EduAssist

Connecting students to assist in decision making about higher education

H541 HCI I

Final Report

Team India

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I. Problem Space and Requirements Gathering

A. Defining the Problem Space

Every year thousands of people from all around the world apply to universities and colleges in pursuit of their dreams and studying further to achieve success in their career. Everyone aims to get selected in the perfect university and courses which will make their skill set stronger. However, this journey becomes difficult when one has insufficient knowledge about how to make such an important decision, along with studying for the exams to be eligible for the universities they aim for.

We, in our **Computer-Supported Cooperative Work and Social Computing design project**, aim to find a solution to the problem of making an informed decision while choosing universities for higher studies.

B. Target Users

Our target users are prospective college students, graduate students, current students of all levels, and professors willing to participate.

C. Goals and Purpose

We envision to create a one-stop solution for all aspiring students to:

- Find accurate and updated facts about all universities
- Connect with current students in the field they wish to pursue at the university of their choice
- Understand more about the specific university as a whole
- Receive help for the competitive exams for these universities
- Rankings of the universities
- Forums for the students to voice their views
- Guidance about important documents required during the process

This platform will connect a prospective student with a current student, who can personally answer the questions of the prospective student and guide them to make an informed choice.

II. Design (Conceptualization)

A. Conceptual Model (social computing model)

Basic concept:

Due to lack of channels for communication and abundance of knowledge on the internet, most prospective students, like us, face a lot of challenges to choose the perfect university and course(major) for themselves. The fact that this decision is a crucial step in our career makes it even more stressful for them to take this decision. Our approach for this problem is, to connect the prospective students to the current students. Through this approach, they will get first hand details about universities and courses.

- Not only can the current students help them narrow down the majors based on their interests, they can guide them and be a mentor to them throughout the complete process, since they have undergone the same process themselves.
- Apart from this major functionality, we included a feature called “Feeds” which are mainly questions prospective students can post, that can be answered by any other prospective students or the current students of the university it is about.
- Along with this, we added another feature, which suggests universities and courses for the prospective students, based on their choices of interests, preferred locations, universities and courses.

In other words, they can decide what career goals they want to accomplish and instead of searching for the right career choices, the personalized feed is shown to them which has answers from all perspectives (current students, former students, and maybe even professors) and this helps make their decision making process easier. This is aided with the constant one-to-one guidance from personal chats with the current or former students.

Basically, we chose to design a one stop mobile app solution for a prospective student to pick their next step in education : Edu - Assist!

1. Key CMC elements

In our efforts to design a best-fit mobile application, one that complements the needs of both the users and the system, our team focused deeply on key computer mediated components(CMC) required for ultimate acceptance and accomplishments. The application will be mobile rather than web-based. Both asynchronous and synchronous communication will be supported. Users will be able to talk synchronously via Instant Messaging, or text messaging via the typing interface. Users will conversely be able to communicate asynchronously posting messages while the other users are not currently present.

How the process works:

1. User signs up for an account by providing basic information (username, password and email id)
2. User then can pick whether they is a prospective or current student.
3. While onboarding a prospective student, the application asks him to choose:
    a. Their interests
    b. Their preferred universities
    c. Their preferred locations
    d. Their preferred courses
4. While onboarding a current student, the application asks him to choose:
    a. Their interests
    b. Their university
    c. Their course
5. In each case, they are directed to their home page.
    a. For a prospective student, the home page is filled with feeds of the university or courses he has selected or its empty
    b. For a current student, the homepage is filled with the feeds related to his university.
6. For a prospective student, he has 3 more options as tabs next to the home tab
    a. Bookmarked or favourite feeds
    b. UniHelp: Where the application suggests courses and universities on the basis of their interests and preferred choices.
    c. Profile which they can edit
7. For a current student, he has 3 more options as tabs next to the home tab
    a. Bookmarked or favourite feeds
    b. Responses, which shows the feeds he answered to
    c. Profile which they can edit
8. The current students has a Star system, which shows his credibility. The stars are awarded by the prospective students who like his/her answers. This defines his level which is showed next to his name at all times, in all of his responses.

9. The application has a search bar which is common for both the prospective and current students' design pages.
10. The application has a notification tab which is common for both the prospective and current students' design pages. This has 3 tabs
    a. Inbox for personal chats
    b. Notifications
    c. Message requests
11. Finally there are functionality to add feeds
12. There are pages for each university and the courses in that university

2. Requirements: Components/Functionality

This device will be designed as an application for portable devices such as smart phones, rather than a web based application. Connections between people will be based on interest basis. Users will be able to see content in the form of feed from other users based on the interests alikeness between both of them.

System Requirements:

Mobile device with touch screens such as android or iPhone devices to facilitate the use of a web-like mobile application.

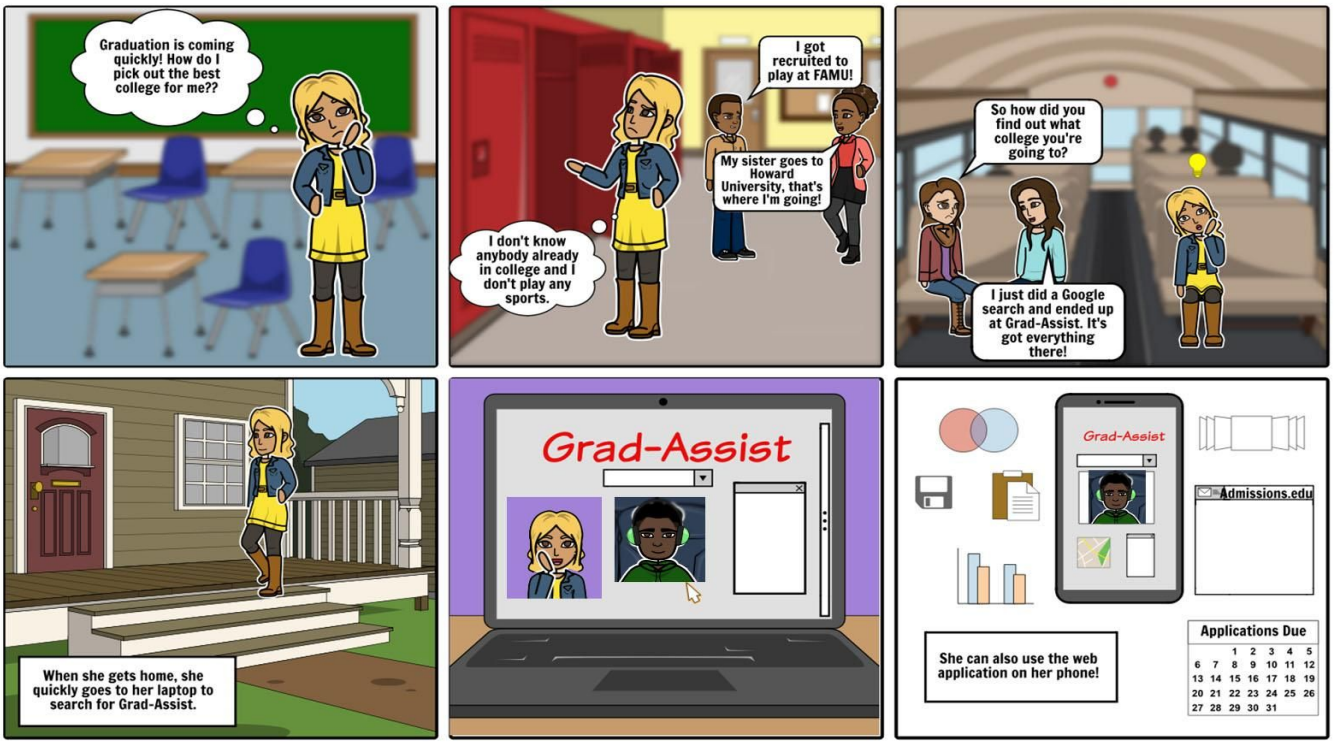
User Requirements:

1. User has smartphone and is comfortable using social media and similar kind of apps.
2. Students with basic high school level education completed.
3. No need to have expert knowledge about technology.
4. Ability to read choices from tab based menu options..
5. Ability to follow/comprehend to the written text via text response (feed comment, reply via message, chat).
6. Ability to understand written instructions and application icons for use.

3. Key Scenarios

Persona 1: Alice is a graduating senior at her high school. She still has not chosen a college to apply to and does not know how. She is concerned and running out of time. Alice wants to see all of her options when choosing a school and finding out the requirements for each school. She would also like to talk to current students at the university to get their opinions.

Scenario 1: High School Seniors



Alice is starting to worry about her future after high school. She has no one to advise her and no clue how to go about searching for a university to apply to. She overhears other students explaining how they made their choices all day. She finds out about EduAssist while riding the school bus home. Once she gets home, she looks up the website and creates an account to start her search for a university. Through this web application, she can filter schools by their location, degree programs, tuition and much more! There is also a forum/chat feature that allows her to communicate with current students at their respective university.

Persona 2: Mike is a star football player at his university and a member of the student government. His impact on and off the field is very impressionable and many people rely on him for information. Due to his busy schedule, he is not always available to talk with incoming freshman in person. He wants to stay connected with prospective students while on the road.

He also, occasionally, needs help with a course and cannot make it to tutoring in time. He needs a way to get help at any given time.

