Introduction to Human Computer Interaction
Department of Computer Science and Engineering
Indraprastha Institute of Information Technology, Delhi

Lecture – 25
Tech Tinder

Hi we are students from triple IIT Delhi in the 3rd year of (Refer Time: 00:13) program and we are a part of the DHS course this semester where we were working on Tech Tinder as our course project. I will walk you through the introduction and motivation of our project.

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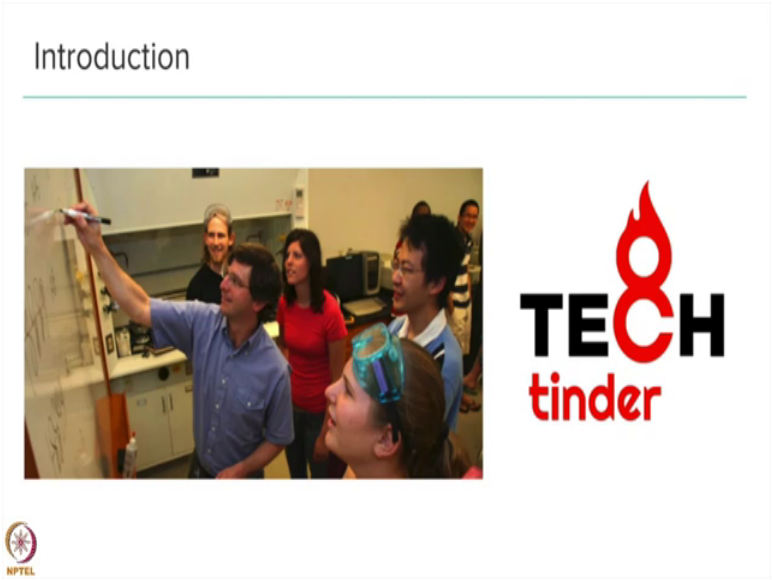

So, first half what does tech tinder do? So, this is a mobile application which acts as a platform to connect students who are willing who have certain domain expertise; with students who want help in certain domain. So, this basically is a platform to felicitate more collaborative model of knowledge sharing and which it basically bridges the gap between students who want to get their doubts clarified and the students who have an expertise in say a certain subject. This the larger motivation of this project is to make learning what ubiquitous and to facilitate the sharing of knowledge via the interaction between students.

Now, the main motivation behind doing this project is that the current existing platforms for you know technical knowledge sharing like stack overflow are firstly very generic. They are not very course specific.

So, let us say you have HCI course; you cannot ask doubt later it specific to that course and stack overflow. Second the motivation is that when students have doubts they hesitate in approaching faculties or the teaching assistants to get the doubts clarified and instead just satisfy the themselves with some sort of an answer. So, to facilitate more knowledge flow between people who have already taken the course or already have some expertise to facilitate this kind of knowledge sharing we thought we should come up with a platform. So, now Abhinav will walk you through the final of the final version of the app that we have as of now..

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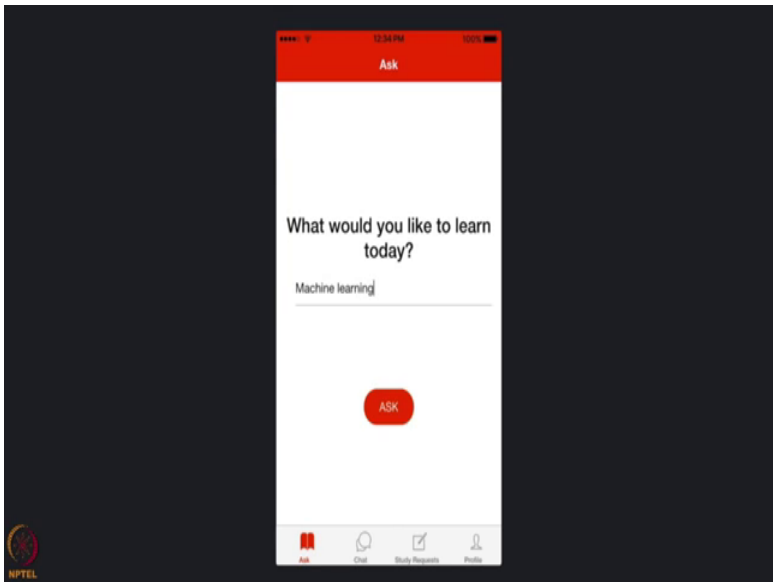

So, this is the application that we have built. First of all you can login with Facebook. Once you do that you greeted by an Ask screen where you can ask the where you can write the topic about the question that you would like to ask. So, say the topic is machine learning.

