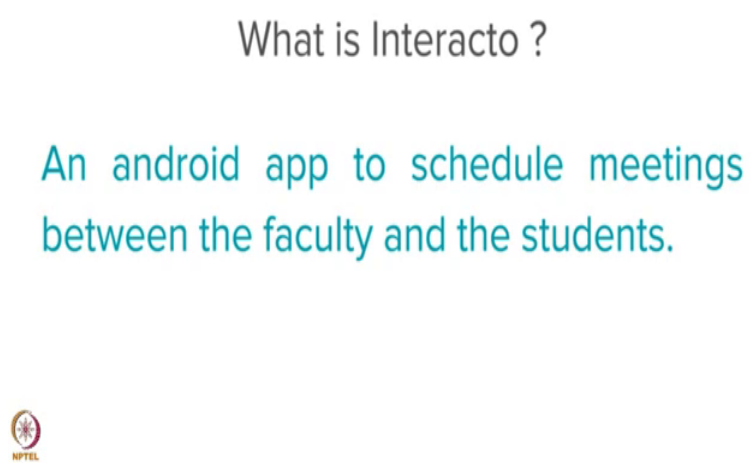
Introduction to Human Computer Interaction
Prof. Ponnurangam Kumaraguru ("PK")
Department of Computer Science and Engineering
Indian Institute of Technology, Madras

Lecture – 24
Interacto

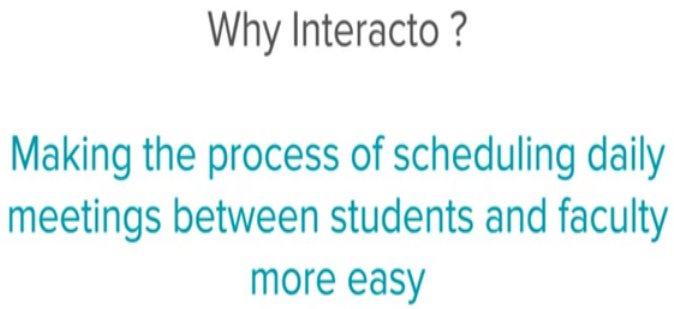
Hi we are a team of 6 MTech students from triple IIT Delhi. We are working on an app called Interacto as a part of DHCS course under the guidance of doctor PK.

(Refer Slide Time: 00:22)

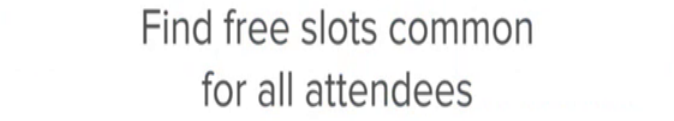


An app to schedule meetings between the faculty and the students.

(Refer Slide Time: 00:28)

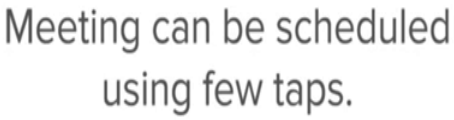


(Refer Slide Time: 00:32)



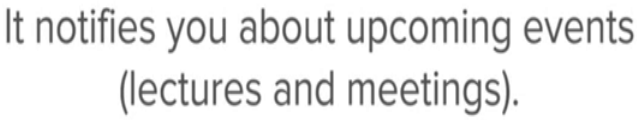
It makes interaction easier as it provides UI to find free slots common for all attendees.

(Refer Slide Time: 00:37)



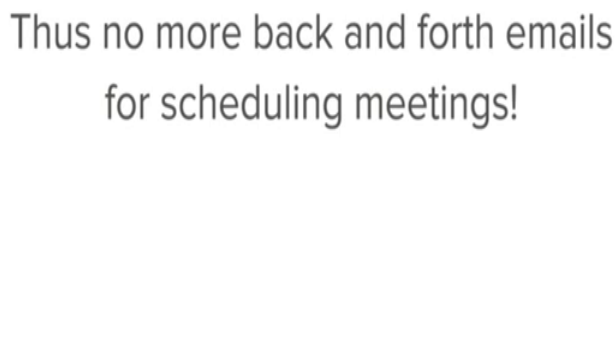
Meeting can be scheduled using few taps.

(Refer Slide Time: 00:39)



It notifies you about upcoming events.

(Refer Slide Time: 00:42)

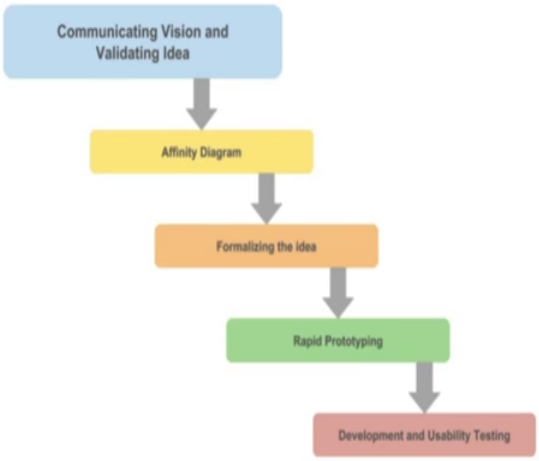


Thus no more back and forth emails required to schedule meetings.

(Refer Slide Time: 00:46)

Let us walk you through the life cycle of the Interacto.

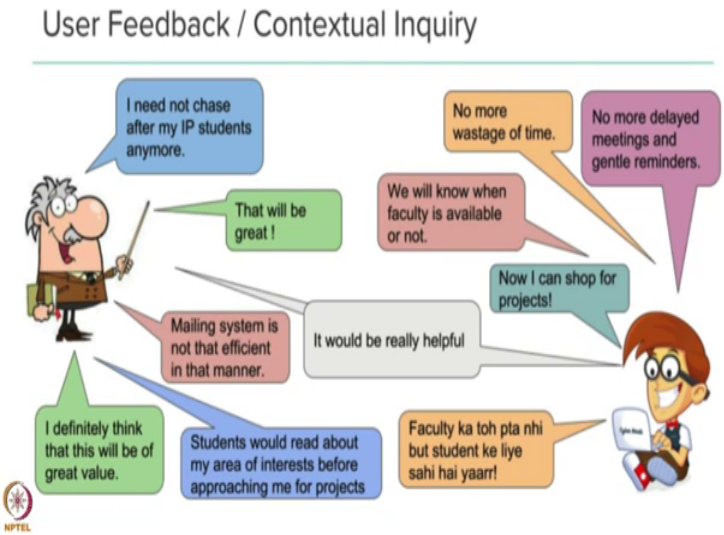
(Refer Slide Time: 00:50)



Communicating vision and validating idea, affinity diagram, formulizing the idea, rapid prototyping, development and usability testing.

We started our first contextual enquiry in which we wrote down the user advice on colored sticky notes and then clustered them into groups depending on their similarity. We gave titles to these clusters.

(Refer Slide Time: 01:15)



(Refer Slide Time: 01:33)

For example here we have the cluster called area of interest which contains the problems faced by the students like; students are not aware of the projects going on. Similarly the problems faced by the faculty like finding the students for projects as further required skill set.

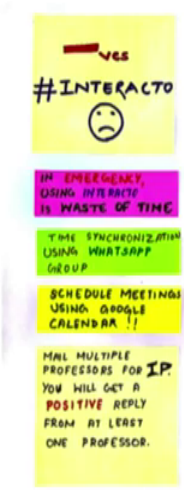
(Refer Slide Time: 01:58)

Some of the other clusters are mailing problem, time synchronization problem, TA meeting, positives of Interacto and negatives of Interacto.

(Refer Slide Time: 02:00)

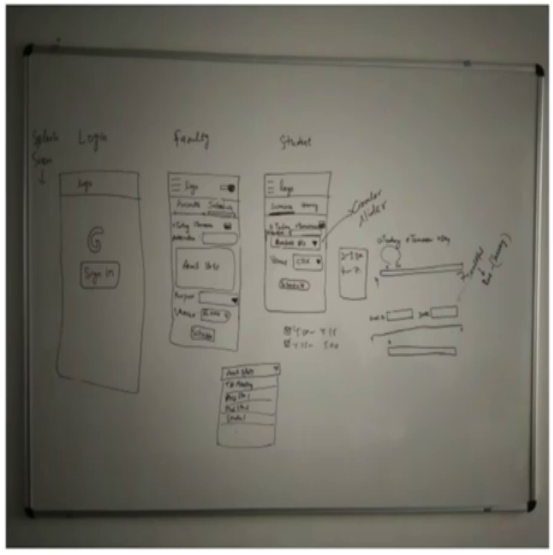
(Refer Slide Time: 02:03)

(Refer Slide Time: 02:08)



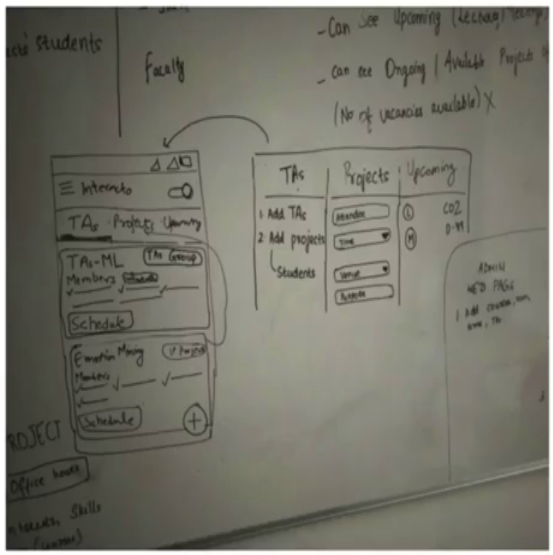
The cluster negatives of Interacto is important because these are the challenges that need to be overcome to ensure best user experience. We made the affinity diagram to cluster the user review and ensure that the functionalities of the app are as per the user requirements.

