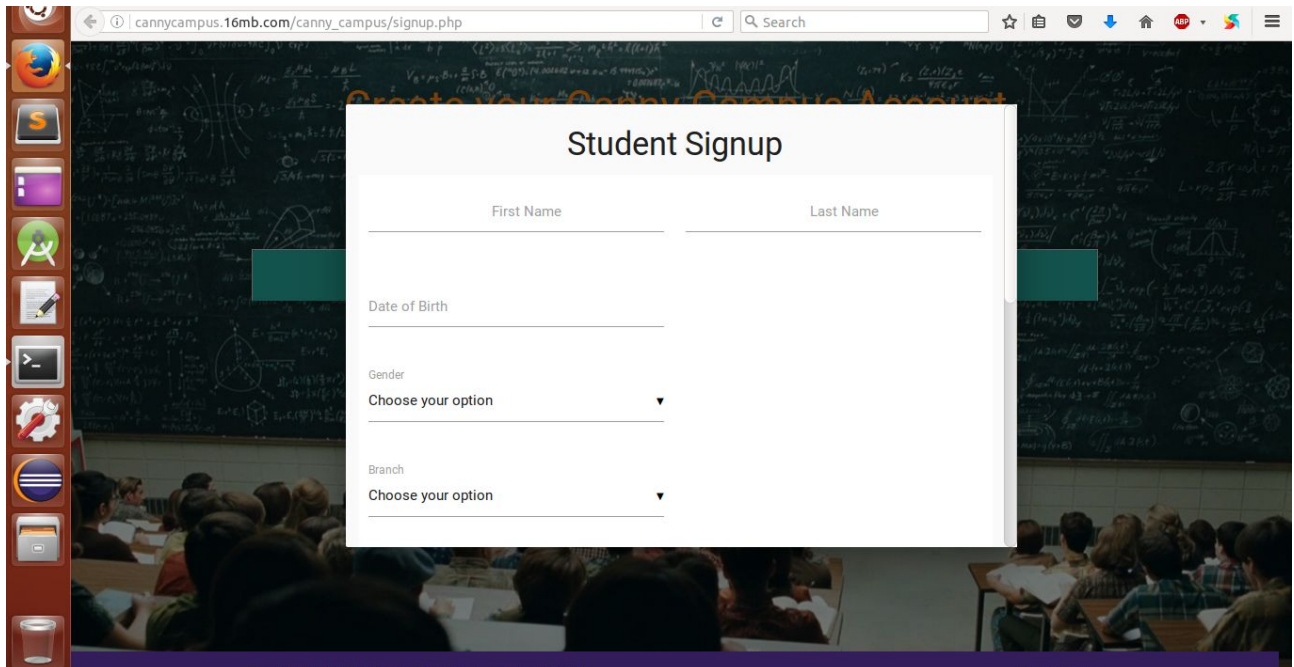


Diagram 4  
(Sign-Up as Student)





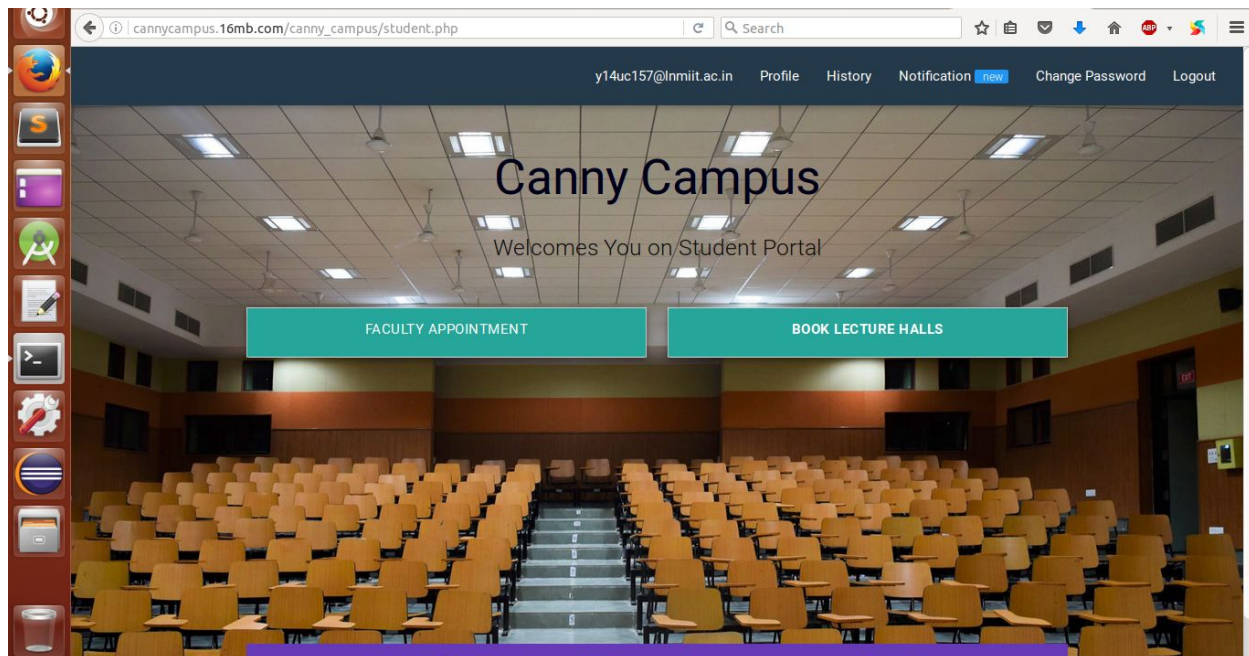
**Diagram 5**  
**(Sign-Up as a Faculty)**