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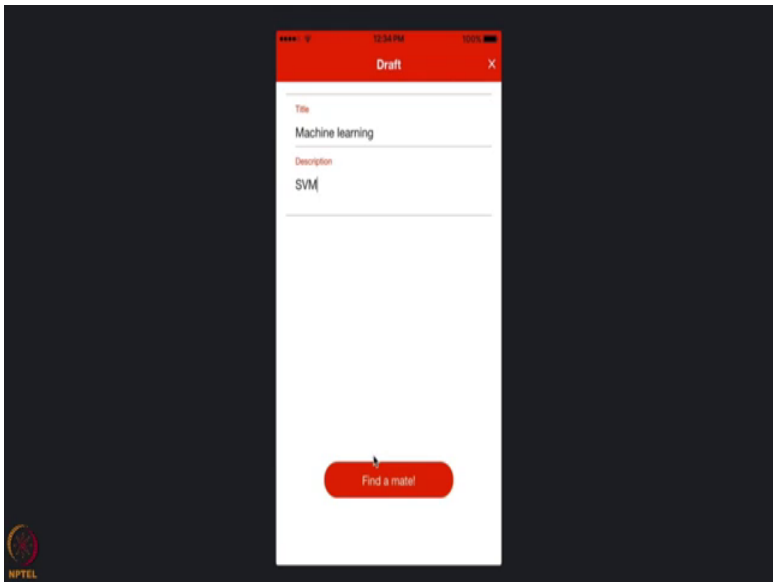

And you click on ask, then you write a one line description about the question say SVN and then you click on find a mate.

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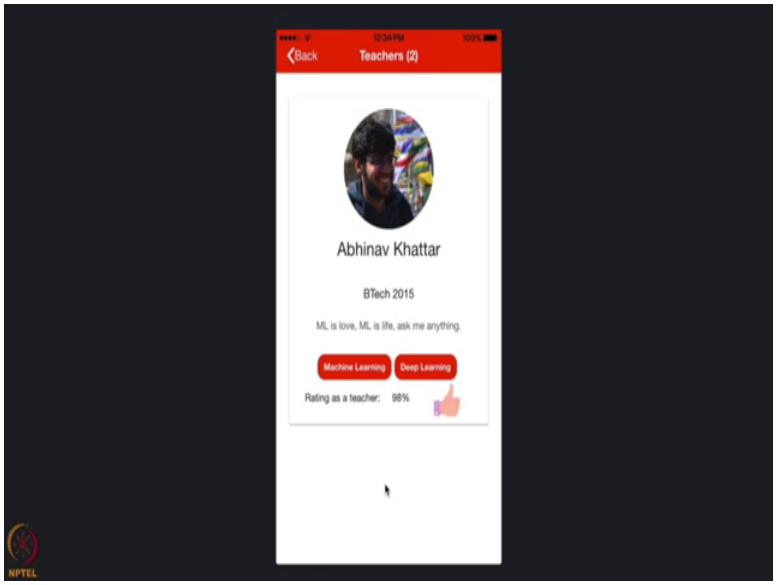

So, now this is a tinder alike interface where you can left swipe or right swipe a person, if you would like to ask them a question. So, left swipe would mean that you would like to not ask this question from that person and the right swipe would mean that you want to ask this question from that person. So, say I now write like Shaan Chopra, this question has now been sent to her.