(Refer Slide Time: 02:32)



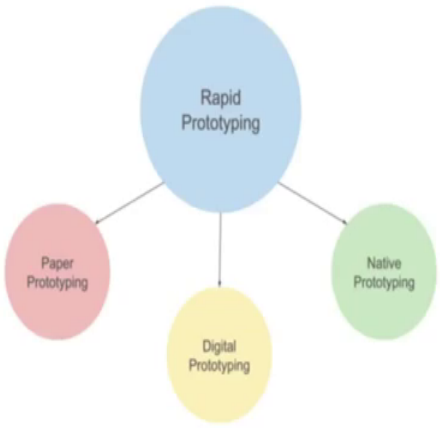
Based on the discussion among team members we made the rough layouts of the interfaces.

(Refer Slide Time: 02:35)

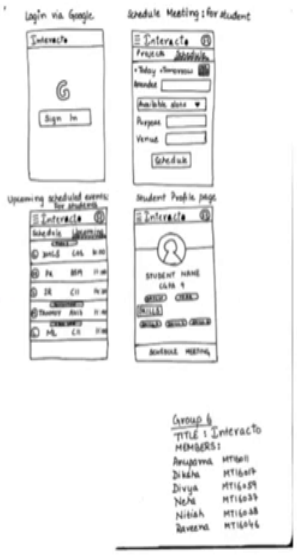


Rapid prototyping contains three stages; sketching and paper prototyping, digital prototyping and native prototyping.

(Refer Slide Time: 02:44)



(Refer Slide Time: 02:51)



We carried out intra team discussions and sketched the initial rough layouts.

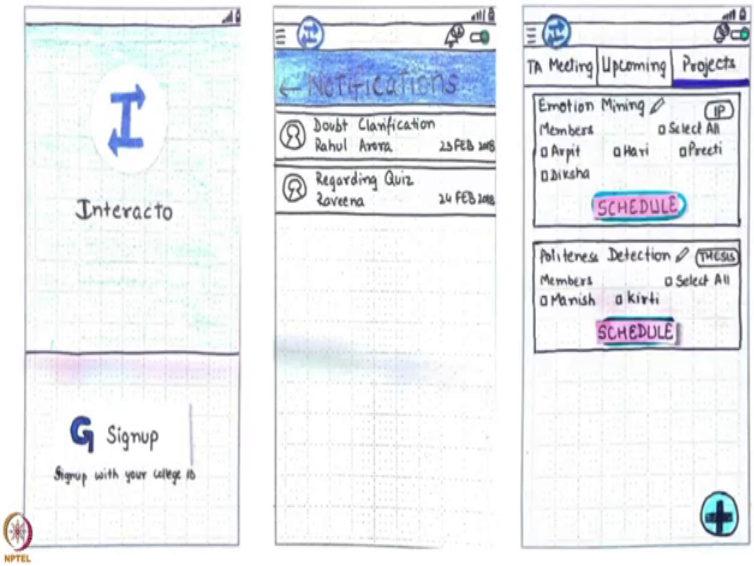
(Refer Slide Time: 02:58)

As per the observations of affinity diagram, we designed the first version of paper prototype; both for the student and the faculty wherein we created the app layout.

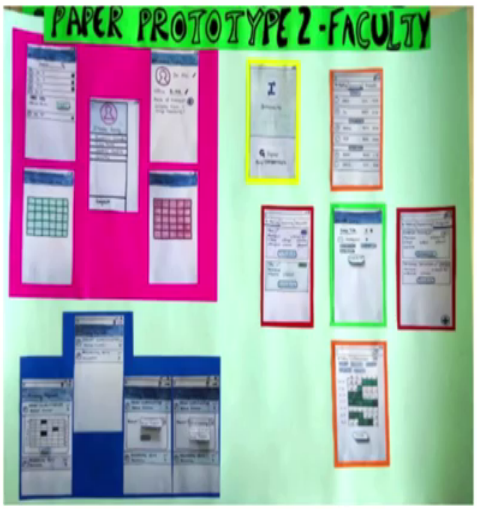
(Refer Slide Time: 03:04)

For better representations we clustered the connected screens together. Carried out user interviews and task analysis on the first version of our paper prototype. Based on the user feedback we revised our design and integrated the design patterns like social login, notifications, cards, etcetera into our app layouts.

(Refer Slide Time: 03:25)

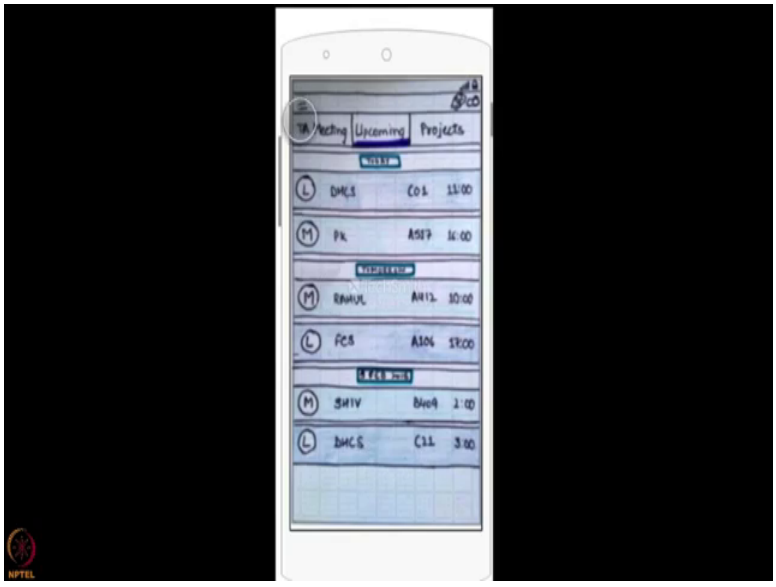


(Refer Slide Time: 03:32)



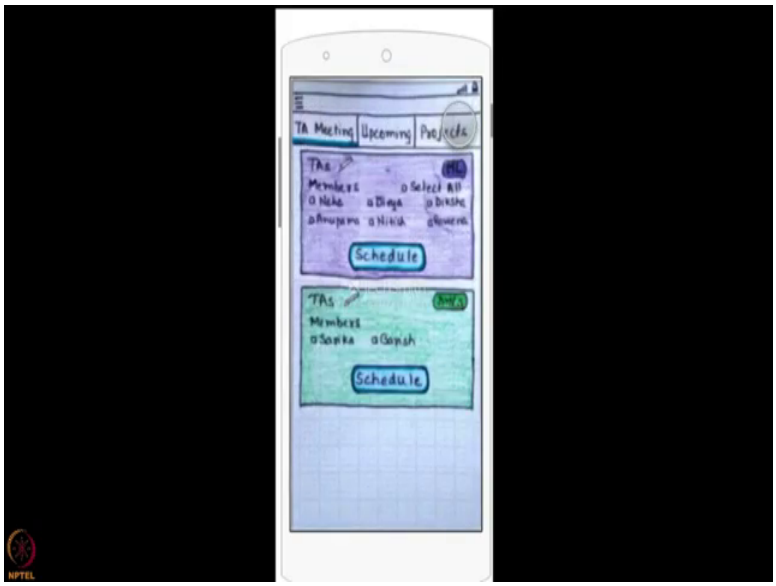
We also decided the color scheme of the app. This was a second version of our paper prototype.

(Refer Slide Time: 03:47)

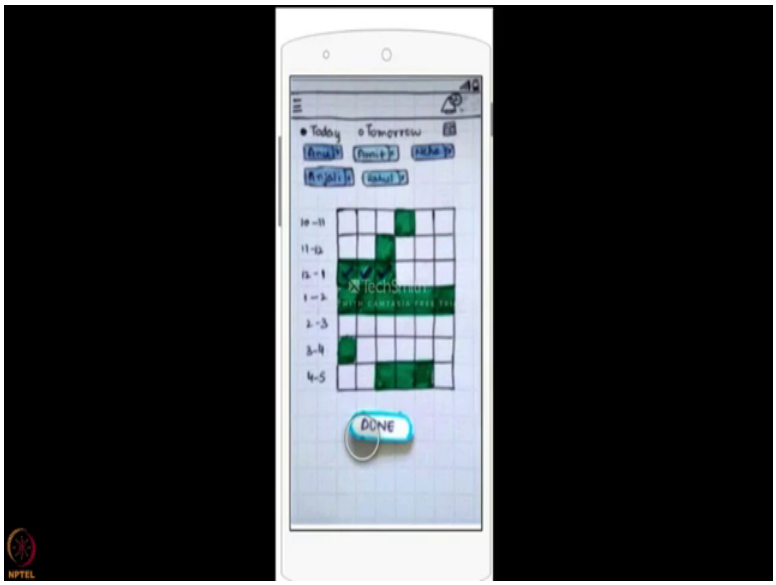


We carried out two iterations and thus generated the first version of digital prototype. We used proto dot io for building digital prototype and depicting interactions among these interfaces.