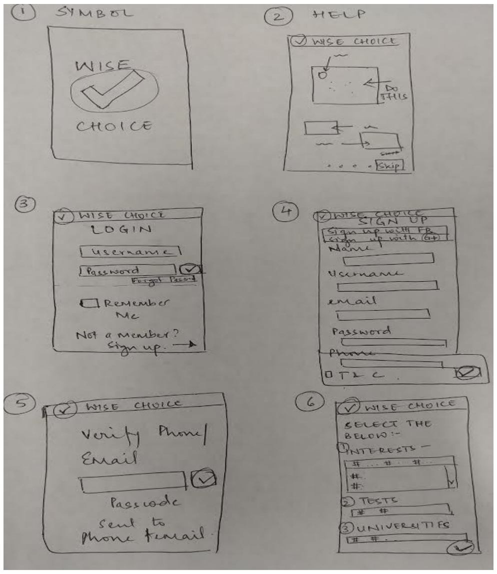
Scenario 2: Current students helping new students

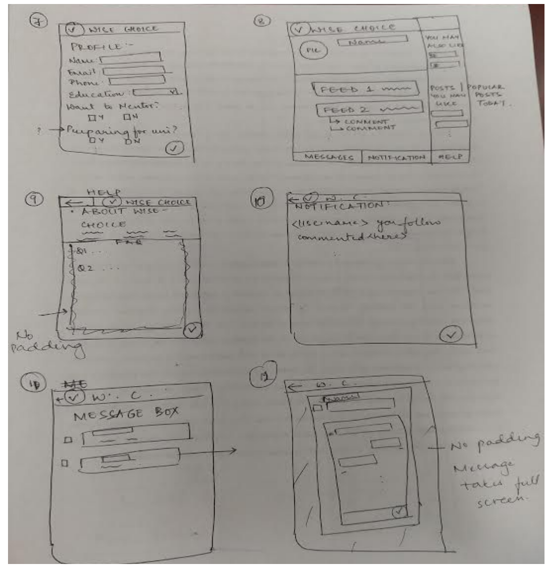
Sometimes, Mike meets with students in person to discuss classes or other issues students are having at school. Other times he uses EduAssist to get help with his coursework while on the road. He didn't have anyone to help him so now he wants to give back any way he can. He also uses EduAssist to advise, encourage, and answer questions from all of the students interested in his university, athletic programs, and degree programs. When using EduAssist he only reaches out to students who are interested in what he has to share. This prevents him from having to repeatedly market to a crowd that is not interested and saves him time.

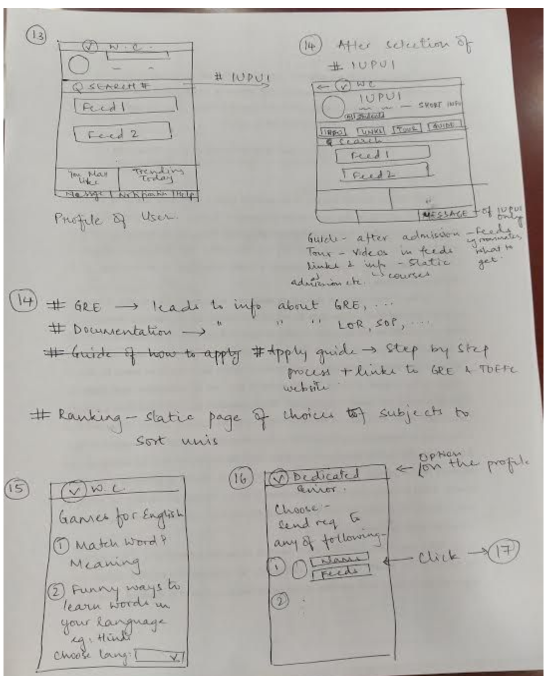
B. Prototype Design & Development

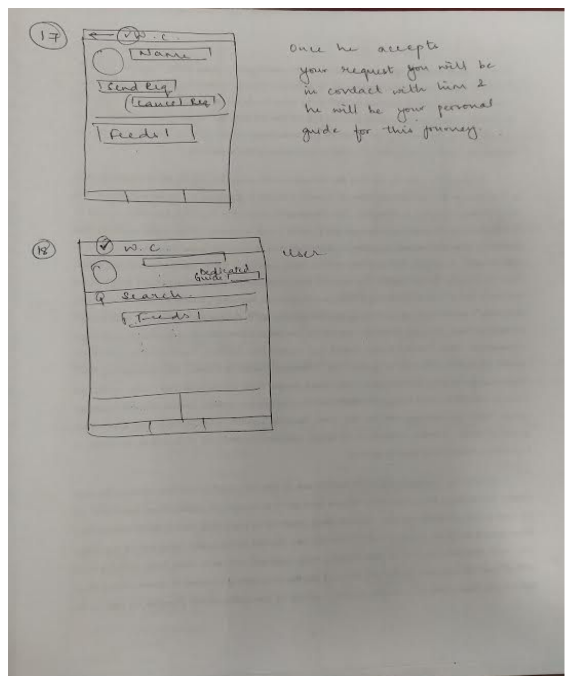
1. Paper prototype

The paper prototype was our first attempt to the design of the application which included all the features and highlighted the major aspects.
(A larger images of the pages is in the appendix, Section D)

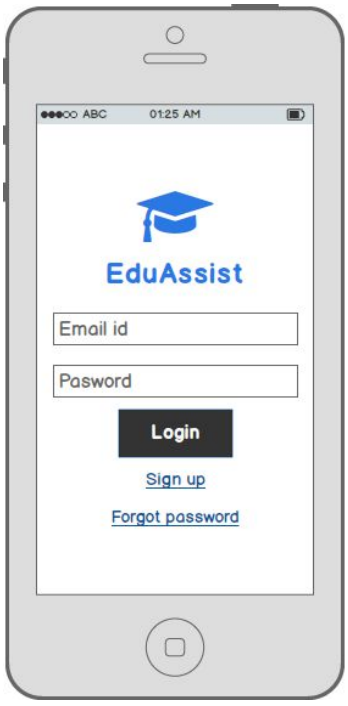

SYMBOL
WISE CHOICE
HELP
LOGIN
Not a member? Sign up.
SIGN UP
Verify Phone/Email
SELECT THE BELOW:-
INTERESTS
TESTS
UNIVERSITIES


PROFILE
NOTIFICATION
No padding
MESSAGE BOX
No padding
Message takes full screen.

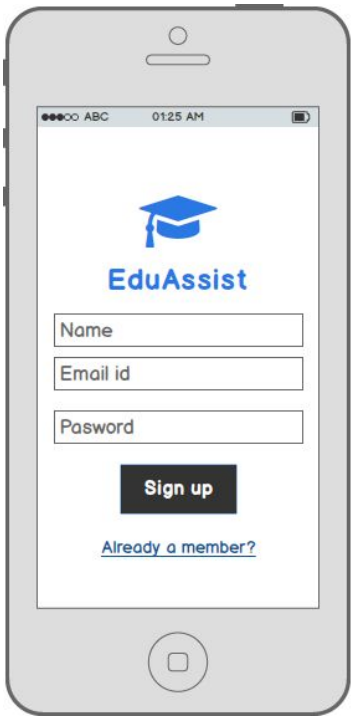

Profile of User
After selection of # IUPUI
GRE → leads to info about GRE, . . .
Ranking – static page of choices of subjects to sort unis
Games for English
Dedicated Senior
Click → 17


Once he accepts your request you will be in contact with him & he will be your personal guide for this journey.
User

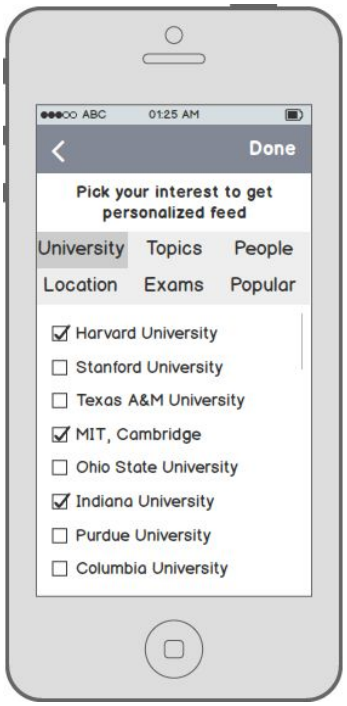
2. Low Fidelity Prototype



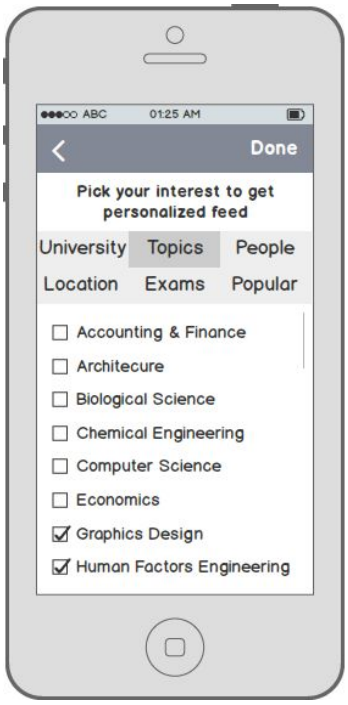
Login



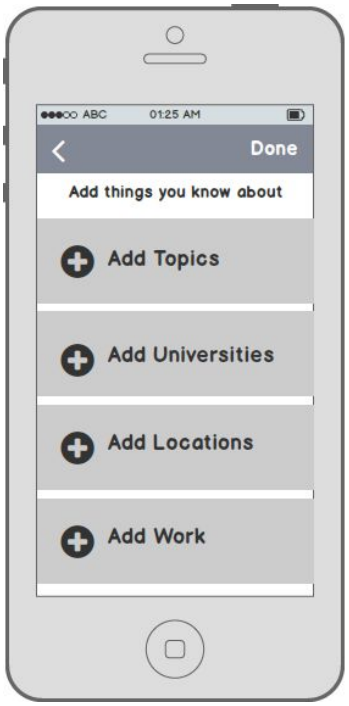
Signup



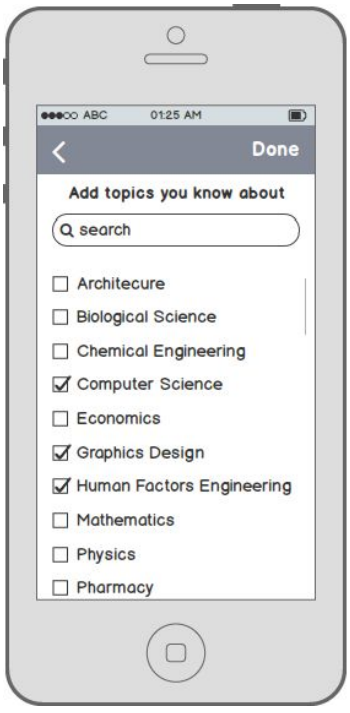
Onboarding - pick universities of your interest