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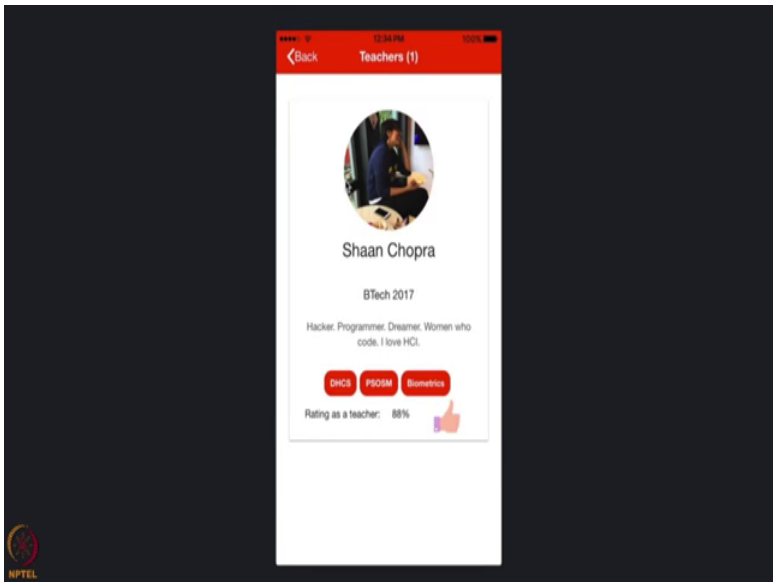

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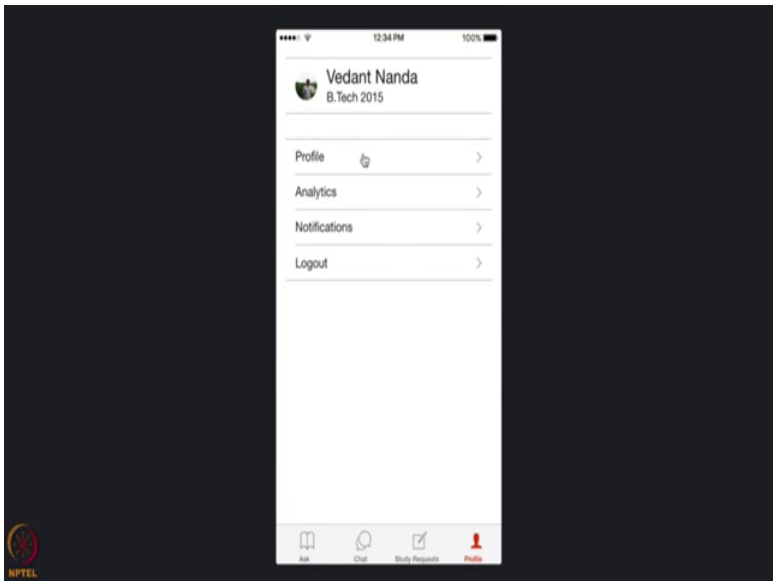

Once we do that we can now also go to a profile section to check how our profile is been made.

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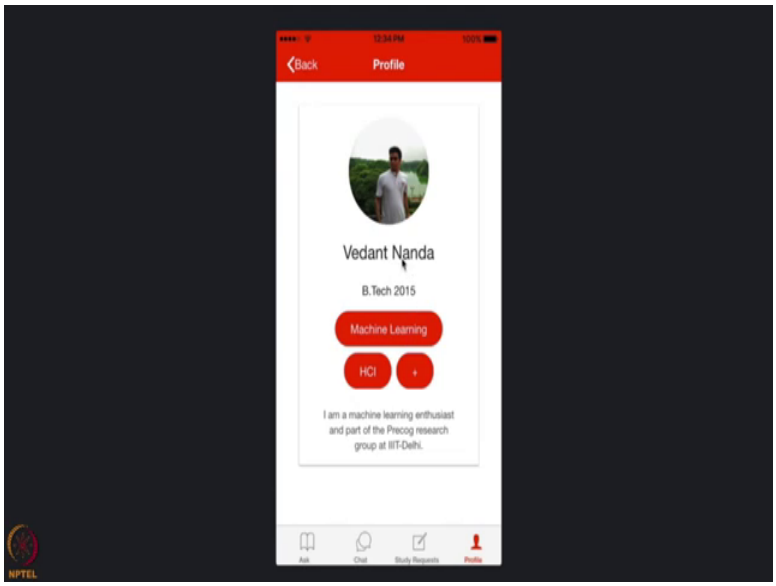

So, here you can see that the badges that have been given that I have given to myself which are machine learning and HCI. I can also add other topics that I am interested in. Also I can write a brief bio about myself cell like I am a machine learning enthusiast.