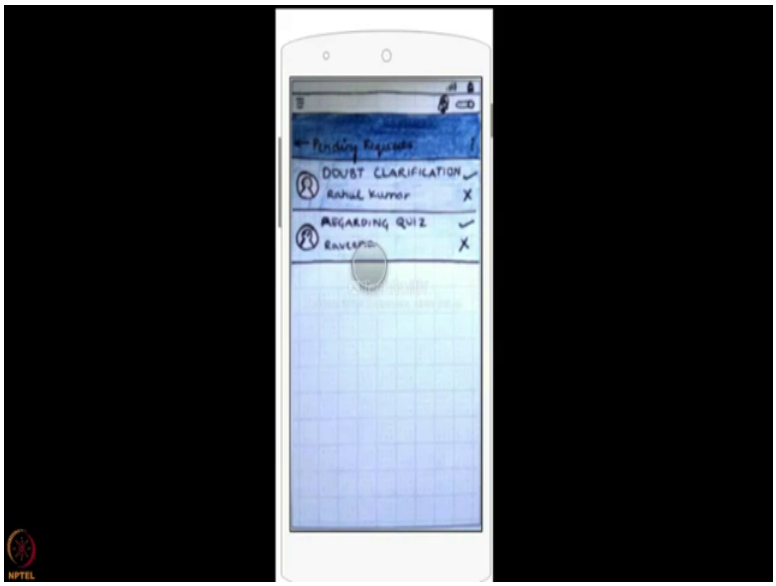
(Refer Slide Time: 03:51)



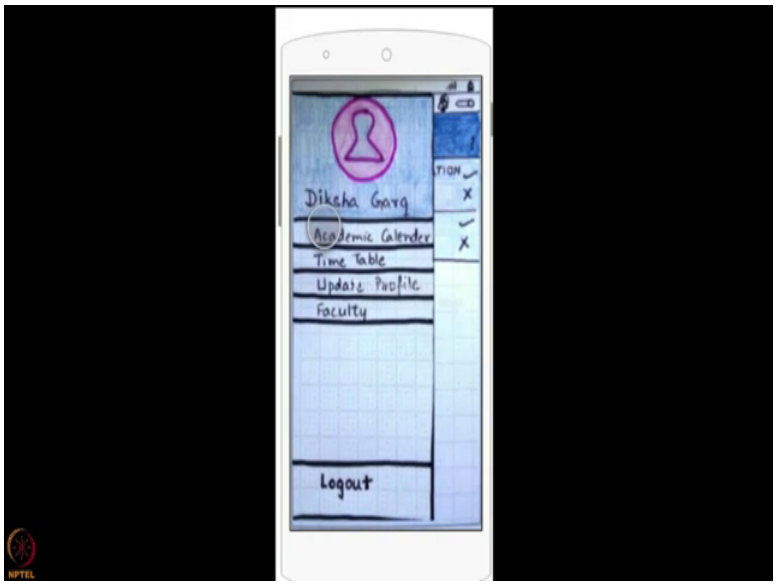
(Refer Slide Time: 03:58)



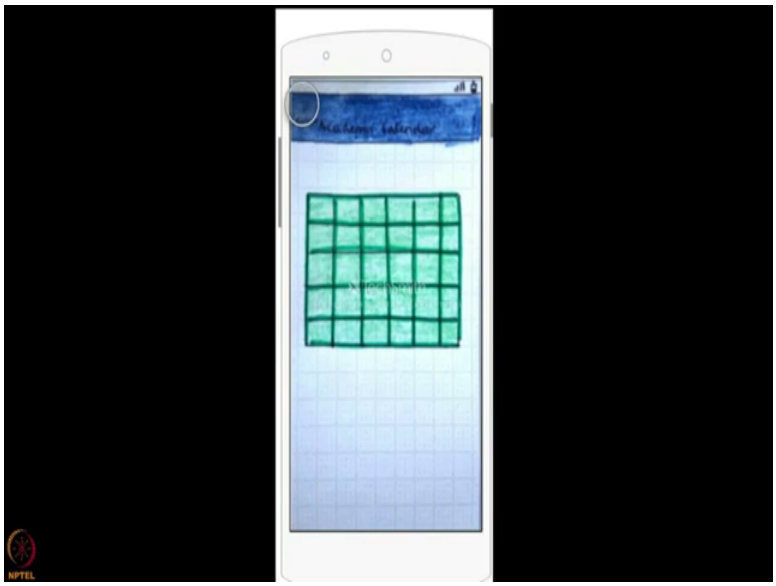
(Refer Slide Time: 04:17)



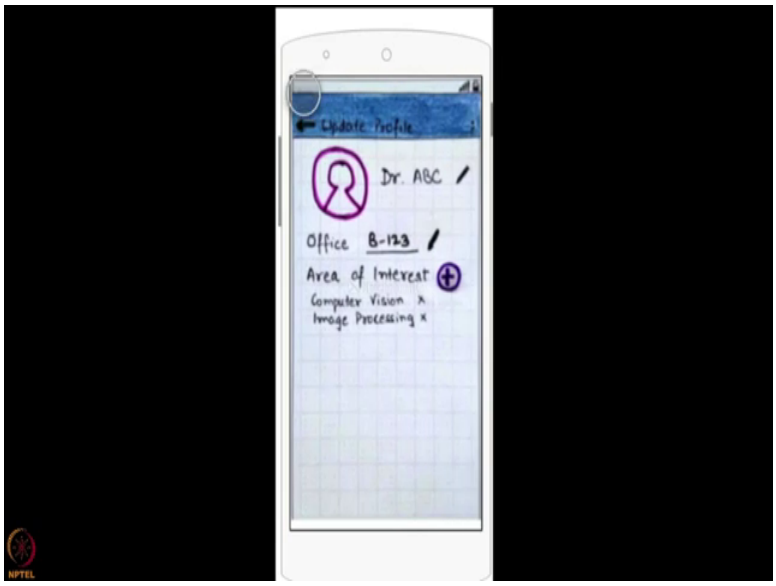
(Refer Slide Time: 04:21)



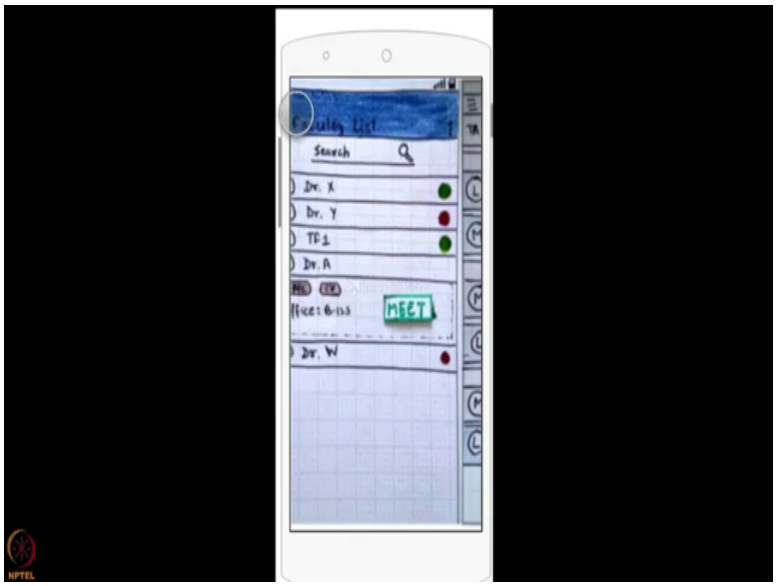
(Refer Slide Time: 04:22)



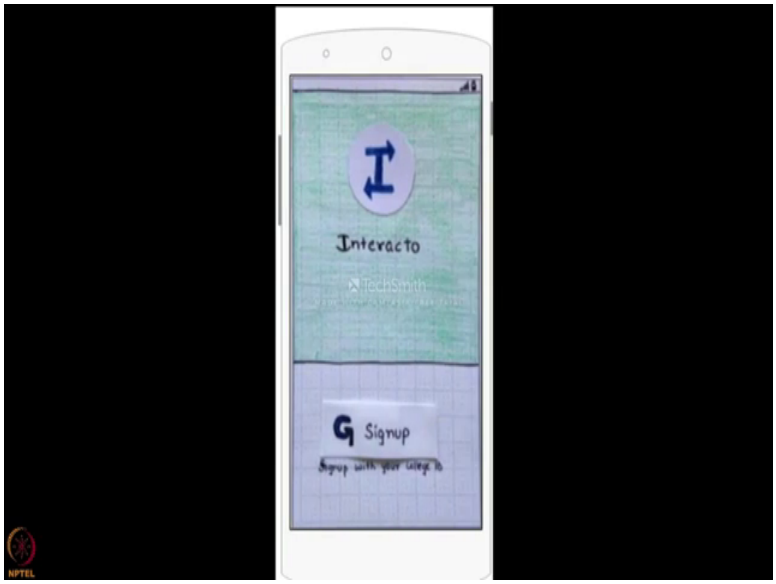
(Refer Slide Time: 04:30)