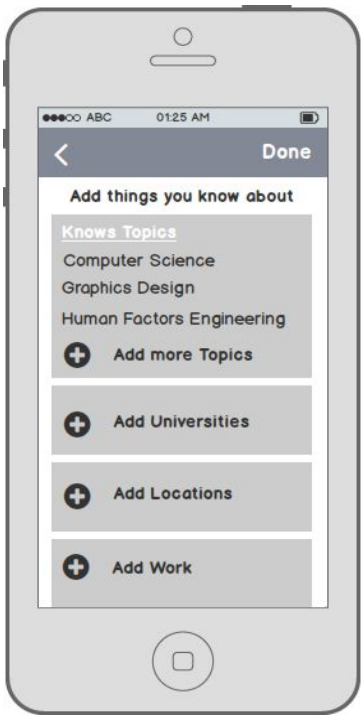
Onboarding - pick topics of your interest



Add things you know about

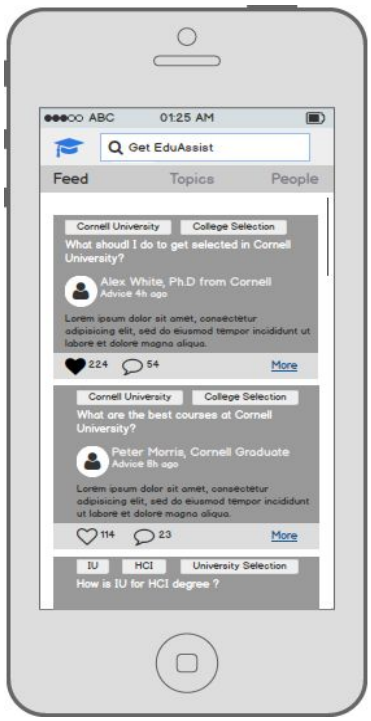


Add topics you know about

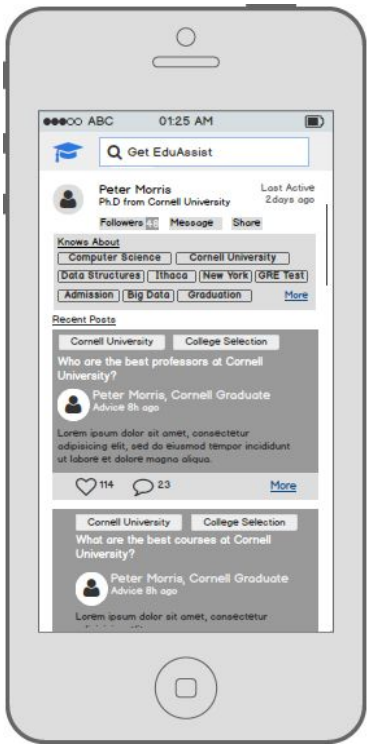


After adding topics you know about

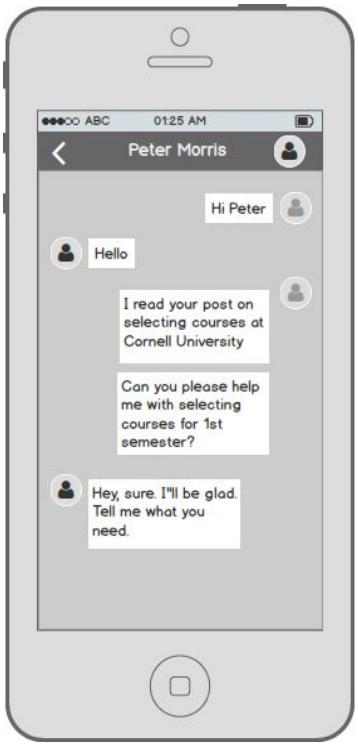
Home page - Feeds tailored as per your interest



Favorite post on your feed



User Profile



Message exchange between two users

3. Cognitive Walkthrough

From our walkthrough with users, we found what was clearly understood and where issues could arise. These were a few recommendations based on our findings from cognitive walkthrough:

1. Onboarding screen - In cases where the user does not find the universities or topics of his interest in the list, it is difficult for the user to list them. Hence, include a search box or add interest option for the user.
2. Clicking on the interest's tag appearing on feeds is not intuitive enough. We should make the interest's tags look like hyperlinks so that user knows that he needs to click on them.
3. The message button on user profile profile page does not catches user's attention. Place the message button on user's profile in way that it gains user's attention.
4. How to post general questions is unclear for the user. Have some action button on the home page to post questions.

(The complete set of internal walkthrough data in format given are in the appendix, Section A)

4. Dynamic Prototype

Based on the research, data gathered and the affinity mapping (Appendix, Section F), we created a dynamic prototype in JustInMind desktop application.

The link for the prototype is:

https://www.justinmind.com/usernote/tests/22502723/22503771/22798898/index.html

(The complete set of screens are in the appendix, Section E)

III. Validation (Product Assessment)

A. Usability Study Findings

Our dynamic prototype had 3 main features for a prospective student,

Collaborating with students

University help and information

Feeds

These formed the basis of the task scenarios we designed. These task scenarios covered most of the features of the prototype. Even though according to us we designed the application to provide the user with maximum ease and clarity for selecting a university by collaboration, we wanted to test whether this aim was realized by the user while they used our app.

Since our primary persona is a prospective student, we chose 5 UX students who have undergone the stage of being a prospective student. This would also give us a chance to understand how much they as current students want to interact with prospective students.

The task scenarios we chose were:

1. Sign Up as a prospective student who has decided to go for either HCI or computer science at IUPUI in Indiana
2. While browsing, find the university, IUPUI, and the course details of Computer Science in it.
3. Find and open the feed titled, “What are some of the best courses offered at Cornell University?”

In this task, we wanted the user to check whether the user is able to understand the “feeds” feature of the application and how they would interact with it.

1. Task Error

Task 1: Sign Up as a prospective student who has decided to go for either HCI or computer science at IUPUI in Indiana

Findings: Some of the inputs we received were:

“This could be a questions as given the user so many choices at first without knowing the application would not be a good experience”

“I HAVE NO IDEA HOW TO SELECT MY INTERESTS; IS IT LOCATION? IS IT COURSES OFFERED? IS IT UNIVERSITY CHOICE? IS IT MAJOR? IS IT THE PLUS BUTTON? I CAN’T FIND IT ANYWHERE.”

“seems pretty good option but cost is also an important factor that helps in decision making process”

“After selecting the interests I was looking for a “Done” action to save my selection.”

“ There is no visual cue to understand that that the options available in the “Courses”, “Universities” and “Locations” is based on your selection in “Interest”. Or are they not? Not sure.”

“It was pretty clean and I liked the interface”

Impact of the errors: The impact of the errors reported was that the users were not able to intuitively understand the motive behind the onboarding process as clearly as we had hoped. This caused the evaluators to get confused even in the navigation of this procedure. Along with this, a few factors which we hadn’t taken into account like the money factor. 4/5 evaluators had problems with the onboarding process.

Mean of the task errors: We realize that the application requires a better onboarding process. The basics aim behind the longer than usual sign up process wasn’t clear. A probable solution to this would be to create a set of assist pages when the user signs up to help clarify the aim of the application.

Task 2: While browsing, find the university, IUPUI, and the course details of Computer Science in it.

Findings: Some of the inputs we received were:

“I did not understand this part where the user chose universities and then got courses in those universities or these were courses in general. I think you need to update this workflow”

“Content under each sub tabs are not consistent.”

“The selections in subtasks were simple and easy to navigate”

Impact of the errors: The main aim of this task was to understand whether user would intuitively understand that the courses and the universities were links to more information about them. this was pretty clear however, some 2/5 participant had navigational problems.

Mean of the task errors: This task highlighted the fact that the UniHelp section of the application requires consistency needs to be more clear about the links. Probable solution is that we can underline each university and course name to make it evident that it is a link to another page.

Task 3: Find and open the feed titled, “What are some of the best courses offered at Cornell University?”

Findings: Some of the inputs we received were:

“give a option open or more to click on”

“IDK WHAT THE AWARD 5 POINTS THING WAS ABOUT BUT I COULD NOT SELECT IT ANYWAYS. “

“Did not know how to get to this feed easily. Random clicks got me there”

Impact of the errors: The impact of the problem of navigating to the page which gives more details about the feeds was that it confused the evaluator. We can’t have the user confused in this aspect of the application as it would cause the user to give up and not open the feed. This would defeat one of the primary focuses of the app. 4/5 app

Mean of the task errors: We thought that clicking on the feed to provide more details about it would be intuitive, however, after the evaluation we are rethinking this and are considering a dedicated button to open the feed.

2. Post-Task Questionnaire

Post-Task Questionnaire:

We then asked the participant to give a post-task survey on google survey. This gave us the statistics about the the clarity of the concept, both overall and of specific elements of the app, and about whether the interface clearly communicated the state of the app.