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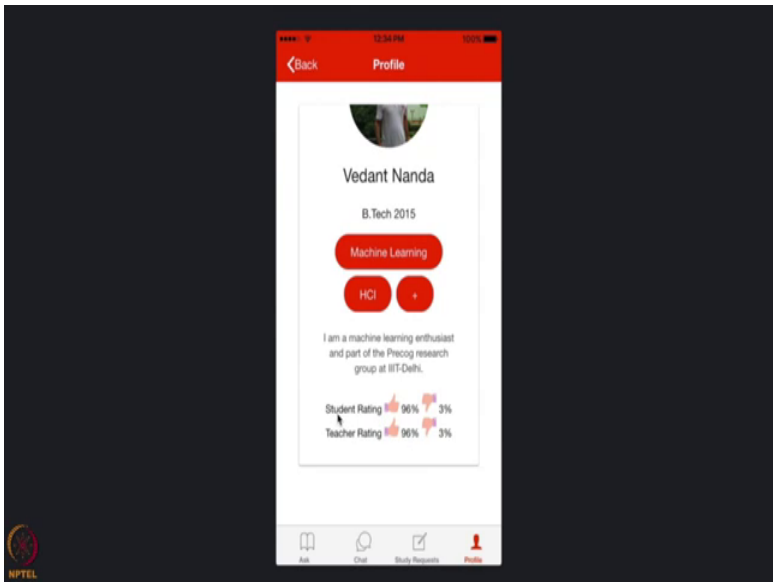

Now when I go to the if I scroll down, I can have also actually sees my student and teacher rating. My student rating is the rating that other teachers have given me and a teacher rating is what other students have given to me.

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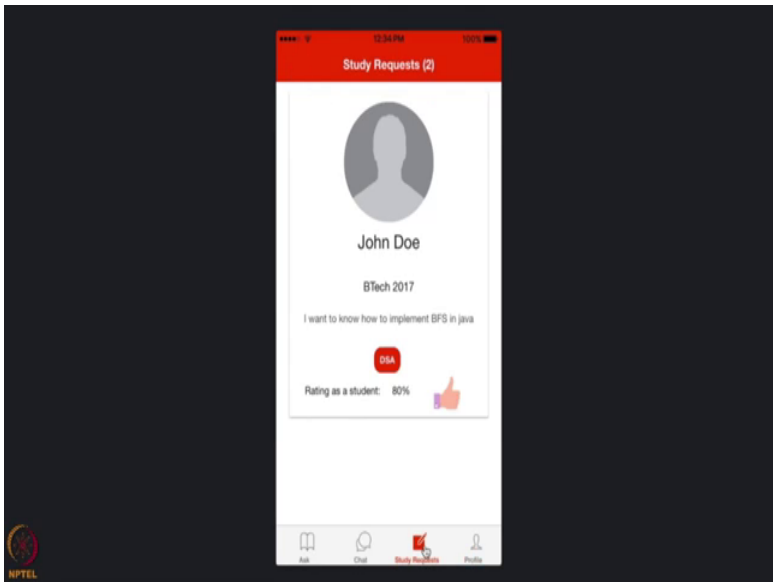

So, when I go to the study request section I can see all the people who have asked me questions. So, say John Doe has asked me I want to know how to implement BFS in java. So, I am not interested in this question, I just left swipe John Doe.