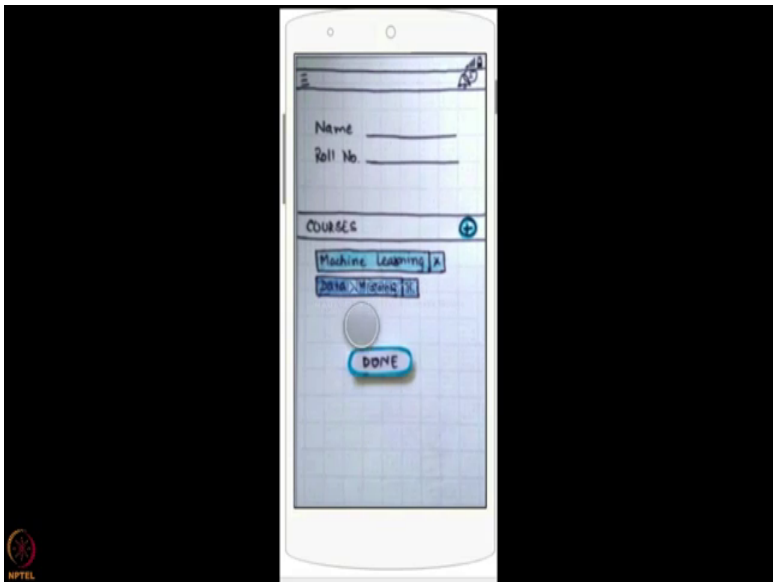
(Refer Slide Time: 04:37)



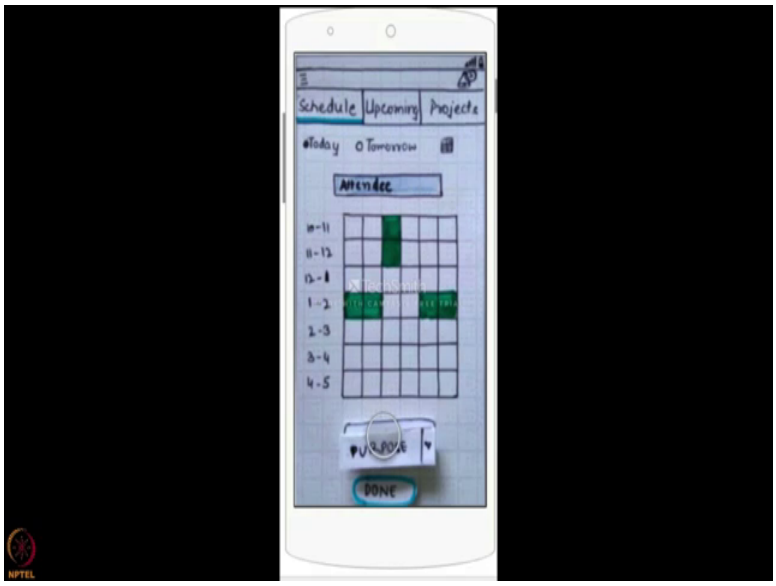
(Refer Slide Time: 04:40)



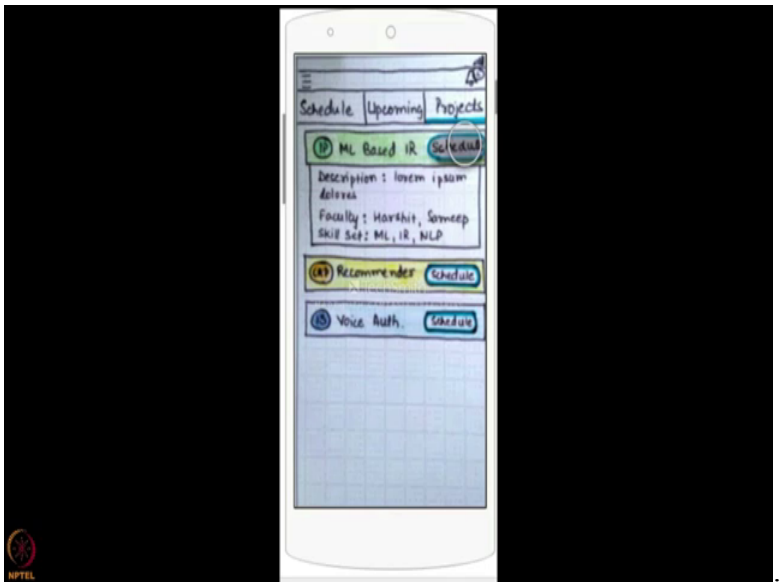
(Refer Slide Time: 04:43)



(Refer Slide Time: 04:48)

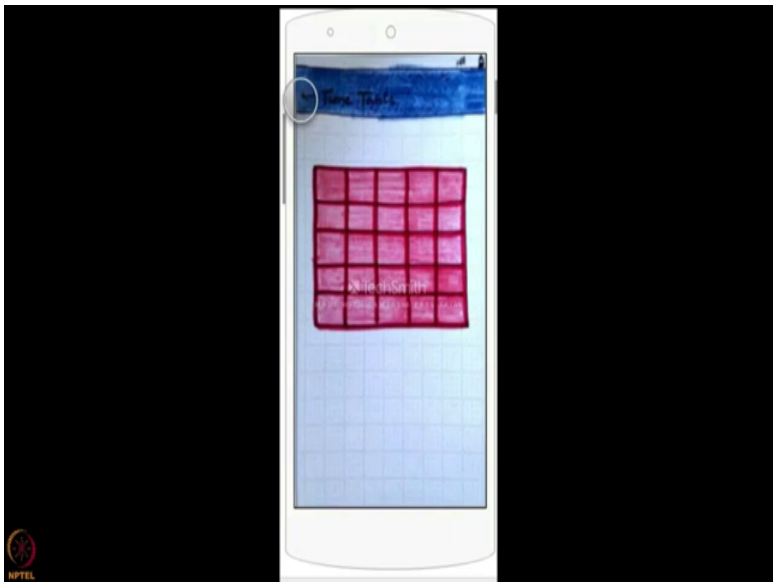


(Refer Slide Time: 04:58)

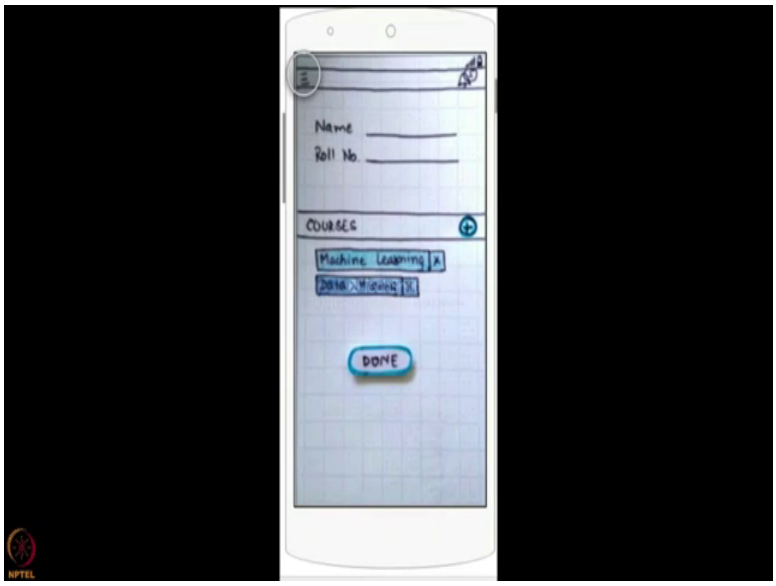


(Refer Slide Time: 05:04)

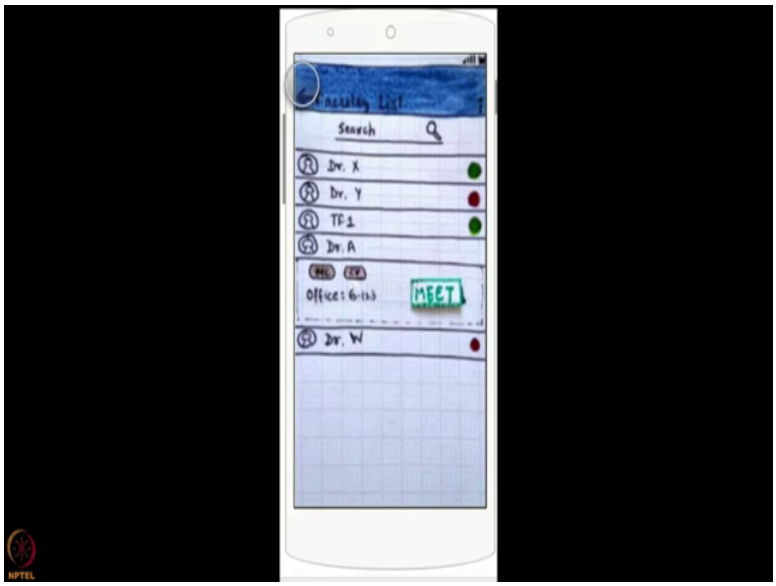
(Refer Slide Time: 05:14)