(Details of the entire survey along with the statistics are in the Appendix, Section B)

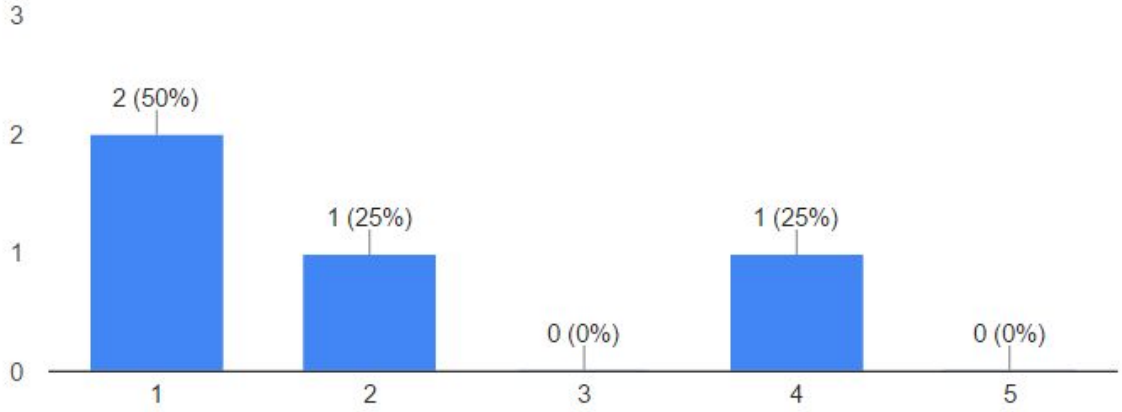
Findings:

Task 1:

Completion Rate: 100%

Issues faced: max 3

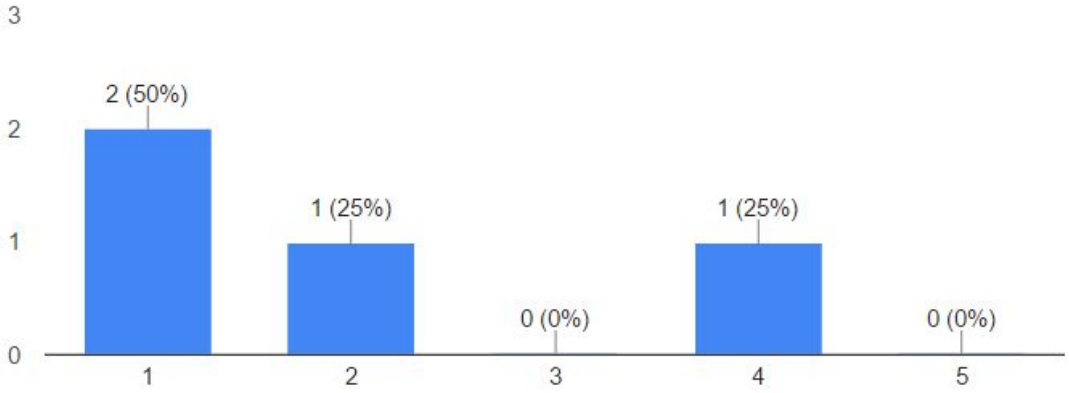
Difficulty levels: 1 - Easy, 5 - Hard



Task 2: Completion Rate: 75%

Issues faced: max 1

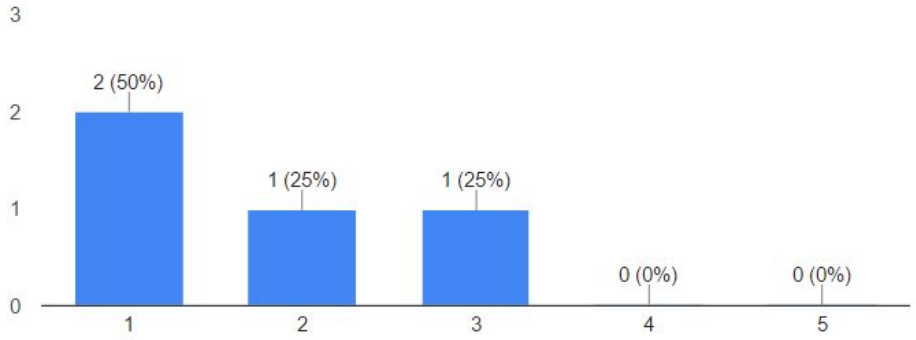
Difficulty levels: 1 - Easy, 5 - Hard



Task 3: Completion Rate: 100%

Issues faced: max 1

Difficulty levels: 1 - Easy, 5 - Hard



3. Interview

We asked evaluators a series of open-ended questions about EduAssist. During the interview with each of the evaluators, they spoke in depth about the issues they faced. We took notes of the evaluator's comments so as to understand them better and implement them. We had no demographic limitations since our primary persona was a prospective student, who was easy to find amongst graduate and undergraduate students. However, we chose current students who understood the phase a prospective student goes through, having undergone that themselves. This gave us a honest, as well as, a UX point of view.

(Details of the email sent and documents used is in the Appendix, Section C)

Since the demographics were already covered in the survey, we began with the interview once we made the evaluator comfortable.

Questions:

- What was your view on the concept of this application?

Summary: The concept according to 4 of the evaluators was interesting and good since it brings the students closer and helps them. The 5th evaluator was confused about how the application fits between a social media application and a information application.

- What did you think of the design overall?

Summary: They felt that the design was simple and good however, the design of the onboarding process needs improvement.

- What are your comments on Task 1?

Summary: Tabs were confusing since they had no idea how and what their selections will affect.

- What recommendations do you have for Task 1?

Summary: They recommended a few help options in the beginning so that they can understand what is the aim of the application and the tabs.

- What are your comments on Task 2?

Summary: The task was pretty simple for most of them, though one of the evaluator mentioned that they weren't able to recognize the subtabs we have put under Unihelp.

- What recommendations do you have for Task 2?

Summary: The evaluators felt that this part of the application was not clear to them, and some of the contents on the screen were not clear. One suggested that we speak about what this feature does during onboarding.

- What are your comments on Task 3?

Summary: The major issue they all recorded was that they were unable to intuitively guess what to click to open the feeds page.

- What recommendations do you have for Task 3?

Summary: 3 out of 5 evaluators recommended use of a button to click which is to open the new page, or have 3 dots on the side of the feed, suggesting that there are further options for it.

- Do you have any suggestions for the application overall?

Summary: The evaluators stressed upon the navigation of the application again. They liked the application and the layout, just recommended a few buttons or help screens to make the aim of the application more understandable.

- What else would you like to mention that we haven't covered?

Summary: Here 4 out of 5 said they covered everything they had in mind, although one evaluator stressed on the fact that the prototype was missing a few screens which made the evaluation feel incomplete.

We finally thanked each and every evaluator for their time and ended the interview.

B. Summary of Product Assessment

1. Problems with the product

The problems with the product as understood by the evaluations we conducted are:

- After signing up, we need to guide the user in a more intuitive way, through the process of selection of their interests, universities, courses and locations. We need to make sure the user understands the main reason behind this step.
- The Home screen required a guide as well as soon as the user signs up.
- The feeds need to have a more intuitive method so that it leads to the feeds page, which gives the details of the specific feed.

- We need to improve the current students home page to make sure a current student understands the “stars” feature.
- We need to improve the design of the application since some of the buttons were not interactive.

2. Recommendations for the future development

- Add a set of help screens before onboarding to give the user a jist of our application
- Add a set of screens to help the user easily and effectively sign up.
- Improve the basic look and feel of the application graphically (font size and colors of the application)
- Redesign the application a bit to make the notifications button more noticeable and signout button not floating.
- Add a set of help screens for the current student as well, to explain the features of our application.
- Make the transition from the home page to the detailed feeds page smoother.
- Add more screens to the prototype to make it complete, like “add a feed page”.
- Add more features to the pages of the university.
- Add the functionality to shift languages
- Add the features where in the prospective students can consult with the current students regarding other topics like: Letters of Recommendations, Statement of Purpose, GRE, SAT, TOEFL, Housing and the areas surrounding each university.

Thus, we can make Edu-Assist helpful and guide prospective students for making the critical decision of choosing their future university and majors by bridging the gap between prospective and current students.

Appendix

A. Cognitive Walkthrough Feedback Form

We conducted the Cognitive Walkthrough for our low fidelity mockups by performing following key tasks:

1. Sign up and then login to EduAssist.
2. Search for IUPUI university and explore information about the course H541-Interaction Design Practices
3. Find a dedicated mentor name 'Sanjay Bafna' and message him.

While we performed these tasks, we carefully documented the issues found by answering the questions related to each task.

Cognitive Walkthrough Report (CWR)

CWR Number: CWR01
Product Name: EduAssist
Task Name: Sign Up for the application
Date and Time of Study: 10:00 am- 12:00 pm Friday, November 18, 2016
Experimenters' Names: Swapnil Chandra

Task Description:

Sign up and then login to EduAssist.

Task Action Sequence:

1. *User: Launches the application: EduAssist*

System: Splash screen leading to short introduction of the application. Leads to Login Page with signup option.

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. There will be a sign up option along with an option to login if already signed up.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The sign up screen will appear.

2. *User: Clicks sign up*
   System: Opens sign up page

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. Boxes will be available to fill the details
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. There will be real-time validation

3. *User: Fills in his details and hits enter*
   System: Opens a screen to add his interests, topics he likes, people, universities etc. of his choice.

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?	Yes	Though, the details to be filled are self explanatory, issue is if the user does not find interest in the list. Maybe having some option like “add your own interest” will help.

If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The second screen will appear.

4. *User: Selects his choices. Clicks done*
   System: Opens a screen to add details about him, like university he is in, education level, topics he knows etc.

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?	Yes	The user selects the options present in the list. What if the user does not find the his university/education/topics in the list? Having a search option to find things might help.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. Clicking on “done” button will take you to the next screen.

5. *User: Fills in the details. Clicks done.*
   Phone: Opens his profile.

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. “Done” is clickable and intuitive.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. Profile screen will open.

6. User: Clicks on Sign out

System: Opens the Login page.

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. Sign out button is clickable and self-explanatory.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. Since it will log off.

Interface/tool/system description:

The mobile application would be for both IOS and Android. It will work on any device. Currently, we are working with paper images of the applications and placing the pieces of paper one by one in front of the user.

CWR Number: CWR02
Product Name: EduAssist
Task Name: Looking at university information
Date and Time of Study: 10:00 am- 12:00 pm Friday, November 18, 2016
Experimenters' Names: Swapnil Chandra

Task Description:

Search for IUPUI university and explore information about the course H541-Interaction Design Practices.

Task Action Sequence:

1. *User: Launch the application*
   System: Splash screen with the login page

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. There will be a sign up option along with an option to login if already signed up.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The login screen will appear.

2. User: Login in
System: Opens the profile of user

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. “Sign in” is clickable and intuitive.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. Profile screen will open.

3. User: Types IUPUI in the search bar and clicks search
System: Shows relevant searches

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. There will be a drop down with suggestions as user types and all text is clickable.
If the user does the right thing, will they know that they did the right thing and that they are		Yes. The relevant searches open

making progress towards their goal?		

4. User: Clicks on IUPUI tab
System: Opens IUPUI group

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. Tabs are intuitive and clickable.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The IUPUI page opens.