The screenshot shows a web browser window with the URL `cannycampus.16mb.com/canny_campus/signup.php`. The page features a background image of a classroom with students and a chalkboard filled with mathematical equations. A white form titled "Faculty Signup" is centered on the page. The form contains the following fields:

- First Name** and **Last Name**: Text input fields.
- Gender**: A dropdown menu with the text "Choose your option".
- Department**: A dropdown menu with the text "Choose your option".
- Experience**: A text input field with a small icon to its right.

At the bottom of the browser window, a copyright notice reads: "Copyright © 2016 Canny Campus. All rights reserved." and a "Beta Version" label is visible in the bottom right corner.

**Diagram 6**  
**(Student Portal)**



**Diagram 7**  
**(Book Lecture Hall-Student)**

The screenshot shows a web browser window with the URL `cannycampus.16mb.com/canny_campus/student.php`. The page displays a 'BOOK LECTURE HALLS' form. The form fields are as follows:

- Number of Participants:** A text input field with a small icon to its right.
- date of event:** A text input field.
- Start time of event:** A text input field with a placeholder 'hh:mm'.
- End time of event:** A text input field with a placeholder 'hh:mm'.
- Reason:** A text input field.
- SUBMIT:** A green button at the bottom right of the form.

A secondary teal button labeled 'FACULTY APPOINTMENT' is visible in the top left corner of the form area.

**Diagram 8**  
**(Faculty Appointment-Student)**

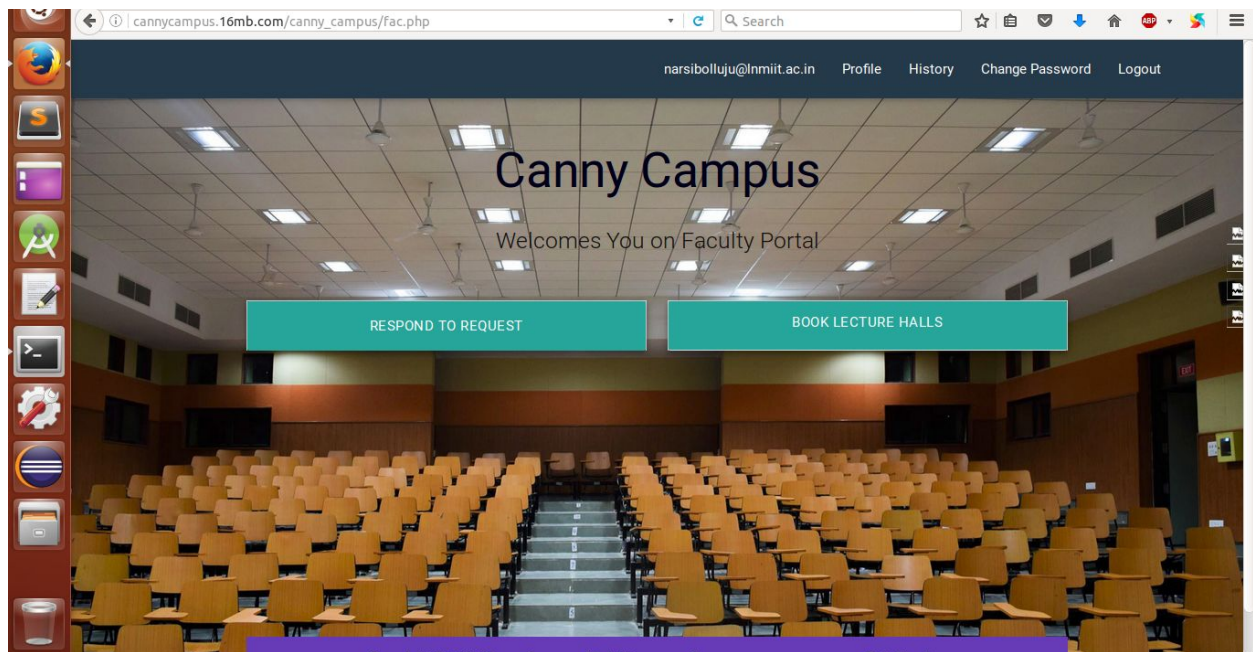
The screenshot shows the same web browser window. The page displays a 'FACULTY APPOINTMENT' form. The form fields are as follows:

- Faculty Email:** A text input field.
- Date of Appointment:** A text input field.
- time:** A text input field with a placeholder 'HH-MM'.
- Purpose of visit:** A text input field.
- SUBMIT:** A green button at the bottom right of the form.

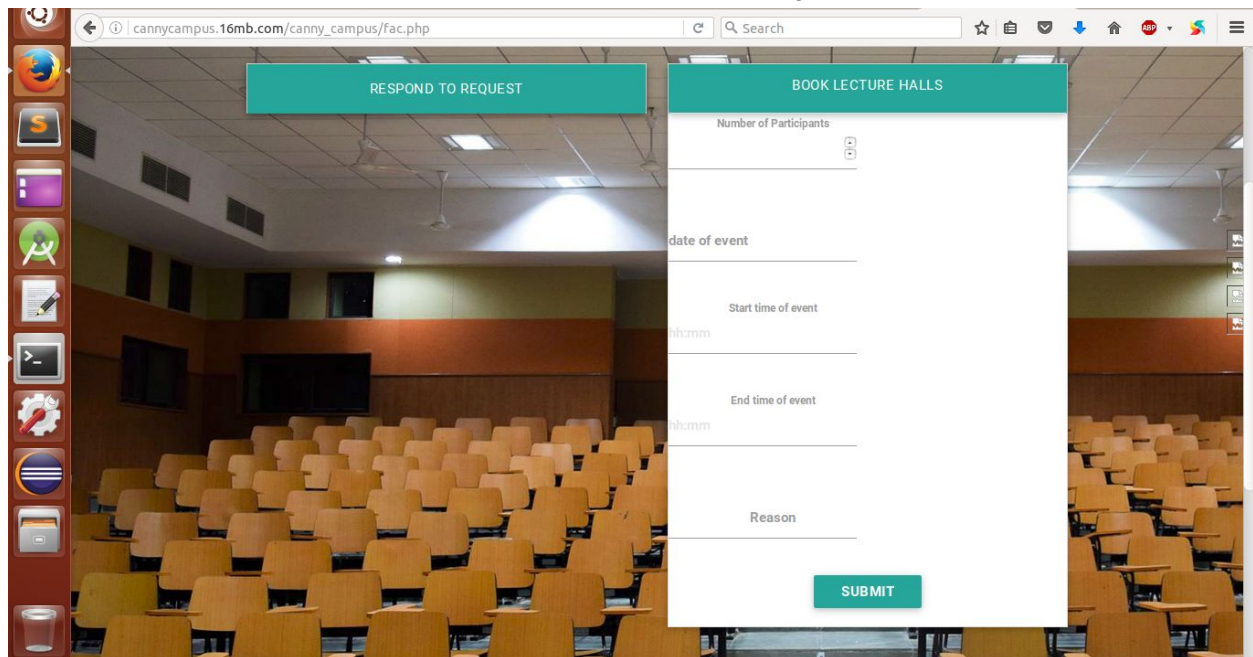
A secondary teal button labeled 'BOOK LECTURE HALLS' is visible in the top right corner of the form area. The background of the page shows a lecture hall with the text 'Canny Campus' and 'Welcomes You on Student Portal' at the top.