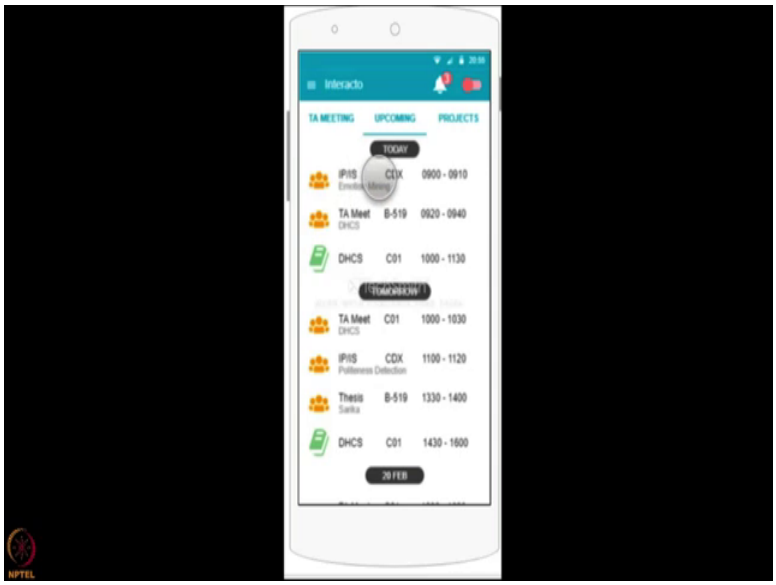
(Refer Slide Time: 05:18)



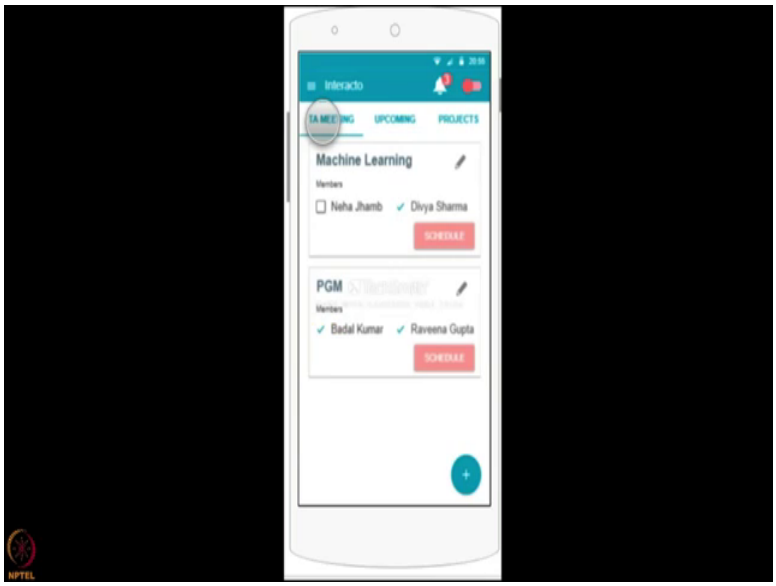
(Refer Slide Time: 05:22)



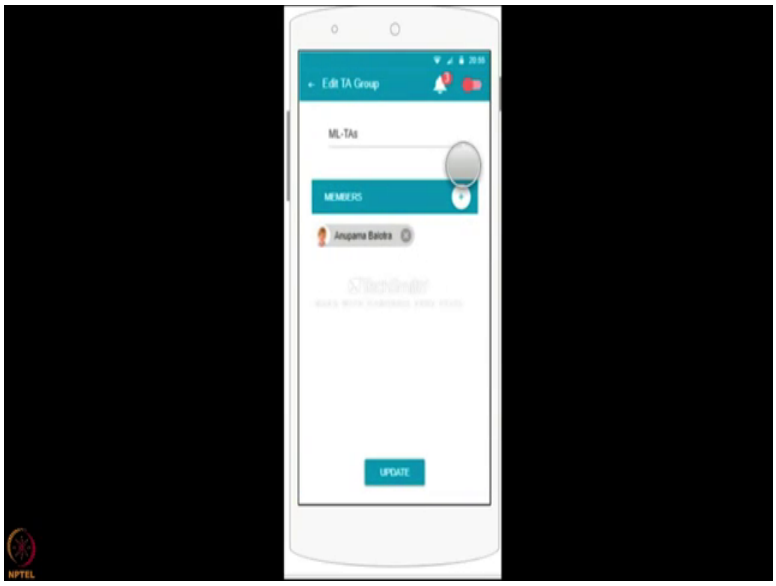
(Refer Slide Time: 05:30)



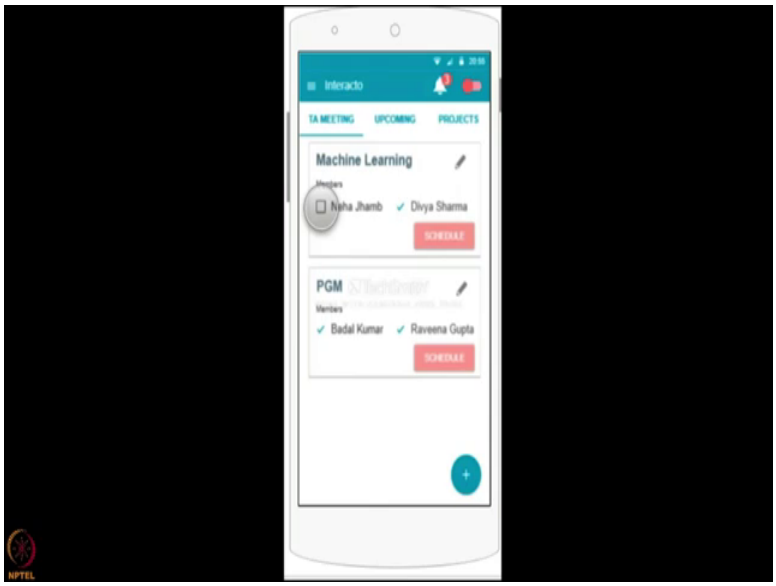
(Refer Slide Time: 05:37)



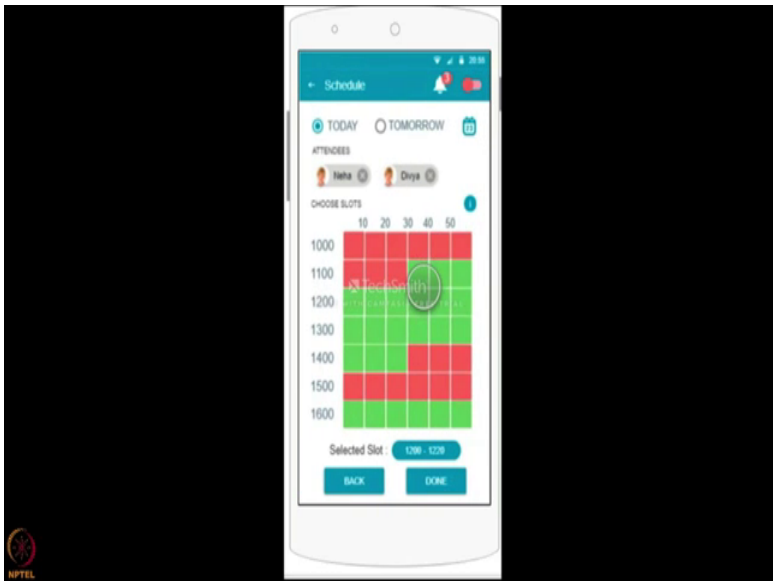
(Refer Slide Time: 05:41)



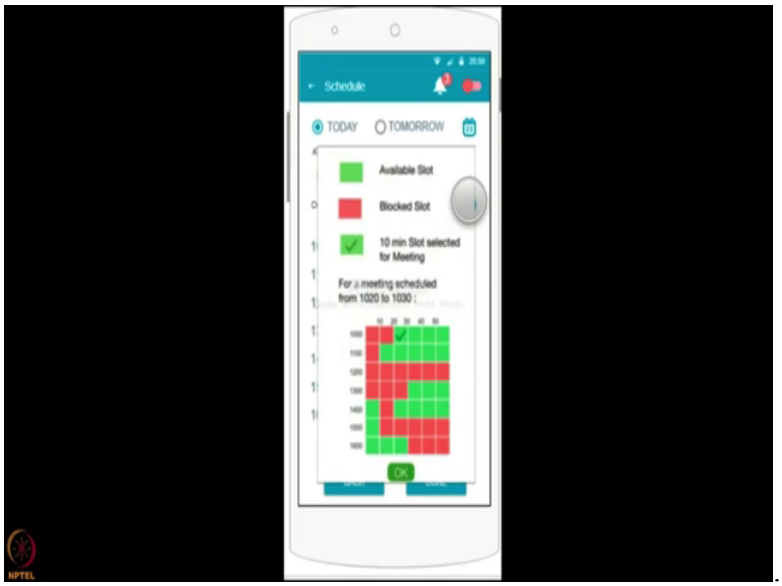
(Refer Slide Time: 05:49)