5. User: Clicks on Information tab
Phone: Opens the information page of IUPUI

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. Information tab is intuitive and clickable.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The screen with the information will open.

6. User: Types H541- Interaction Design Practices in the search tab. Click search
System: Opens the course option

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes, since the search has real-time suggestions
If the user does the right thing, will they know that they did the		Yes, since the course option page opens.

right thing and that they are making progress towards their goal?		

7. User: Explores about the course and the teachers teaching it. Looks at the links offered in the course description.
System: [n/a]

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. He is exploring information
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes, since the information is categorized.

8. User: Looks at the feeds from people about the course. Clicks on a feed about Dr. Lynn Dombrowski.
System: Opens the feed and the comments related to the feed.

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?	Yes	Clicking on a feed is intuitive and hence information is given. But related tags shown in the feed for a particular post are not seen as hyperlinks. The user does not know if he has to click those tags.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?	Yes	The feed is opened for the user. But pop messages or toast messages about the feed would help the user understand what these feeds about. The user should be kept informed here about what he is seeing.

9. User: User: Comments: What are your views on the method of her teaching

System: posts the comment.

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. Comment button is clickable and intuitive.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The comment displays in the thread of feed.

10. User: Clicks on Sign out
System: Opens the Login page.

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. Sign out button is intuitive and clickable.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The user is logged off and login page opens.

Interface/tool/system description:
The mobile application would be for both IOS and Android. It will work on any device. Currently we are working with paper images of the applications and places the pieces of paper one by one in front of the user.

CWR Number: CWR03
Product Name: EduAssist
Task Name:

Messaging someone
Date and Time of Study: 10:00 am- 12:00 pm Friday, November 18, 2016
Experimenters' Names: Swapnil Chandra

Task Description:

Find a dedicated mentor: Sanjay Bafna and message him.

Task Action Sequence:

1. *User: Launch the application*
   System: Splash screen with the login page

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. The login page opens.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes, the done button leads to the next page.

2. User: Enter username and password and click Login
System: Opens the profile of user

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. Input boxes are mentioned well.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The profile page opens.

3. User: Types "Dedicated mentors" in the search bar and clicks search
System: Shows relevant searches

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. The search has real time suggestions.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. Relevant searches open up.

4. User: Clicks on "Dedicated mentors" tab
System: Opens "Dedicated mentors" group

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. The dedicated mentors tab is self-explanatory and clickable.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. Opens the Dedicated mentors page.

5. User: Clicks on Mr. Sanjay Khanna
System: Opens his profile.

CW Question	Issue?	Notes
Will the user know what to do at this step?		Yes. Each name is clickable and self-explanatory.
If the user does the right thing, will they know that they did the right thing and that they are		Yes. Screen of profile opens.

making progress towards their goal?		

6. User: Sends message clicking on message button.
System: Sends message to Sanjay

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?	Yes	The message button is not intuitive enough. Landing on the profile page of the recipient user, it is confusing for the sender user to recognize the message button.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. A notification will show the status of the message request.

7. User: Opens Message window and types a message to Sanjay.
System: Sends the message to Sanjay in the conversation thread.

CW Question	**Issue?**	**Notes**
Will the user know what to do at this step?		Yes. Type messages.
If the user does the right thing, will they know that they did the right thing and that they are making progress towards their goal?		Yes. The conversation thread is intuitive.

Interface/tool/system description:
The mobile application would be for both IOS and Android. It will work on any device. Currently we are working with paper images of the applications and places the pieces of paper one by one in front of the user.

B. Usability Test Results

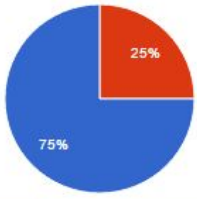
Have you undergone the application process for universities?

Yes	4	100%
No	0	0%

Are you a current student?

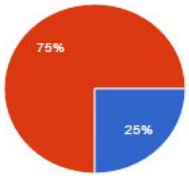
Yes	4	100%
No	0	0%

If yes, would you be interested in connecting with prospective students?



Yes	3	75%
No	1	25%

Would you have used such an application as ours?



Yes	1	25%
No	3	75%

Is there anything else you would like to tell us about yourself?

N/A
If you could give me a context of what you want me to describe it would be easier for me to articulate this answer
Nothing

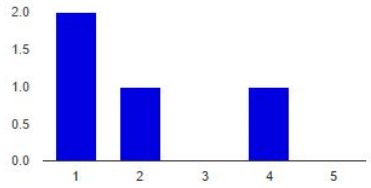
Task 1: Were you able to complete the task?

Yes	4	100%
No	0	0%

Task 1: How many issues did you face?

3
Signing up was very easy. I dont think I faced any potential issues here.
nothing

Task 1: Difficulty Level of the task: (1 easy, 5 tough)



Easy: 1	**2**	50%
2	**1**	25%
3	**0**	0%
4	**1**	25%
Hard: 5	**0**	0%

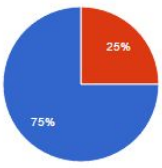
Task 1: Your suggestions regarding the design of this task.

I didn't know I had to sign up for the app. I just logged in from the main page that was shown when I clicked on the prototype link. I had to log out and then sign up to get to the interests page.
It was pretty clean and I liked the interface
the signup page has terms and conditions checkbox but it has no link to terms and conditions

Task 1: Any other comments?

Not sure if this is suppose to be a social media app for students or a contest by students (the Award X Points Option is unclear to me). I didn't see any points I might accumulate on my profile. Can I search for common interests with other students? It's not clear to me.
No

Task 2: Were you able to complete the task?



Yes	**3**	75%
No	**1**	25%

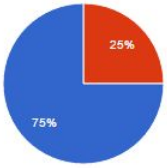
Task 2: How many issues did you face?

0
I had a bit of a problem finishing this task. The reason was I was not sure which tabs to use to complete my task. Usually when you are onboarding a user you dont give the user choices. As a user I was confused with the tabs given on top. I thought the app will guide me and take me to the required screens.
nothing

Task 1: Any other comments?

Not sure if this is suppose to be a social media app for students or a contest by students (the Award X Points Option is unclear to me). I didn't see any points I might accumulate on my profile. Can I search for common interests with other students? It's not clear to me.
No

Task 2: Were you able to complete the task?

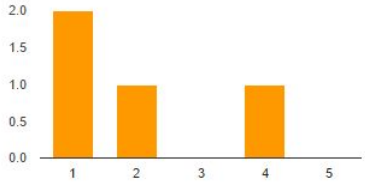


Yes	3	75%
No	1	25%

Task 2: How many issues did you face?

0
I had a bit of a problem finishing this task. The reason was I was not sure which tabs to use to complete my task. Usually when you are onboarding a user you dont give the user choices. As a user I was confused with the tabs given on top. I thought the app will guide me and take me to the required screens.
nothing

Task 2: Difficulty Level of the task: (1 easy, 5 tough)



Easy:	1	**2**	50%
	2	**1**	25%
	3	**0**	0%
	4	**1**	25%
Hard:	5	**0**	0%

Task 2: Your suggestions regarding the design of this task.

N/A
As mentioned above I think you should work on improving the onboarding of the user. The onboarding has to be as smooth as possible, as this would decide if the user will use your application or not.
very easy and clear screen

Task 2: Any other comments?

N/A
I liked the concept but you some if the interactions were weak.

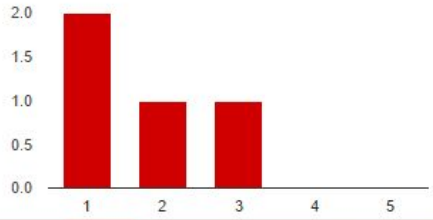
Task 3: Were you able to complete the task?

Yes	4	100%
No	0	0%

Task 3: How many issues did you face?

0
I did not face any issues in this. This was pretty clear.
hey I had difficulties in opening the feed, where exactly should i click to open the feed

Task 3: Difficulty Level of the task: (1 easy, 5 tough)



Easy: 1	2	50%
2	1	25%
3	1	25%
4	0	0%
Hard: 5	0	0%

Task 3: Your suggestions regarding the design of this task.

N/A
I liked this page and I think this was well designed
"More", "open" deliberate options could help

Task 3: Any other comments?

IDK WHAT THE AWARD 5 POINTS THING WAS ABOUT BUT I COULD NOT SELECT IT ANYWAYS.
No
nothing

What are your views on the concept of the application?

I think it needs to be clear if this is a social media app or an information ranking app like "Rate my professors" is.
The concept is good and is worth improving. I think many students would want to use this application
concept seems good to interact with students to know more about the college
it would be helpful for the people who are looking for school and program meet their interests.

What are you views on the design of the application?

I think I just needed to get used to a non-IOS design. But overall its fine and learnable.
The design is good and simple. I liked the colors scheme that you have used. You need to improve the onboarding.
the application could have a more logical process and a more clean view

What are some suggestions you would recommend?

I NEEDED TO SIGN UP WHICH I COULD ONLY DO AFTER I SIGNED OUT OF MY ACCOUNT (WEIRD). I DIDN:T LIKE THAT I HAD TO CLICK THROUGH THE TABS INSTEAD OF PRESSING THE NEXT BUTTON TO MOVE ONTO THE NEXT INTERESTS. FOR EXAMPLE, IF I GOT DONE WITH LOCATIONS, I IMMEDIATELY WANTED TO PRESS THE NEXT BUTtON TO MOVE ON TO PICK MY UNIVERISITES, BUT THE NEXT BUTTON TOOK ME TO THE HOME PAGE. I NEEDED TO CLICK THE TAB OF THE UNIVERSITY TO PICK MY UNIVERSITY.
I liked the app and I think you can add more information like the location and the housing information of that location, best places to stay or best places eat etc.
could works more on the color and layout

Is there anything else you would to mention that we haven't already covered?

IT SEEMS FINE. NOT EVERY TAB AND SELECTION WORKS OR BRINGS UP A NEW SCREEEN
No

C. Test Subject Profile Information

Our test subjects were graduate level students in the HCI program.

These subjects have studied UX design before and have a great understanding of what an application should consist of as well as, how to give feedback to make it better. Apart from this they perfectly sympathize with our primary persona: A prospective student, mainly because they have gone through that phase.