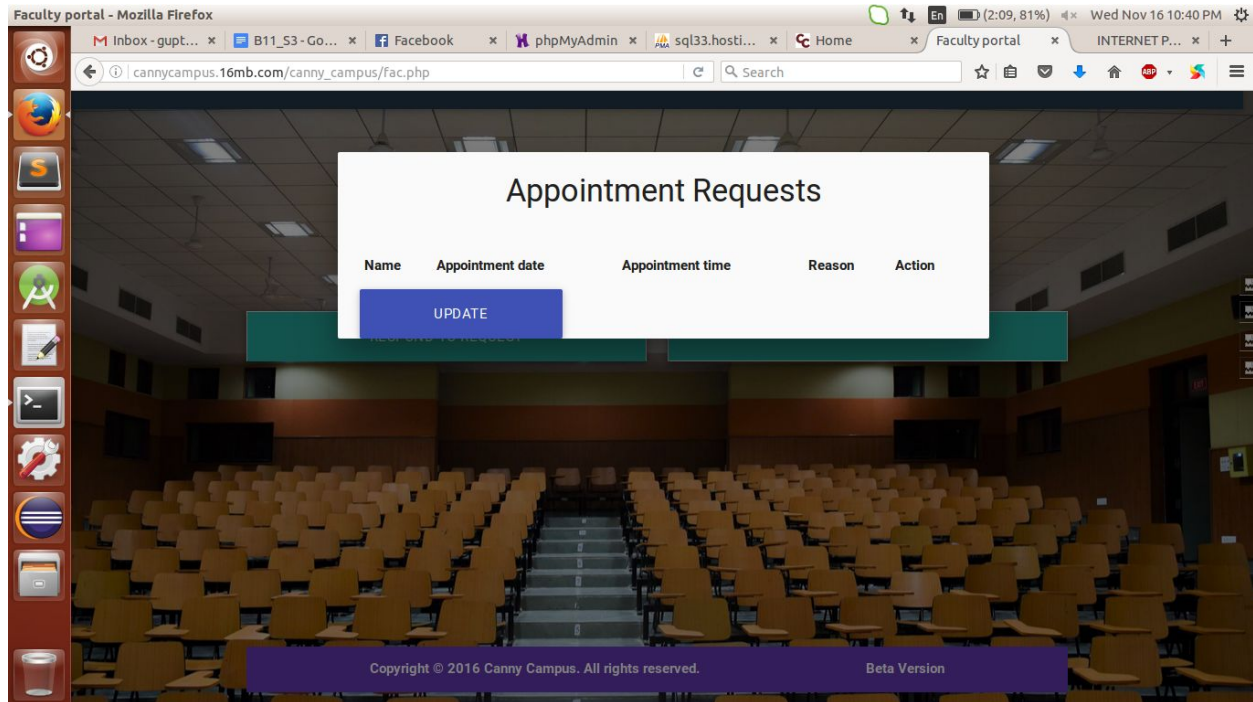
**Diagram 9**  
**(Faculty Portal)**



**Diagram 10**  
**(Book Lecture Hall-Faculty)**



**Diagram 11**  
**(Respond to requests-Faculty)**



**Diagram 12**  
**(Respond to requests-LH Supervisor)**

The screenshot shows a web browser window titled "cannycampus.16mb.com/canny\_campus/lhsuper.php". The page displays the "Respond to LT Requests:" section. At the top right, there is a user profile section for "lhsupervisor@lnmiit.ac.in" with links for "Change Password" and "Logout". Below this is a table with the following columns: Email, Number of participants, Booking date, Start time, End time, Reason, and Action. The table contains four rows of data, each with a "Pending" status and a dropdown arrow in the Action column. A blue "UPDATE" button is located at the bottom left of the table area.