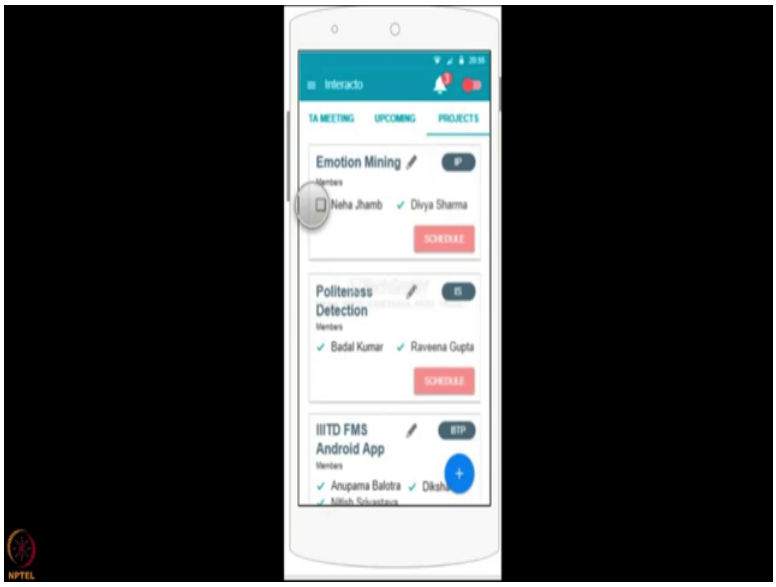
(Refer Slide Time: 05:51)



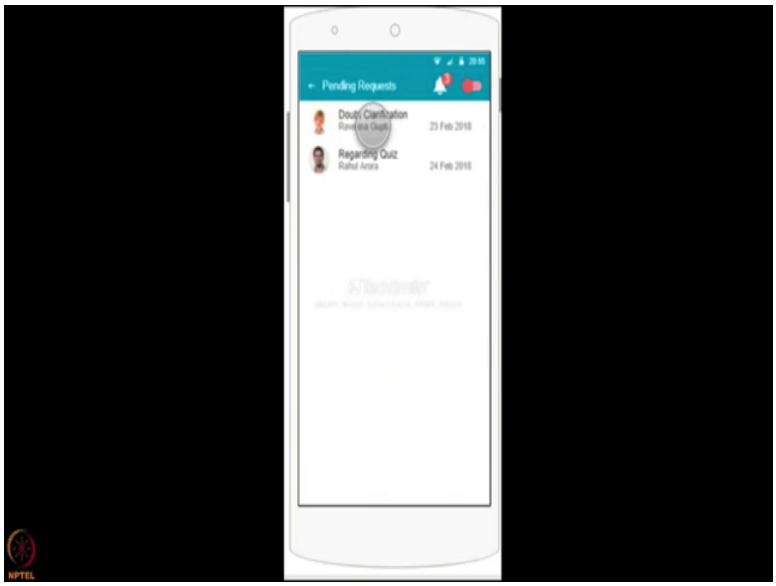
(Refer Slide Time: 05:54)



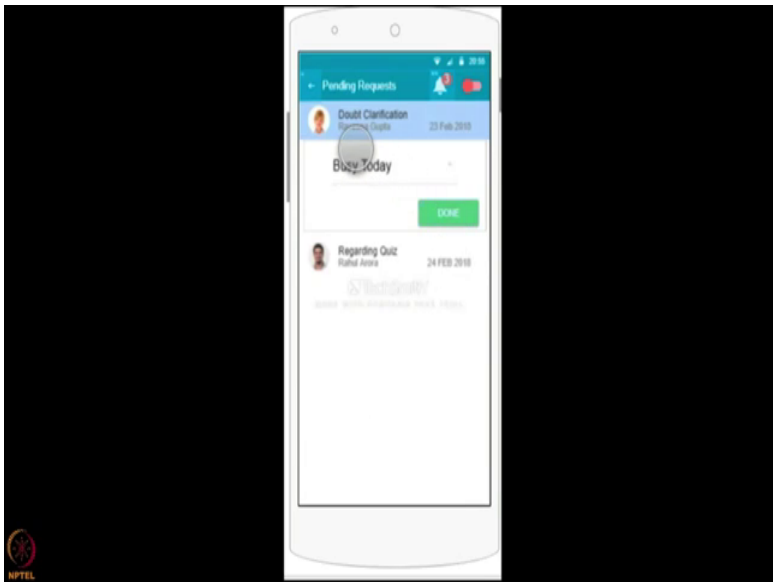
(Refer Slide Time: 06:17)



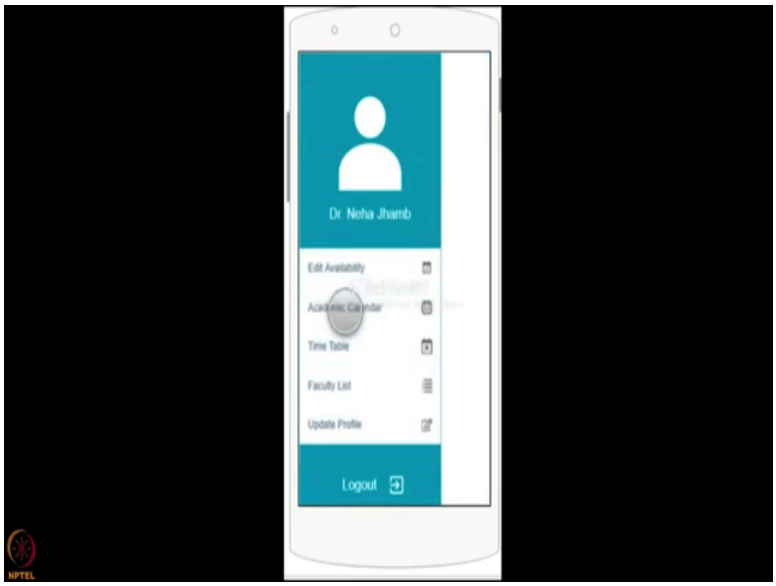
(Refer Slide Time: 06:53)



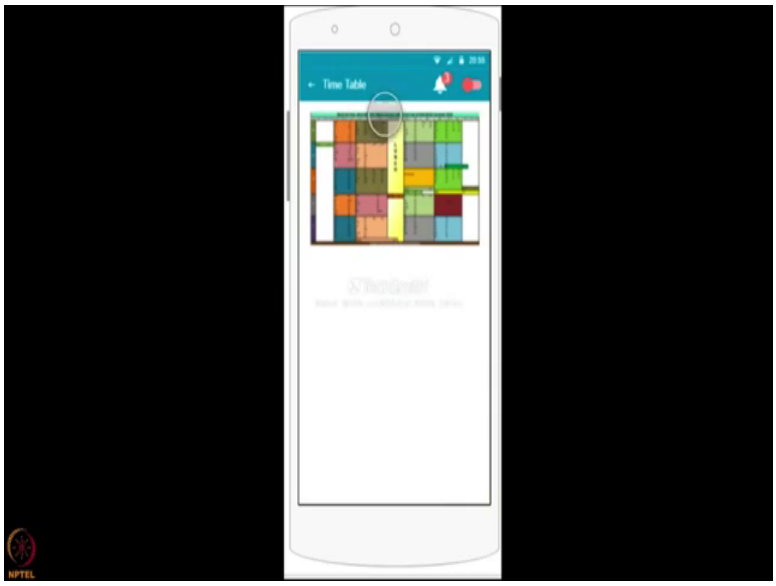
(Refer Slide Time: 07:09)



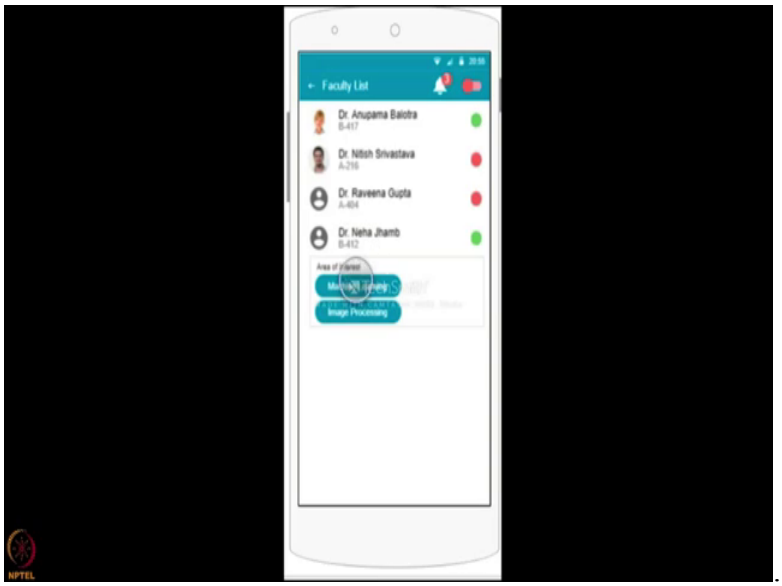
(Refer Slide Time: 07:25)



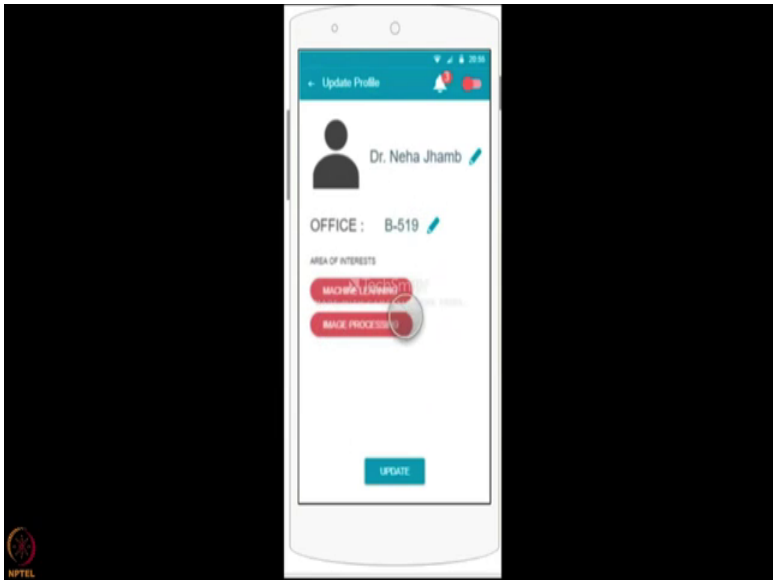
(Refer Slide Time: 07:30)