Email we drafted:

Dear Rehab,
Thank you for taking the time to evaluate my product for my HCI I final class project – Edu Assist.
During this evaluation, we would like your honest feedback assuming that every input you provide is important to us to make the design for this application intuitive and user-friendly (there are no wrong answers or suggestions).
Some background about our project: This project is inspired by our personal experiences faced while we applied to universities for our higher education.
Due to lack of channels for communication and abundance of knowledge on the internet, most prospective students, like us, face a lot of challenges to choose the perfect university and course(major) for themselves. The fact that this decision is a crucial step in our career makes it even more stressful for them to take this decision. Our approach for this problem is, to connect the prospective students to the current students. Through this approach, they will get first hand details about universities and courses. Not only can the current students help them narrow down the majors based on their interests, they can guide them and be a mentor to them throughout the complete process, since they have undergone the same process themselves. Apart from this major functionality, we included a feature called "Feeds" which are mainly questions prospective students can post, which can be answered by any other prospective students or the current students of the university it is about. Along with this, we added another feature, which suggests universities and courses for the prospective students, based on their choices of interests, and preferred locations, universities and courses.
On the basis of the above, we have designed a prototype. This is the basic prototype of Edu-Assist and we would really benefit with your inputs on how to improve the design to makes it more user-friendly and intuitive.
The prototype has been created in such a way that it provides the above basic functionalities however due to the time constraints, the prototype is not fully functional. When you evaluate the prototype, please do mention additional features we can add to make this app successful. In the future scope, we plan to add a few more screens.
Prototype Link:
https://www.justinmind.com/usernote/tests/22502723/22503771/22798898/index.html
Tasks:

- Sign Up as a prospective student who has decided to go for either HCI or computer science at IUPUI in Indiana
- While browsing, find the university, IUPUI, and the course details of Computer Science in it.
- Open the feed titled, "What are some of the best courses offered at Cornell University?"

While carrying out the tasks, you can record your suggestions and comments in: Task Error Recording Sheet.docx (PFA)

After the evaluation is completed, please let us know your comments in the survey:
https://goo.gl/forms/03TkkkG7eimixf0Z2

Once this evaluation is complete, we want to schedule a telephonic interview, so that we can have a better understanding of your problems and suggestions. Please suggest a suitable time for you.
We really appreciate your inputs and time.
I, a member of Team India- Swapnil Chandra, can be contacted on: +1-314-201-0701, swapchan@iupui.ed
Thank you.

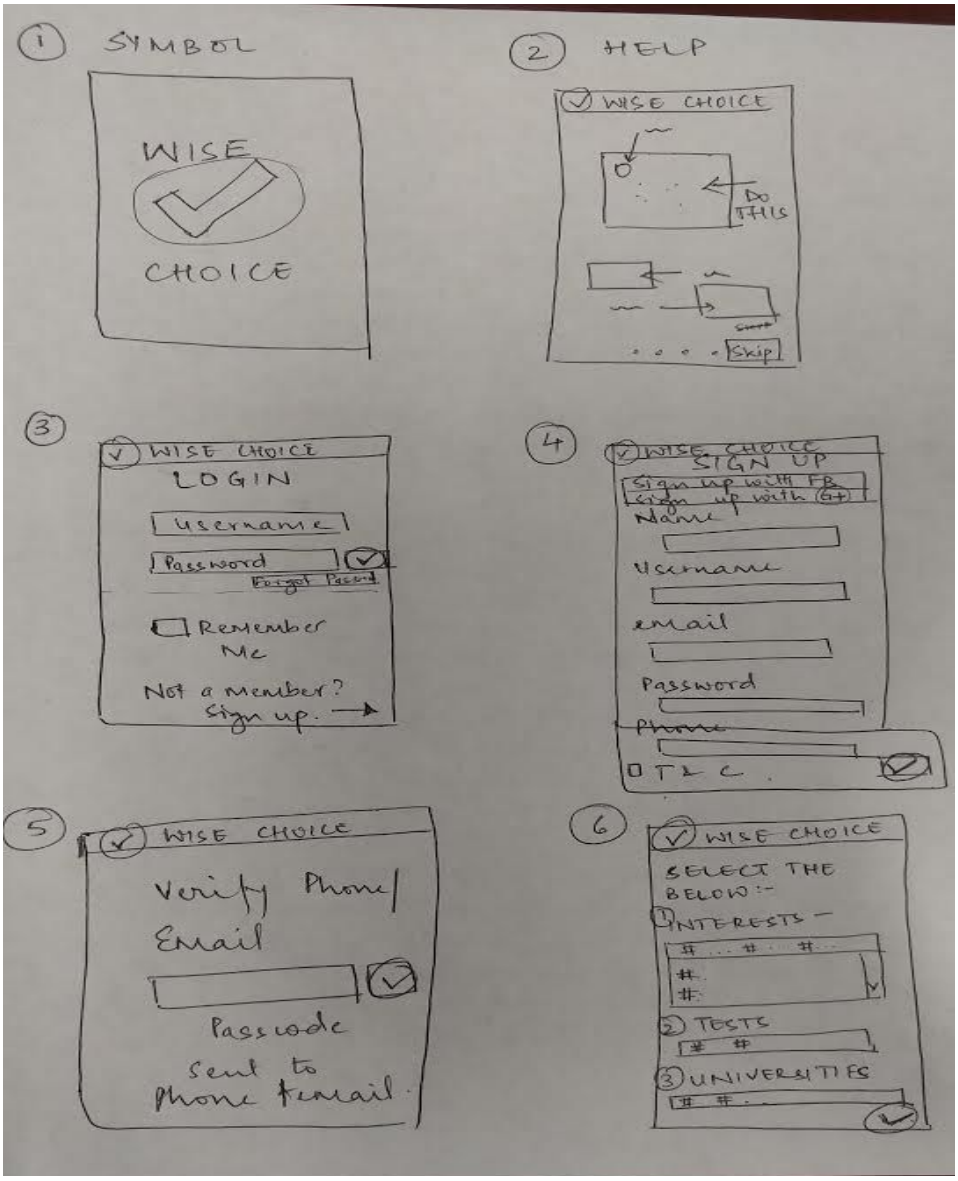
Regards,
Swapnil Chandra, Mia Moore, Kartik Rao
Team India

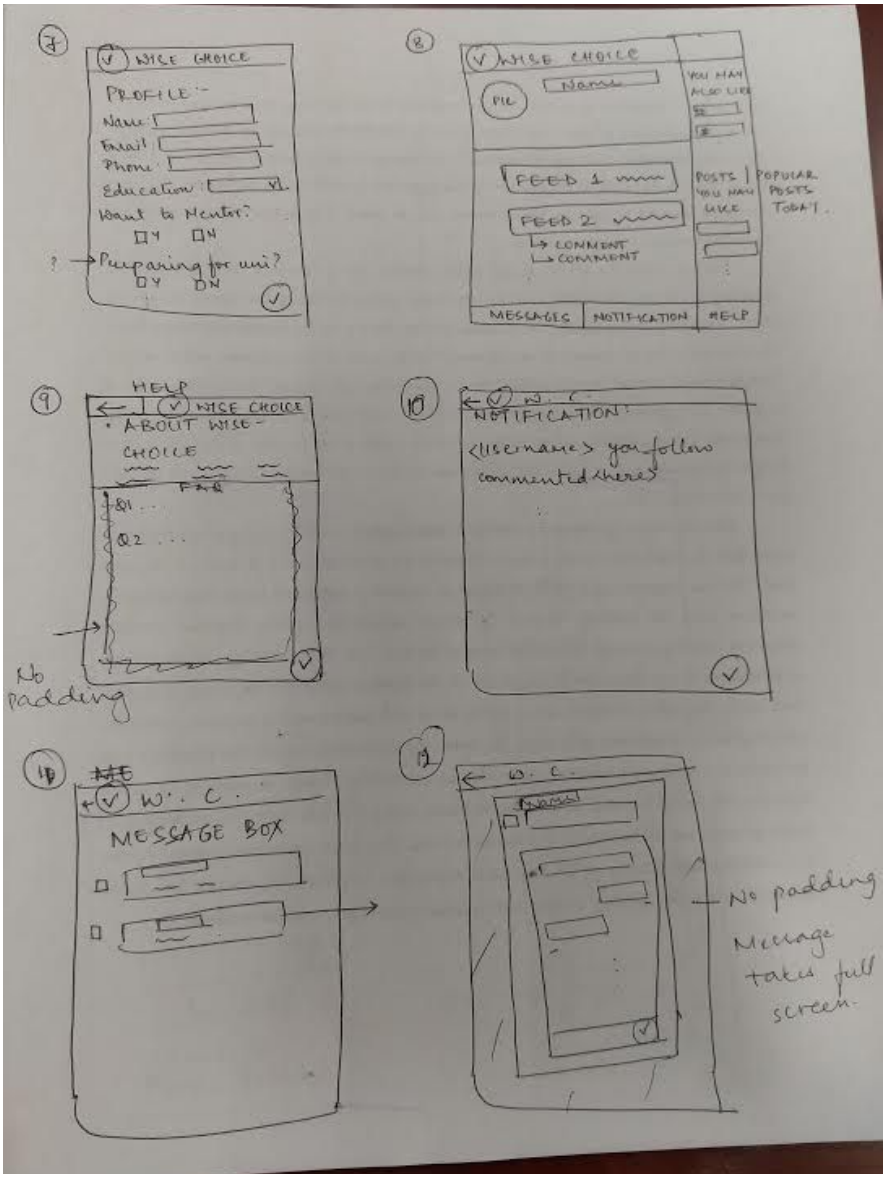
Along with this we attached a .docx file where they recorded their comments and sent it to us. The layout of this file can be found at:
https://drive.google.com/open?id=0B8e7wVS4AGcab3RRd2ZGTjd1Qms