Email	Number of participants	Booking date	Start time	End time	Reason	Action
y14uc187@lnmiit.ac.in	55	21 October, 2016	19:30:00	21:00:00	Android Classes	Pending
y14uc157@lnmiit.ac.in	120	10 November, 2016	19:00:00	21:00:00	Web Attack	Pending
sandeep@lnmiit.ac.in	100	21 November, 2016	17:00:00	19:00:00	Extra class	Pending
narsibolluju@lnmiit.ac.in	100	25 November, 2016	10:00	12:00	SWE Class	Pending

**Diagram 13**  
**(Edit Profile)**

The screenshot shows a web browser window with the URL `cannycampus.16mb.com/canny_campus/profile.php`. The page title is "Srishti Bhardwaj" and the main heading is "Edit Profile". On the left, there is a profile picture placeholder and contact information: Name: Srishti Bhardwaj, Email: y14uc157@lnmiit.ac.in, Batch: , Contact: 9461631493. The main form area contains fields for Name (Srishti Bhardwaj), Gender (dropdown), Branch (dropdown), Year (dropdown), Email (y14uc157@lnmiit.ac.in), and Contact (9461631493). An "UPDATE" button is located at the bottom right of the form.

**Diagram 14**  
**(Appointment History)**

The screenshot shows a web browser window with the URL `cannycampus.16mb.com/canny_campus/studhistory.php`. The page title is "Appointment Requests" and the user is logged in as y14uc157@lnmiit.ac.in. The page displays two tables: "Appointment Requests" and "Lecture Hall Requests".

Name	Appointment date	Appointment time	Reason	Action
narsibolluju@lnmiit.ac.in	18 November, 2016	10:00	Project Meet	Approved