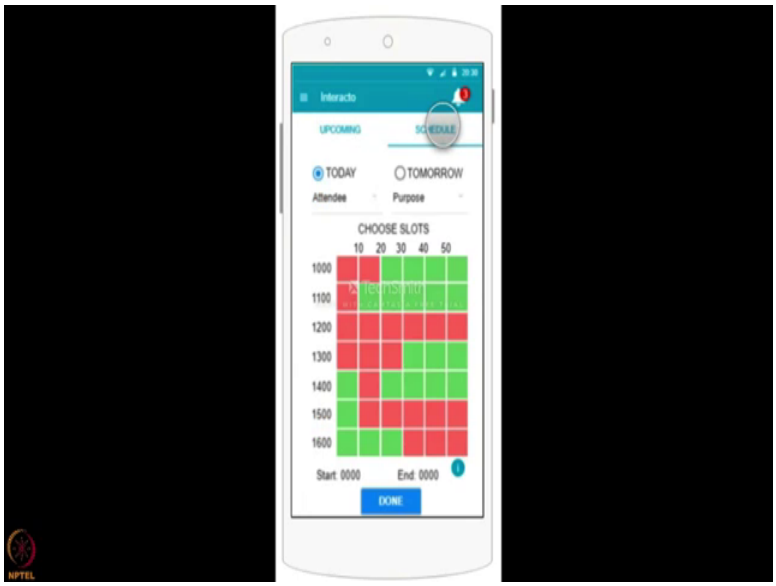
(Refer Slide Time: 07:41)



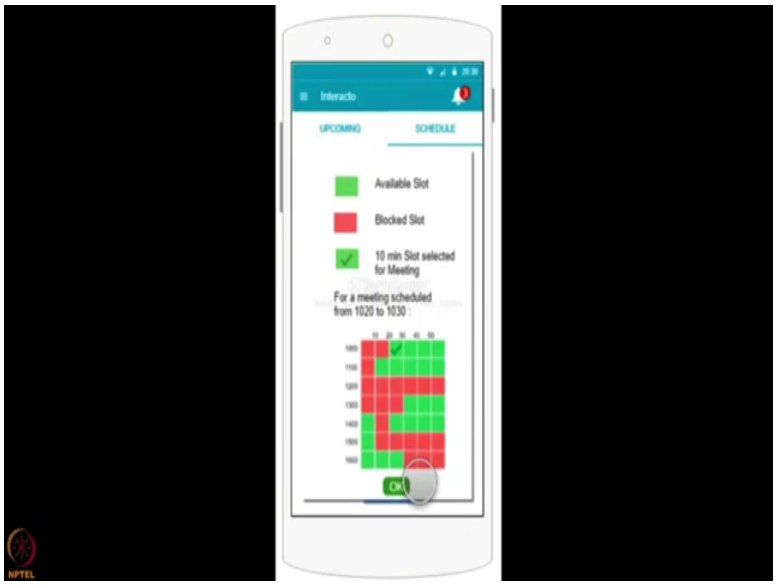
(Refer Slide Time: 07:51)



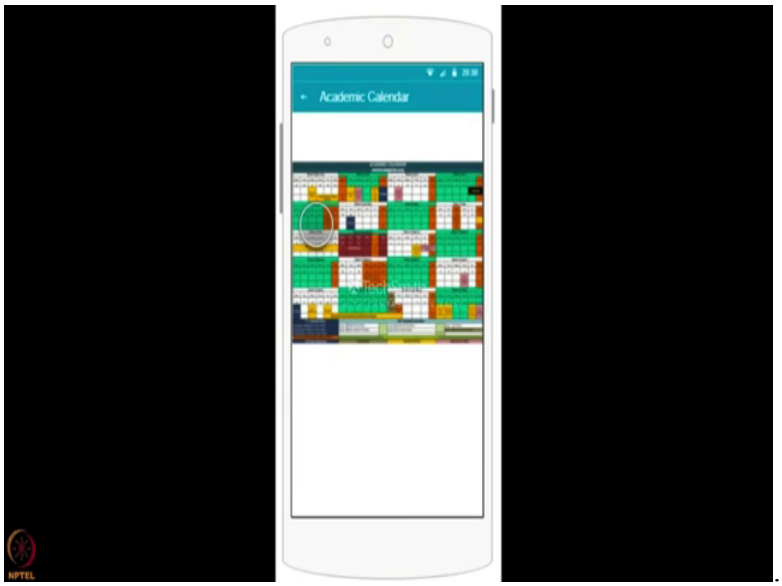
(Refer Slide Time: 08:24)



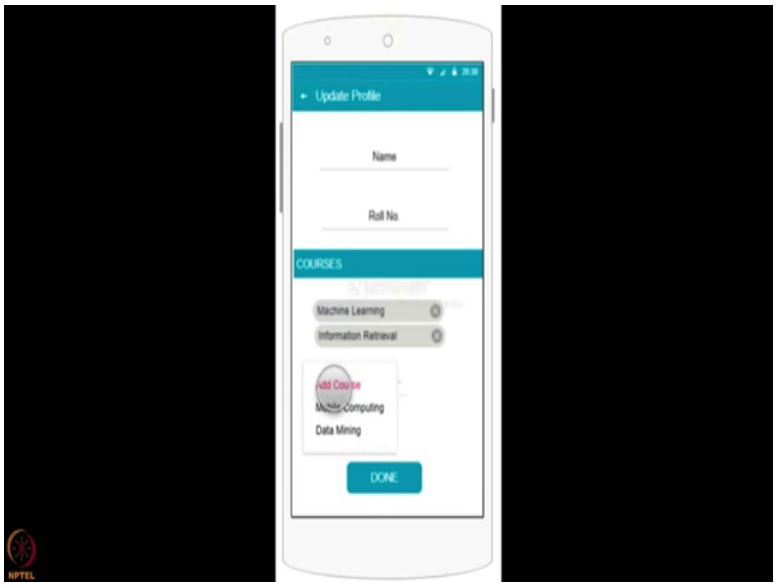
(Refer Slide Time: 08:42)



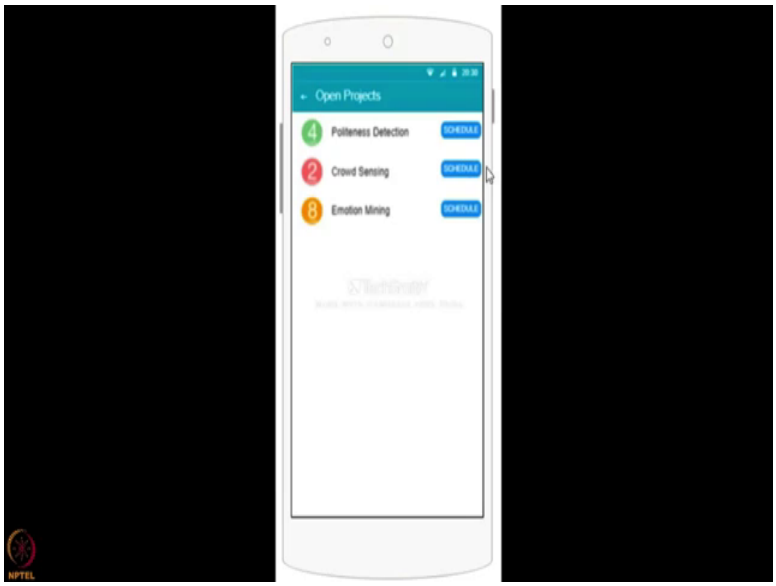
(Refer Slide Time: 08:56)



(Refer Slide Time: 09:08)



(Refer Slide Time: 09:42)



(Refer Slide Time: 09:57)

When bring up the user feedback on the digital prototype using loop back dot io and moved on to the last phase of rapid prototyping for the native prototyping.

(Refer Slide Time: 10:15)

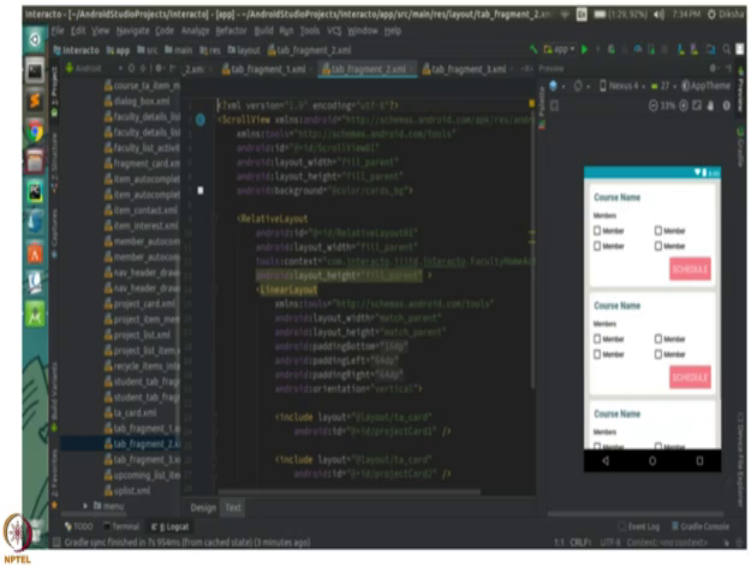
This is where we explore the technologies, frameworks and platform for the app development.