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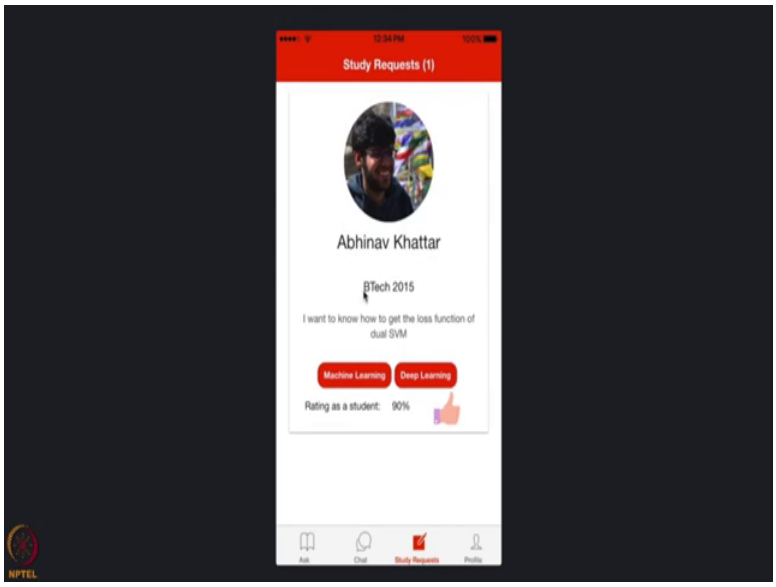

Now Abhinav Khattar has asked me I want to know how to get the lost function of dual SVM? Given that I like his question and I know the answer I would like to right swipe him.

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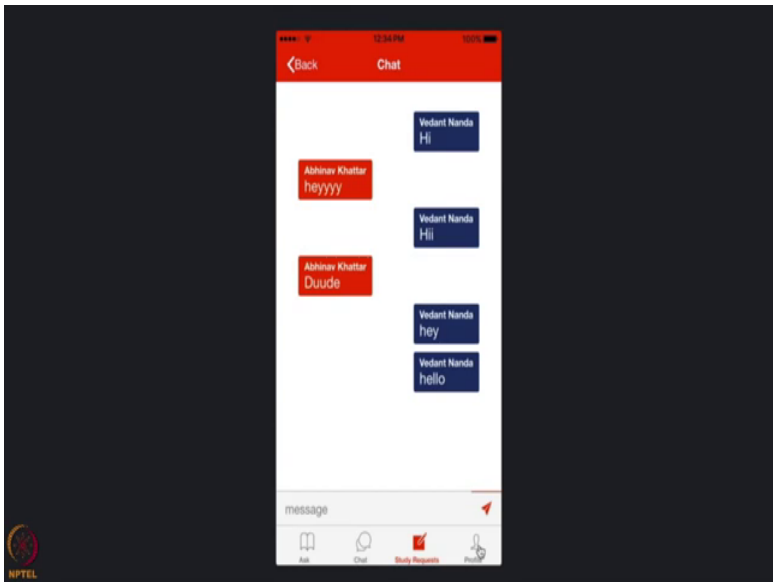

So, as you can see a chat section opens where I can actually now chat with him. So, I send a message. So, this chat is real time and I can actually get, any doubt clarified or anything from this chat section. Then you go back to the profile section and log out of the application. So, let us look at this steps that we took in order to end up at this application.

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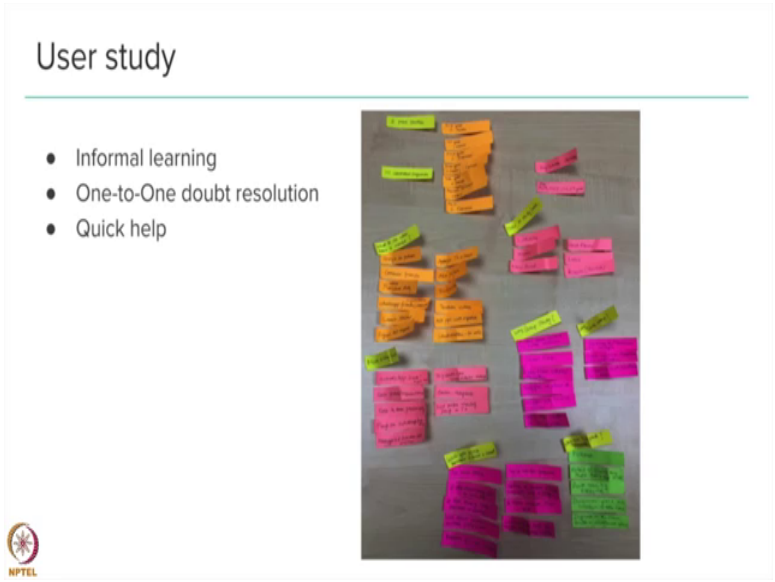

We performed user studies and contextual inquiries to find out what people wanted from our application and we realized that they wanted an informal learning platform that

provided one to one doubt resolution and quick help. After we realize this we started up with low fidelity prototyping.