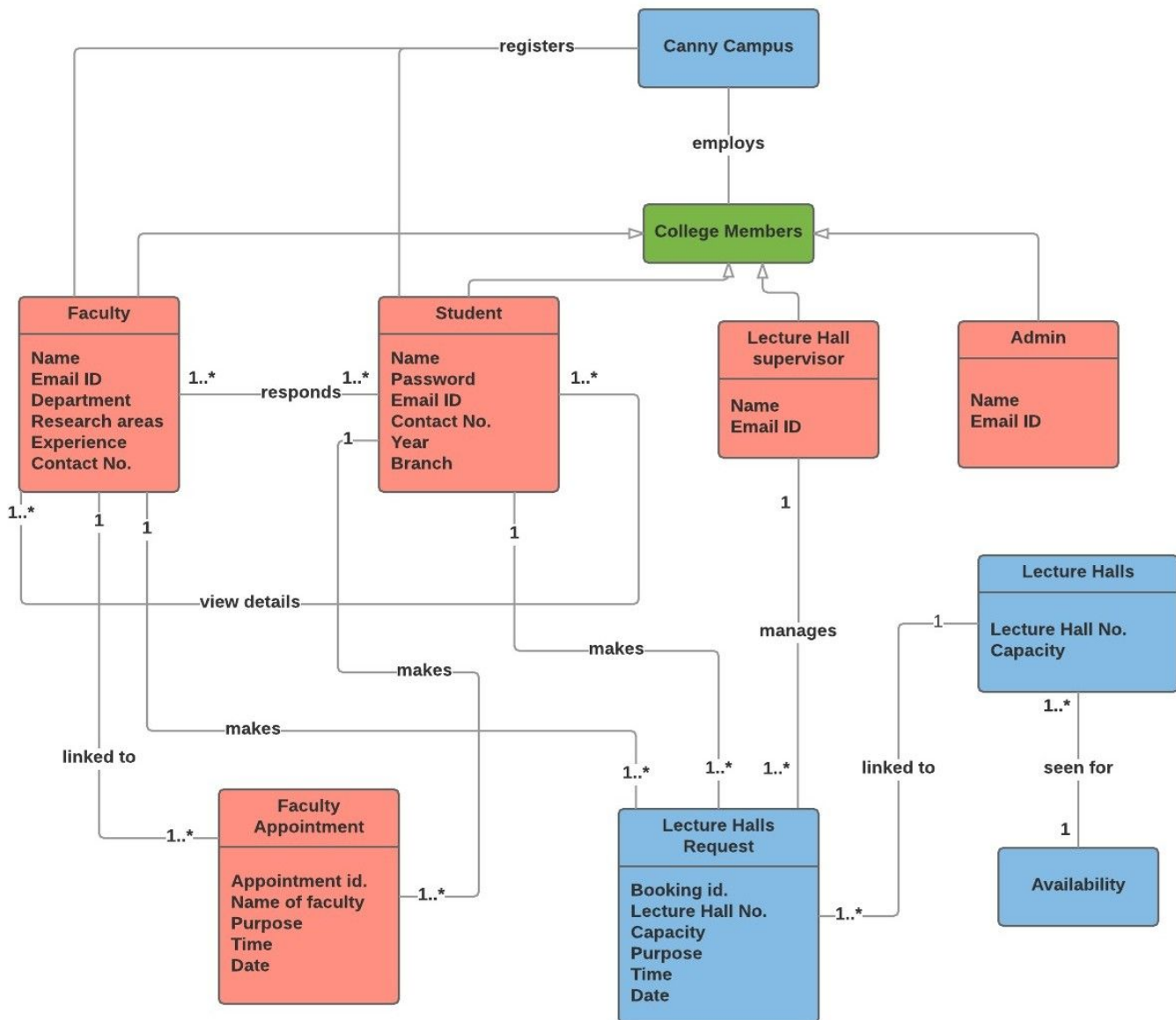
  

Number of participants	Booking date	Start time	End time	Reason	Action
120	10 November, 2016	19:00:00	21:00:00	Web Attack	Pending
50	25 November, 2016	07:00	08:00	Android Class	Disapprove

## <Class diagram-Revised and Extended>

The three main design patterns used in our class diagrams are:

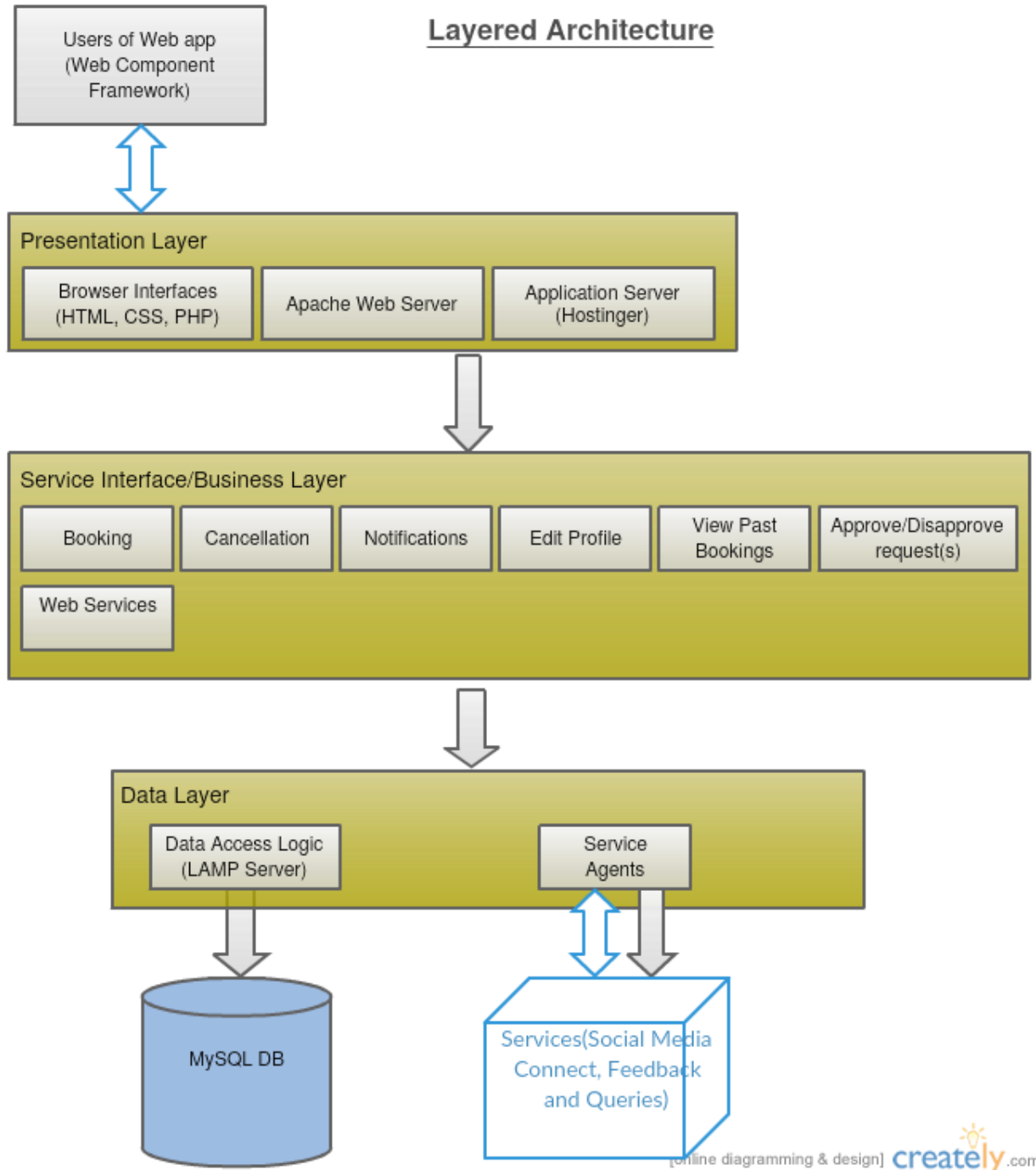
- **Structural Pattern:** Ease the design by identifying the type of relationships between entities. Such as, Decorator and Composite Patterns have been used to define one-to-one or one-to-many relationship between the classes. Also, it provides extended functionality, such as, booking of lecture halls or making an appointment request.
- **Behavioural Pattern:** Define way of communication between the entities. In this diagram, the different lines between entities state their purpose and mode of communication.
- **Creational Pattern:** Helps in solving the design complexities. In this case, with a proper usage of classes at different layers with definite attributes.