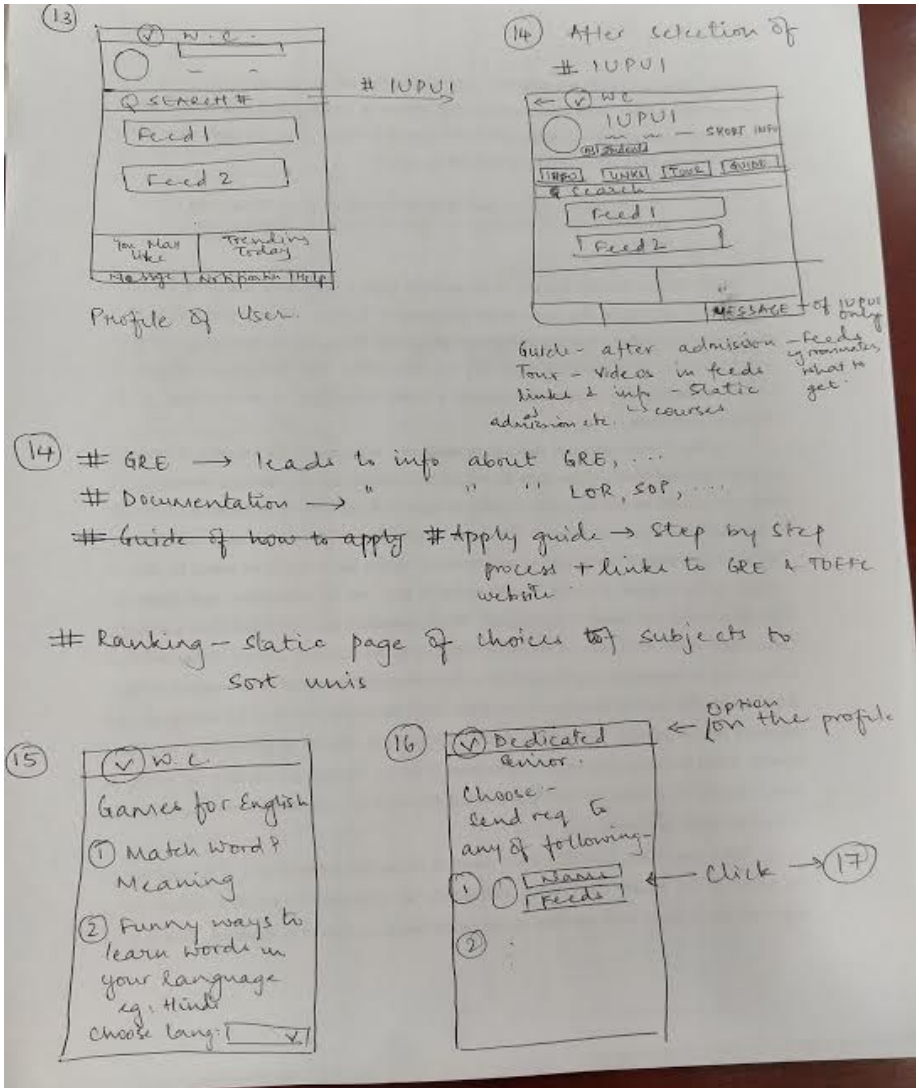
D. Additional Screen Images of Product Interfaces

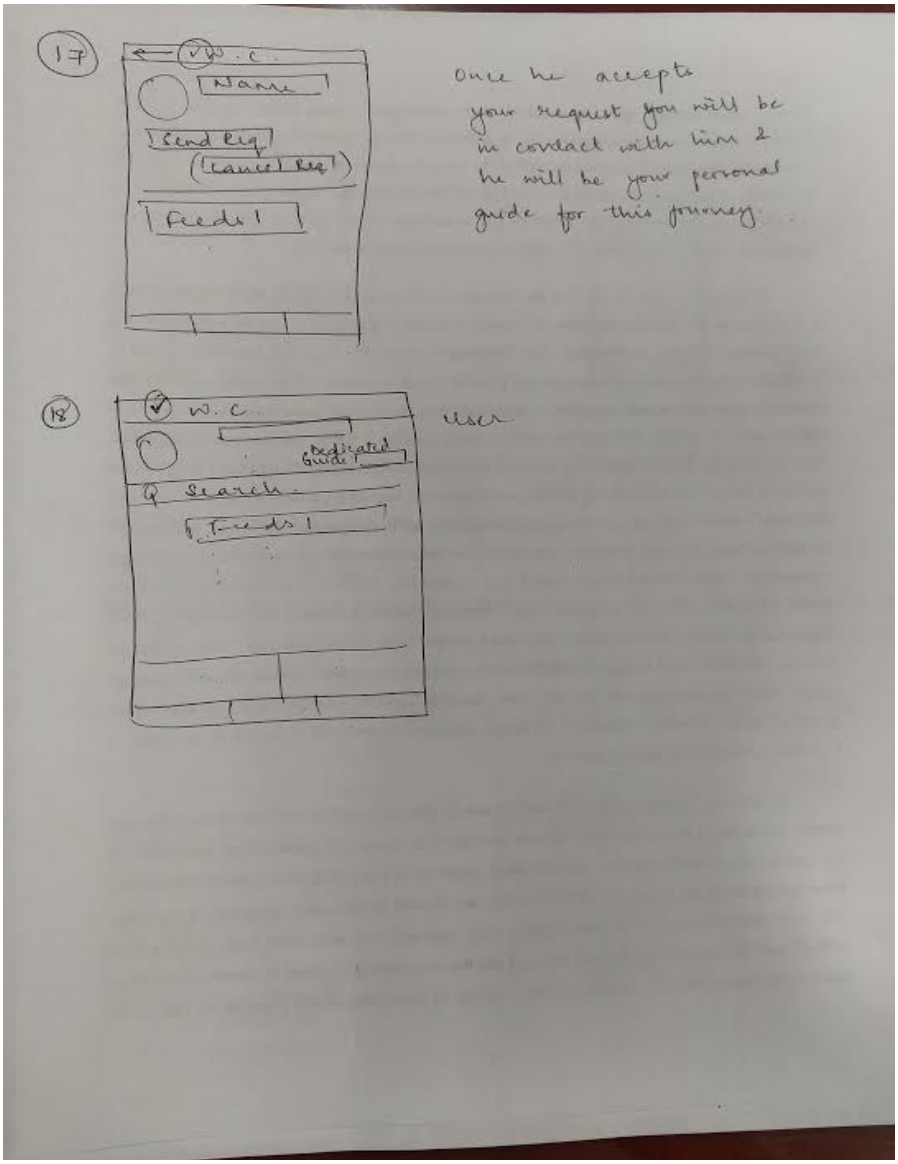
Sketches and Low Fidelity mock ups with core functionality

For our product, we began by sketching out a few paper mockups.
The following are the final sketches we came up with which explained the complete flow and functionality of our product.

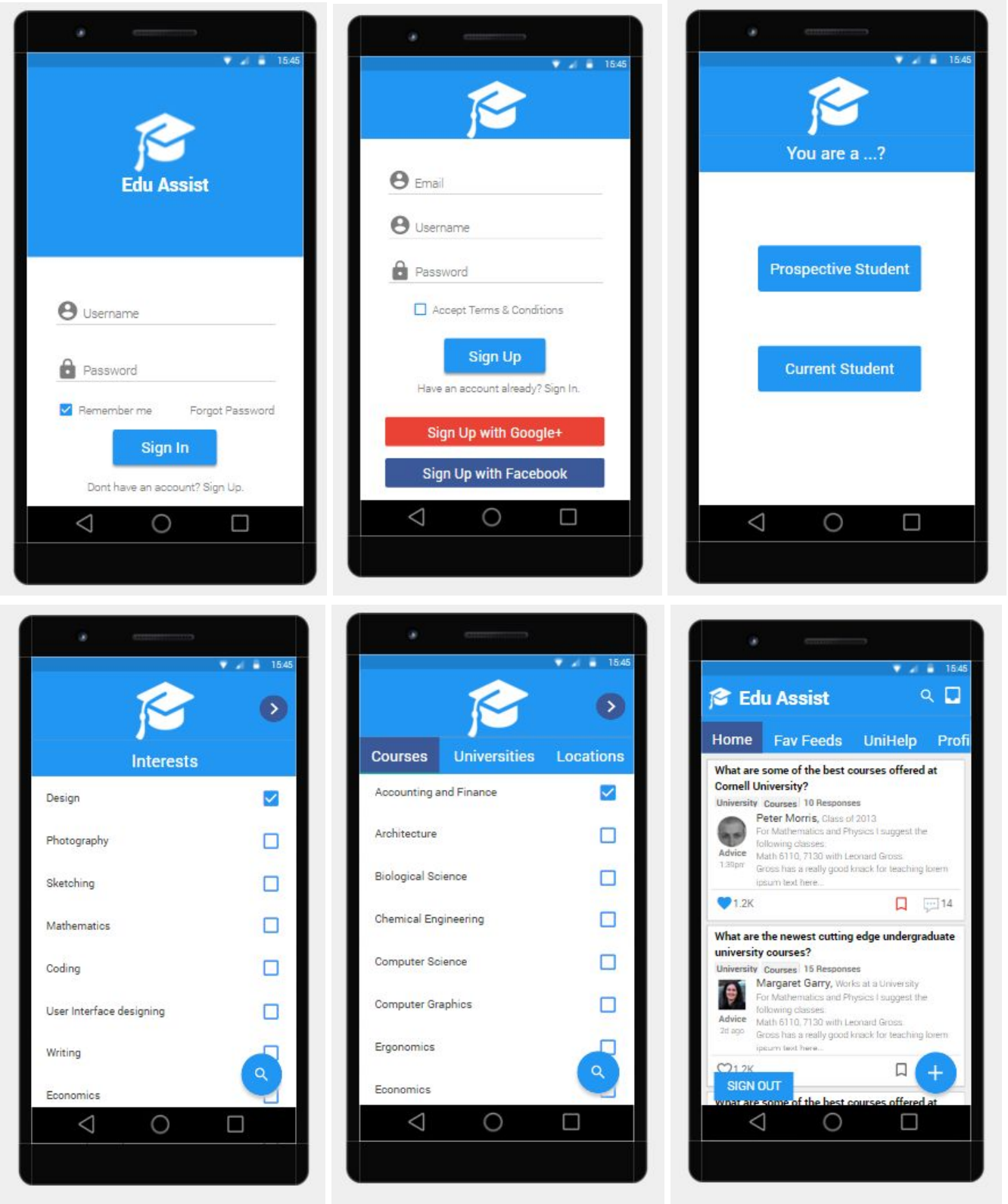

1
SYMBOL
WISE
CHOICE
2
HELP
WISE CHOICE
DO THIS
Skip
3
WISE CHOICE
LOGIN
Username
Password
Forgot Password
Remember Me
Not a Member?
Sign up.
4
WISE CHOICE
SIGN UP
Sign up with FB
Sign up with G+
Name
Username
email
Password
Phone
T & C
5
WISE CHOICE
Verify Phone/ Email
Passcode sent to Phone/email
6
WISE CHOICE
SELECT THE BELOW :-
1 INTERESTS –
2 TESTS
3 UNIVERSITIES