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We used phone screen cutouts to create the prototypes. We wanted the home screen to be as minimalistic as possible. Hence only had a drop down bar to search for topics and ask button to actually go and proceed and find the study mates. Once our first low fidelity prototype was complete, we performed a task analysis.

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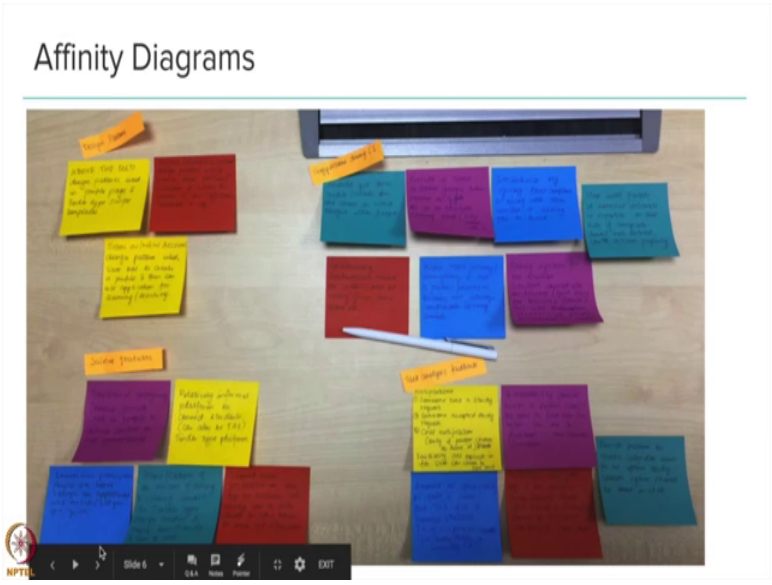

We divided the tasks, we divided the tasks into three categories; easy, medium and hard. The easy category could be logging into the application, medium could be being your profiler chatting with someone, whereas the hard one could be choosing or accepting a teacher or a study request. We analyze this by making affinity diagrams in which we club different kind of features and feedback and decided what must be implemented based on the task analysis and contextual inquiry conducted.

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In our second iteration we incorporated changes that we got as feedback from the previous task analysis. These included things like having a more detailed profile screen in which the user would first go to his profile and then go to his bio. The second important change we made in this iteration was we removed the initial hamburger menu and concatenated all into one single menu at the bottom.

The home button signifies the ask screen, the chart signifies the chart screen, the notification signifies study request that the person might have received and the profile signifies the detailed profile of the user. We again performed task analysis and incorporate this feedback to come up with that third iteration.

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In our third iteration we decided that we needed to improve upon the menu bar, the navigation bar that we gave at the bottom as the ones one before was not intuitive to the users. So, we redefined the icons and actually had a text written below them, so that the user will understand what I can meant what. We also added an option of archive and current chats and we also had added a one line description about the question on the study request screen. The user could format the text or even add send attachments when he or she asked the question. Now moving on to the high fidelity iteration.

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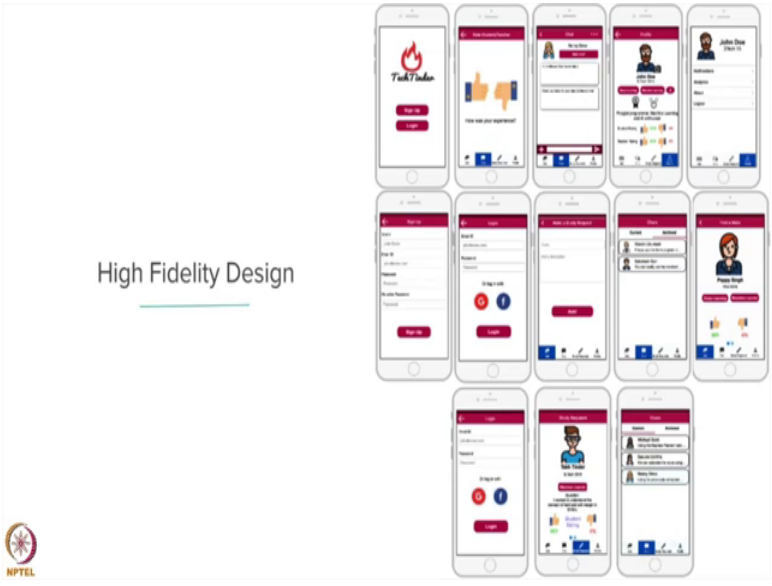