# System Architecture Diagram

<layered architecture is suggested; but you may choose the most appropriate one for your project>



## Scrum Minutes of the Meeting

(Two entries per week for each team member)

### Sprint 3 – Week 1

Team Member	Work Completed	Work Planned	Impediments
Simran Gupta	1. Enhancing GUI like changing colour of buttons and navbar, background etc.  2. Allowing user to change password	1. To modify the GUI according to the given reviews for better user experience.  2. To allow a user to change his password and new password gets updated in database.	To ensure uniformity on all the pages and that the theme seems pleasing to the visitor.
Srishti Bhardwaj	1. Analyzed the reviews  2. Modified GUI according to reviews given for better user experience.	1. For better outlook and presentation of the site, theme was modified so that visitors feel more at comfort while browsing the website.	To ensure that all fonts and colours used blend in properly with the theme.
Pooja Biyani	1. Made slight required modifications in the database tables.  2. Import multiple entries of appointment requests.	1. Cross checking of the proper entries occurring in the table and a linking between them.  2. To ensure that faculty is receiving all the student requests.	Faculty was able to view only a single request even though multiple students had made multiple requests.
Somya Shekhar Jain	1. Form validations was taken care of.  2. Verified and testing the database tables.	1. Form should not be accepted for submission unless all fields marked with asterisk are filled.  2. To ensure that the database tables are all in conformity with the project	Connectivity issues while implementing forms and implementing few of the fields as required fields. Proper extraction and storing of data from and to the database.

		requirements and that data is properly extracted and stored.	
Mudit Sharma	<p>1.Import multiple entries of lecture hall requests.</p> <p>2.Email notification not working.</p>	<p>1.To be able to import all the entries of lecture hall requests from the database for the lecture hall supervisor to see.</p> <p>2.To also ensure that user is receiving notifications via email.</p>	Only a single entry was being imported. This issue was resolved. Also, the hosting company is not giving the required permissions to enable the email notifications.
Samriddh Kulshrestha	<p>1.Update entries in the database when changes are made and saved in the edit profile section.</p> <p>2.Implementing the new notifications functionality in the navigation bar.</p>	<p>1.To ensure that if user edits his profile information, the updated information gets stored in the database.</p> <p>2.To implement notifications functionality so that users can receive notifications regarding their appointment and LH requests.</p>	Ensuring that current entries in database is replaced with updated entries without the creation of duplicate entries.