(Refer Slide Time: 10:16)

(Refer Slide Time: 10:20)

We carried out discussions to decide on the data base schema.

(Refer Slide Time: 10:25)

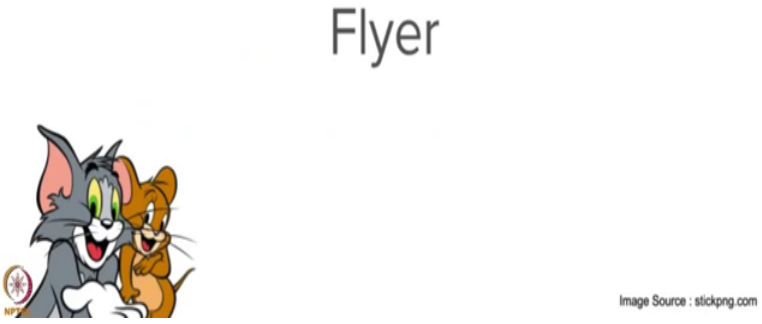


Following which we started developing the UI on android studio. We are in the process of developing this app. This would be followed by user study.

(Refer Slide Time: 10:36)

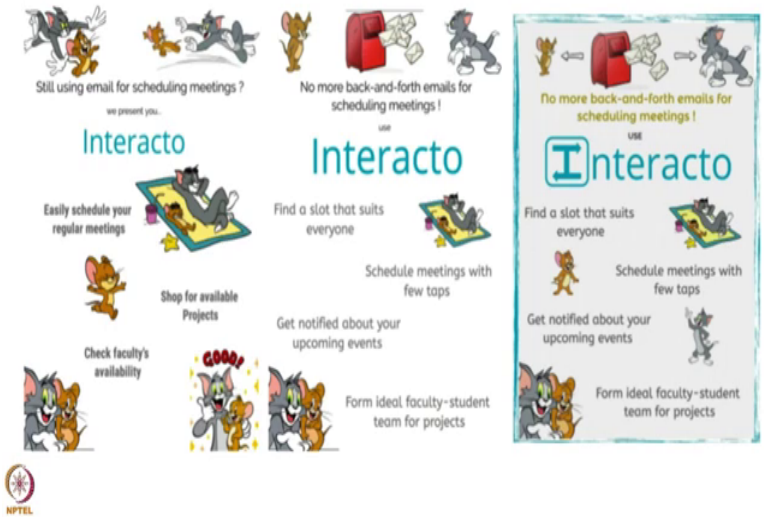
After various iterations, we finalized our logo which depicts two way interaction between the faculty and the students.

(Refer Slide Time: 10:45)



To advertise our app and to reach the audiences we made a Flyer.

(Refer Slide Time: 10:50)

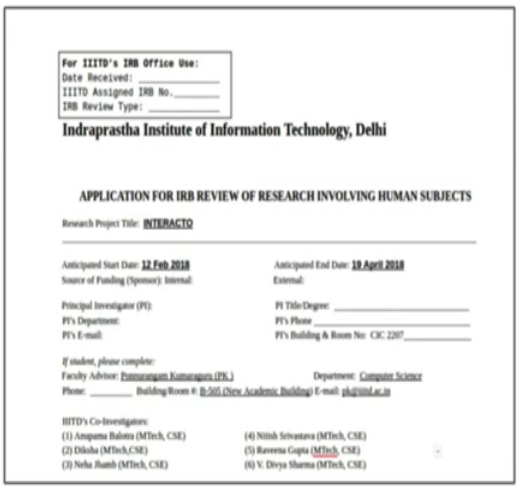


Idea behind the flyer: Jerry running behind Tom is analogous to students chasing faculty as well as faculty chasing students when required. Our solution facilitates easy interaction between them.

(Refer Slide Time: 11:06)

During the development process we created an application form an IRB proposal and a consult form..

(Refer Slide Time: 11:10)



For IIITD's IRB Office Use:
Date Received: _____
IIITD Assigned IRB No._____
IRB Review Type: _____

Indraprastha Institute of Information Technology, Delhi

APPLICATION FOR IRB REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS

Research Project Title: **INTERACTO**

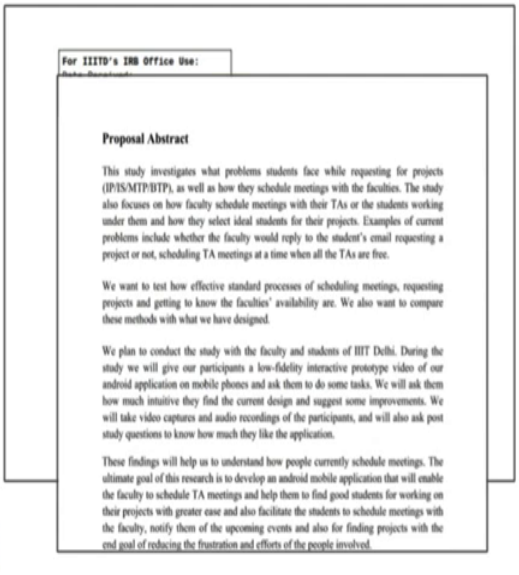
Anticipated Start Date: **12 Feb 2018** Anticipated End Date: **10 April 2018**
Source of Funding (Sponsor): Internal: External:

Principal Investigator (PI): PI Title/Degree: _____
PI's Department: PI's Phone _____
PI's E-mail: PI's Building & Room No: CIC 2207_____

If student, please complete:
Faculty Advisor: Ponnurangam Kumaraguru (PK) Department: Computer Science
Phone: _____ Building/Room #: B-505 (New Academic Building) E-mail: pk@iiitd.ac.in

IIITD's Co-Investigators:
(1) Anupama Balotra (MTech, CSE) (4) Nitish Srivastava (MTech, CSE)
(2) Diksha (MTech,CSE) (5) Raveena Gupta (MTech, CSE)
(3) Neha Jhamb (MTech, CSE) (6) V. Divya Sharma (MTech, CSE)

(Refer Slide Time: 11:14)



For IIITD's IRB Office Use:

Proposal Abstract

This study investigates what problems students face while requesting for projects (IP/IS/MTP/BTP), as well as how they schedule meetings with the faculties. The study also focuses on how faculty schedule meetings with their TAs or the students working under them and how they select ideal students for their projects. Examples of current problems include whether the faculty would reply to the student's email requesting a project or not, scheduling TA meetings at a time when all the TAs are free.

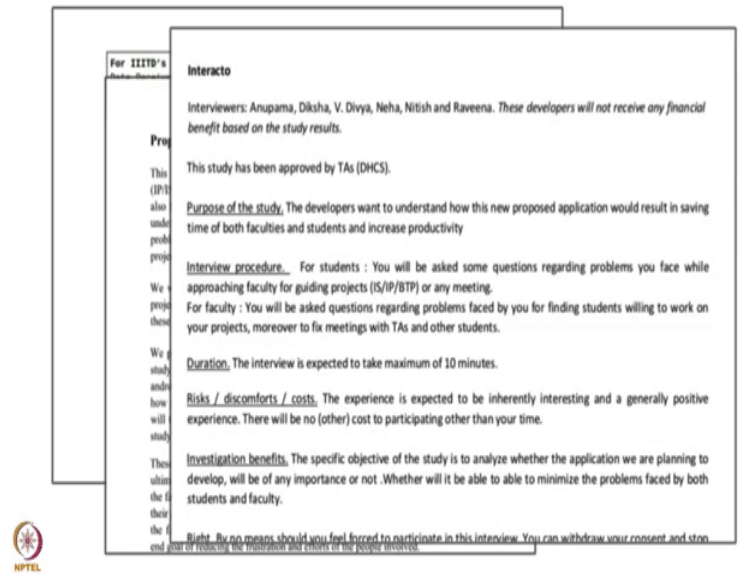
We want to test how effective standard processes of scheduling meetings, requesting projects and getting to know the faculties' availability are. We also want to compare these methods with what we have designed.

We plan to conduct the study with the faculty and students of IIIT Delhi. During the study we will give our participants a low-fidelity interactive prototype video of our android application on mobile phones and ask them to do some tasks. We will ask them how much intuitive they find the current design and suggest some improvements. We will take video captures and audio recordings of the participants, and will also ask post study questions to know how much they like the application.

These findings will help us to understand how people currently schedule meetings. The ultimate goal of this research is to develop an android mobile application that will enable the faculty to schedule TA meetings and help them to find good students for working on their projects with greater ease and also facilitate the students to schedule meetings with the faculty, notify them of the upcoming events and also for finding projects with the end goal of reducing the frustration and efforts of the people involved.

We considered the teaching essence of BHCS course as IRB and took their consult before contacting the intended users for the contention enquiry.

(Refer Slide Time: 11:22)



We also ensured to get the consult form signed from the users before taking their interviews.

Thank you for watching.