After three iterations of a paper prototyping, we moved on to create high fidelity prototypes. To do so, we used proto dot io. After making minute changes on our final low fidelity screens, we replicated those screens on proto dot io, we also created a first draft of a logo. Once we had created all the screens we added interactions between them.

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In our last final iteration of low fidelity prototype, we had used the blue color theme for our app. According to color theory a blue signified trust and stability, but after taking feedback from users we decided to go with the pink slash magenta color theme. Pink and magenta because they signified energy urgency and passion something which we wanted similar to tinder. Once we had finalized our high fidelity prototype, we performed one iteration of task analysis before moving on to creating our final app.

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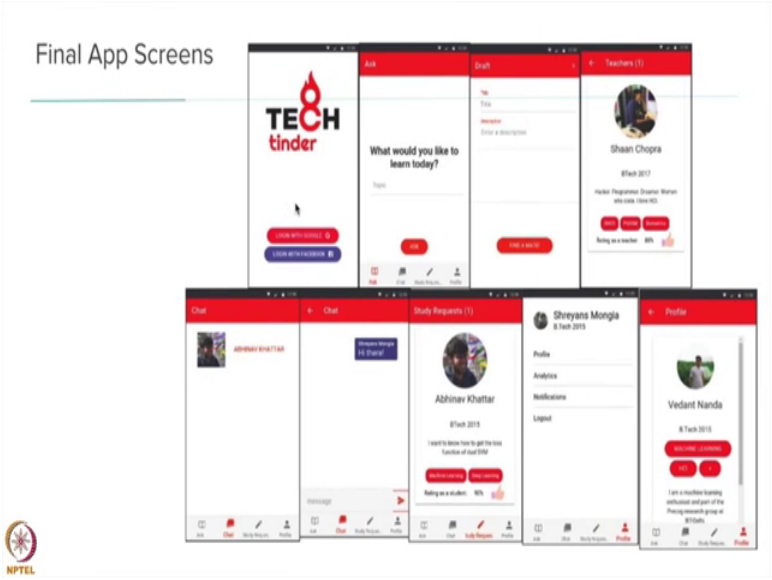

To create a final app we use the ionic platform. Ionic is a mobile first development framework. We used ionic since it provided us cross platform support. So, by creating just one application we could import it to ios, android as well as the windows platform. All our backend data is stored on firebase. While creating a final app, we change the color theme to bright orange. So, bright orange gives us a sense of importance and it is also more lively and general neutral than magenta. If you want to know more about the ionic platform you can visit ionic framework dot com.

To conclude during the design and evaluation of this app we learned many concepts and important design paradigms. We realize the importance of empathy and the value of keeping the users in the loop at every point in the production stage. We also realize the importance of multiple iterations and how focus should initially be on the functionality and how things functionality of how the app works and later on we should move on the aesthetics that is how things look the color and everything else.

We over show the entire pipeline of the design pipeline of prototyping, evaluating and building an application like we have seen in the lecture slides. Prior to this course if we were to build an application let us say a web application or a mobile application you would straight away begin with the coding of the UI elements, the backend, the database design and later on when we launched a product in the market we realized that some part of the app was not (Refer Time: 10:36) functionality and we wanted to change. It

required a lot of time a lot of efforts. This course taught us the importance of low fidelity prototyping and getting user feedback at each set of free iteration. Not only does such a user feedback model allow for streamline building but it also allows for a better design which can then be taken to a user and is more usable as well.