### Sprint 3 – Week 2

Team member	Work completed	Work planned	Impediments
Simran Gupta	1.Created the system architecture.  2. Connected the app with social media.  3. Search bar could not be implemented.	1.To create the system architecture for the project and also use design patterns.  2. To create a better user experience by connecting with social platform.  3. Implementation of search bar option on the home page for various purposes.	Wanted to have a search bar that could search according to category like department, name etc but implementation complexities did not lead to a successful implementation.
Srishti Bhardwaj	1. Added the design patterns  2. Summarized the entire project.  3. Test for broken links after modification of project.	1.Modifying the class diagram incorporating in it the design patterns and summarizing the project.  2.Also, to see that all pages are redirected to proper pages.	Issues in coming to a conclusion as to what design patterns to follow.
Pooja Biyani	1.Revised the use case diagram and designed the sprint 3 product backlog.  2.Verify if GUI has been made in accordance with the requirements and functionalities and reviews.	To get in one place all the new features added to the app in this sprint and also to check the GUI.	None
Somya Shekhar Jain	1.Created guest user id and password for login purposes.  2.To verify if the table structure is proper with no errors.	1.For demo purpose, few ids had to be created and to see if the tables in the database are proper.	More than 11 entries are not allowed so very few ids were created for testing purposes.

	3. To verify all functionalities.	2.To ensure all functionalities have been implemented.	
Mudit Sharma	1.Hosting company did not allow more than 11 entries. Rest everything else was okay.  2.Email notification unsuccessful.	1.To ensure that hosting is error free.  2.Again try implementing the email notification.	Entries were restricted and many user accounts could not be created. Permission was not being given to enable sending of notifications via email.
Samriddh Kulshrestha	1.Designed the wireframes.  2.Ensured the coherency in the retrieval and storage of data in the database.	1.To add wireframes to the sprint 3 document.  2.To see that data is being properly sent and retrieved from the database.	None

## Sprint 3 Summary

<<https://youtu.be/EZyXljyzaBM>>

<<http://www.cannycampus.16mb.com>>

### Review Summary (about the product)

1	In our first meeting, we listed out the remaining work which was to be done among which most got successfully implemented leaving out one or two tasks.
2	In our second meeting, we completed the implementation of the functionalities identified for Sprint 3. We had to make the project enable the feature of suggestion of timings for appointments and lecture hall bookings. Also, several issues being encountered were resolved on the hosted site.
3	In our third meeting, the final completion and slight modifications in the UI/UX was paid heed to. All the features were made up to the mark, design was user friendly and redirection of the links was taken care of.

### **Retrospective Summary (about the process)**

1	The entire retrospection of the app was made right from the website to the document. Loopholes were to be filled with small and minor changes. Incomplete functionalities were to be completed and coherency of the database was to be ensured. Major work in the document was similar to the previous ones except that a few new things were introduced like the design patterns and the system architecture.
2	Certain disputes came in coming to a conclusion regarding the table structure design and also finalizing the GUI design. However, with further discussions and taking into account everyone's views, a common conclusion was drawn.
3	To avoid such disputes, such tasks instead of being given to a single member should be shared between two to avoid hassle and ensure smooth and fast completion. Reviews, though, can be taken from all.

# Overall Project Summary

Basic idea of this app of ours is to provide an efficient interaction between the faculty and the students and hereby act as a multipurpose platform for students. It enables students to easily know about the availability of faculties and different lecture halls. It helps in reducing the time taken to commute to and fro, by teacher setting their status available or busy and students finding an apt time for meeting.

The feature of booking an appointment with faculty has an option of initially the student filling up his preferred timings and purpose of meeting. Also, the students will be notified by their approval or disapproval of requests through both online and offline notifications. On the other hand, the faculty will be providing their areas of interest, based on which students can easily communicate their ideas with faculty.

Similarly, one of the remarkable features of the application is booking of lecture halls online. Based on the required participants, the lecture hall of particular size will be suggested to the faculty or student. If one particular lecture hall request is approved by the LT Supervisor, then the same lecture hall is disabled as an available option in the list of lecture halls. Both, can move their booking history in order to make any changes, if required.

Any general visitor of the site, needn't necessarily login to surf through the site. He or she can view the details of the application(college) on various different social platforms and stay updated with the current information.

Overall, our idea is based on realistic application and if implemented by implying certain more restraints, it can turn out to be useful at a large scale, especially on college level. The details of different faculties and departments can be linked through the main site of the campus.

We discovered a new horizon of software tools and learned to implement and use the same. We blended with project, learning new techniques and a proper coordination while implementing some idea in a team. This project provided us with an urge to explore beyond the definite boundary of some subject. Software Engineering, overall, provided us with coherency.