#### 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.

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What is Interacto?

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

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

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## Why Interacto ?

# Making the process of scheduling daily meetings between students and faculty more easy

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Find free slots common for all attendees

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

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Meeting can be scheduled using few taps.

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Meeting can be scheduled using few taps.

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It notifies you about upcoming events (lectures and meetings).

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It notifies you about upcoming events.

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Thus no more back and forth emails for scheduling meetings!

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

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Let us walk you through the complete design process of Interacto

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

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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.

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User Feedback / Contextual Inquiry

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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.

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

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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.

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

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

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

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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.



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.

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

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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.

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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.

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# Step #4c Native Prototyping



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

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

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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.

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

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Flyer



Image Source : stickpng.com

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



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.

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# Important Documents

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

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Date Received: IIITD Assigned IRB No IRB Review Type:	
Indraprastha Institute of	Information Technology, Delhi
APPLICATION FOR IRB RE	VIEW OF RESEARCH INVOLVING HUMAN SUBJECT
Research Project Title: INTERACTO	
Anticipated Start Date: 12 Feb 2018	Anticipated End Date: 19 April 2018
Source of Funding (Sponsor): Internal.	Experime
Principal Investigator (PI):	PI Title Degree:
PI's Department:	PT's Phone
PI's E-mail:	PI's Building & Room No: CIC 2207
If student, please complete:	
Faculty Advisor: Ponnurangam Kumaragury	L(PK.) Department: Computer Science
Phone: Building Room #: B-1	605 (New Academic Building) E-mail: ph@tiiid.ac.in
IIITD's Co-Investigators:	
IIITD's Co-Investigators: (1) Anapama Balotra (MTech, CSE)	(4) Nitish Srivastava (MTech, CSE)
IIITD's Co-Investigators: (1) Anopama Balotra (MTech, CSE) (2) Diksha (MTech,CSE)	(4) Nitish Srivantava (MTech, CSE) (5) Raveena Gupta ( <u>MTech</u> , CSE) -

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For	IIITD'S IRB Office Use:
	Proposal Abstract
	This study investigates what problems students face while requesting for projects (IPISMTP:BTP), as well as how they schedule meetings with the faculties. The study also focuses to how facely schedule meetings with their TAs or the statents working under them and how they select ideal attachms for their projects. Examples of current problems include whether the facelup would reply to the student's email requesting a project or ost, scheduling TA meetings at a time when all the TAs are fee.
	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 HIT 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 that video captares and audit corolingin 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 appelication that will enable the faculty to schedule 1X meetings and help them to find goal students for working on their projects with greater case 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 and of the data and efforts of the schedule meetings with the ned and of reducing the frustration and efforts of the schedule incertain grades and the schedule in the function of the upcoming events and also for finding projects with the end and of reducing the function and efforts of the schedule incertain grades and the schedule in the strategiest of the schedule in the schedule in the schedule in the function of the upcoming events and also for finding projects with the end and of reducing the function and efforts of the schedule incertain grades and the schedule in the schedule

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

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	For IIITD's	Interacto
		Interviewers: Anupama, Diksha, V. Divya, Neha, Nitish and Raveena. These developers will not receive any financial
	Pro	benefit based on the study results.
	This	This study has been approved by TAs (DHCS).
1	(1P/1)	
1	also	Purpose of the study. The developers want to understand how this new proposed application would result in saving
	unde	time of both faculties and students and increase productivity
	proje	Interview procedure. For students : You will be asked some questions regarding problems you face while
1	Wes	approaching faculty for guiding projects (IS/IP/BTP) or any meeting.
1	proje	For faculty : You will be asked questions regarding problems faced by you for finding students willing to work or
	these	your projects, moreover to fix meetings with TAs and other students.
	We	Duration. The interview is expected to take maximum of 10 minutes.
1	study	
1	how	Risks / discomforts / costs. The experience is expected to be inherently interesting and a generally positive
1	will	experience. There will be no (other) cost to participating other than your time.
1	study	
1	These	Investigation benefits. The specific objective of the study is to analyze whether the application we are planning to
	ultim	develop, will be of any importance or not . Whether will it be able to able to minimize the problems faced by both
	the fi	students and faculty.
	their	
	the f	Right, By no means should you feel forced to participate in this interview. You can withdraw your consent and stor

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

Thank you for watching.