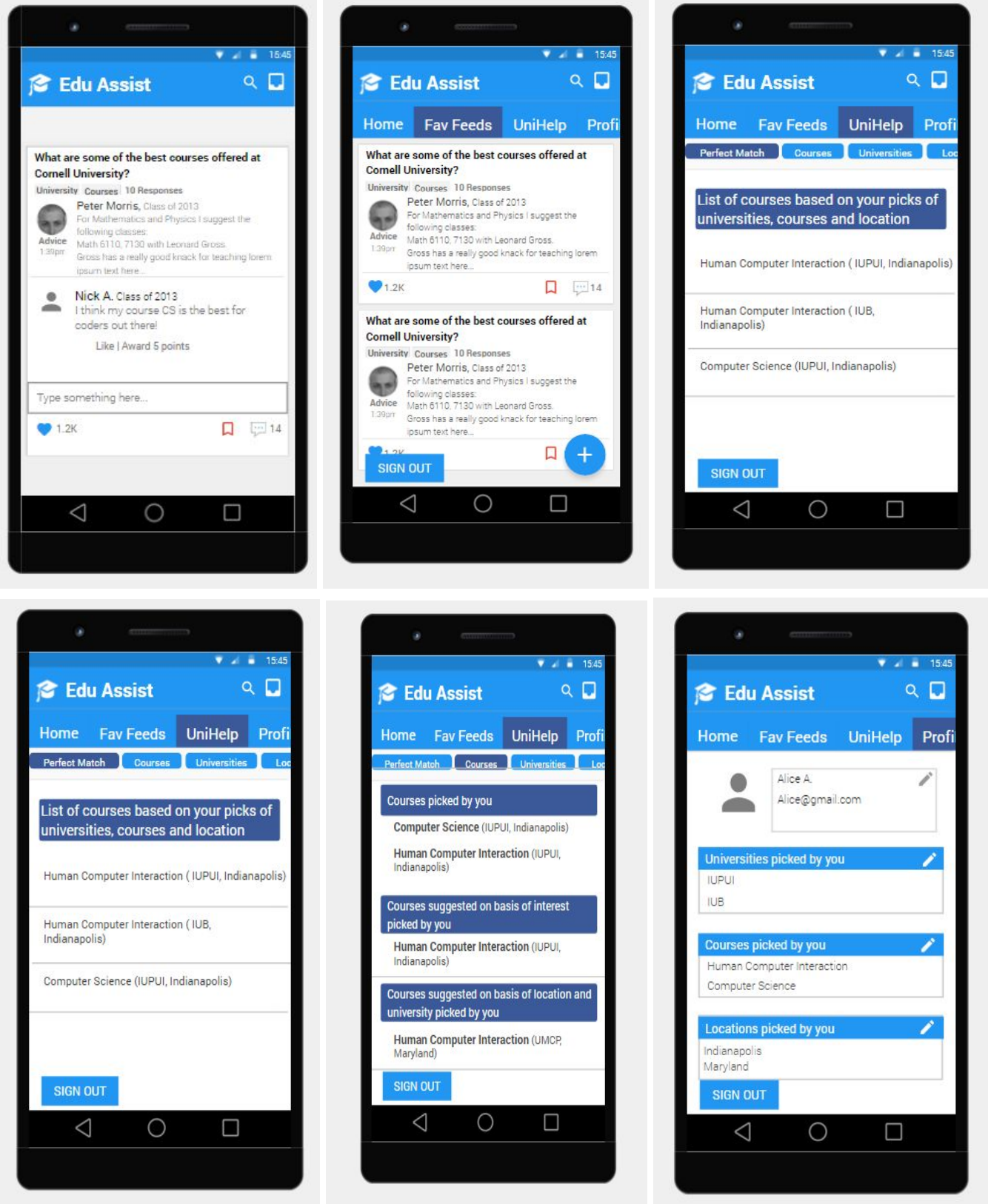

WISE CHOICE
PROFILE
Name
Email
Phone
Education
Want to Mentor?
Preparing for uni?
WISE CHOICE
Name
PIC
FEED 1
FEED 2
COMMENT
COMMENT
MESSAGES
NOTIFICATION
#HELP
POSTS YOU MAY LIKE
POPULAR POSTS TODAY
HELP
WISE CHOICE
ABOUT WISE-CHOICE
FAQ
Q1 ...
Q2 ...
No padding
NOTIFICATION
<Username> you follow commented there>
MESSAGE BOX
No padding
Message takes full screen.

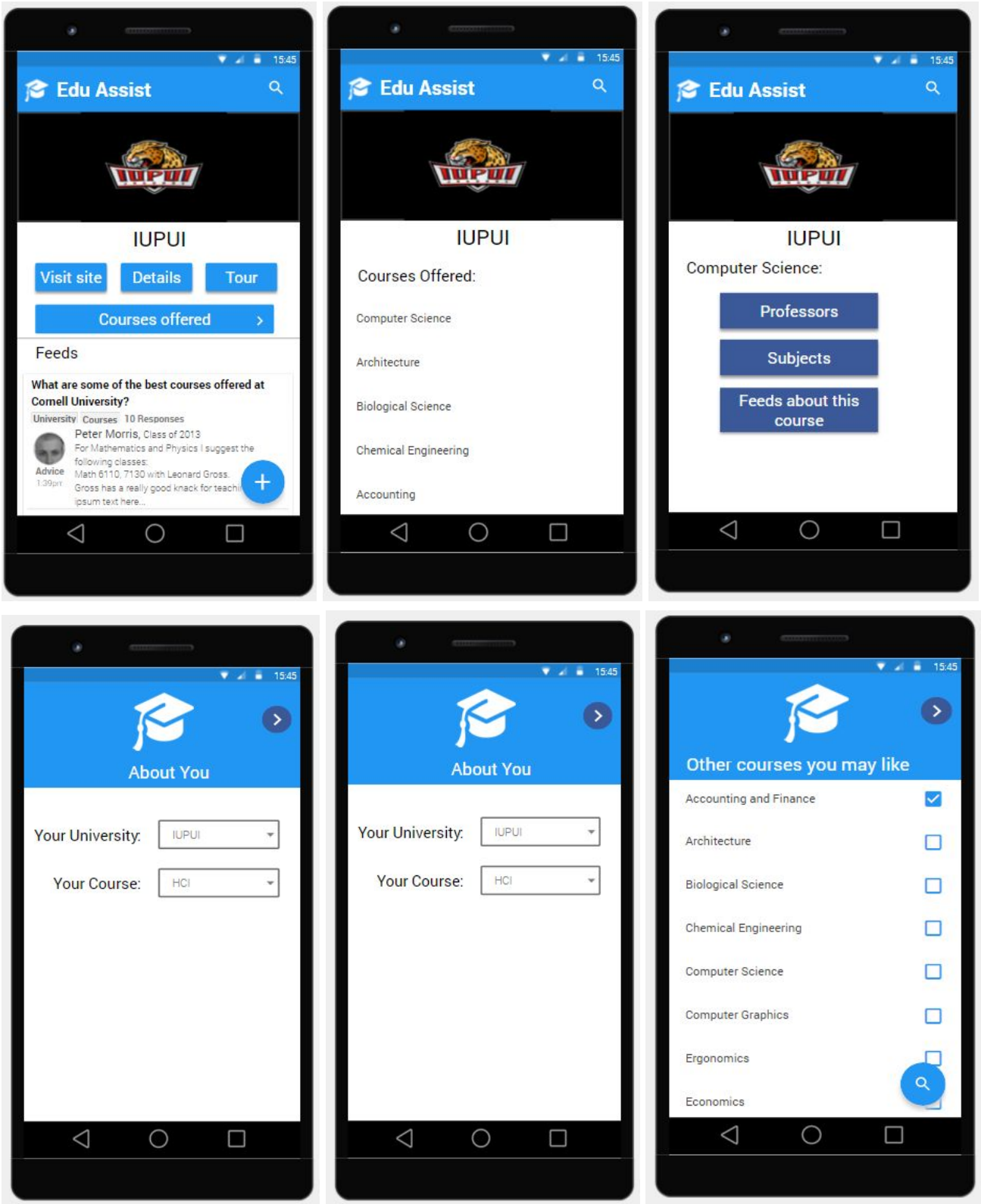

13
W.C.
Search #
Feed 1
Feed 2
You May Like
Trending Today
Message
Notification
Help
IUPUI
Profile of User
14
After selection of # IUPUI
W.C.
IUPUI
SHORT INFO
INFO
LINKS
TOUR
GUIDE
Search
Feed 1
Feed 2
MESSAGE
of IUPUI only
Guide - after admission
Tour - videos in feeds
links & info - static
admission etc.
courses
Feeds eg roommates, what to get.
14
GRE → leads to info about GRE, ...
Documentation → " " " LOR, SOP, ...
Guide of how to apply
Apply guide → step by step process + links to GRE & TOEFL website
Ranking - static page of choices of subjects to sort unis
15
W.C.
Games for English
1 Match Word? Meaning
2 Funny ways to learn words in your language eg. Hindi
Choose lang:
16
Dedicated Senior.
Choose - Send req to any of following -
1 Name
Feeds
2
Option on the profile
Click → 17

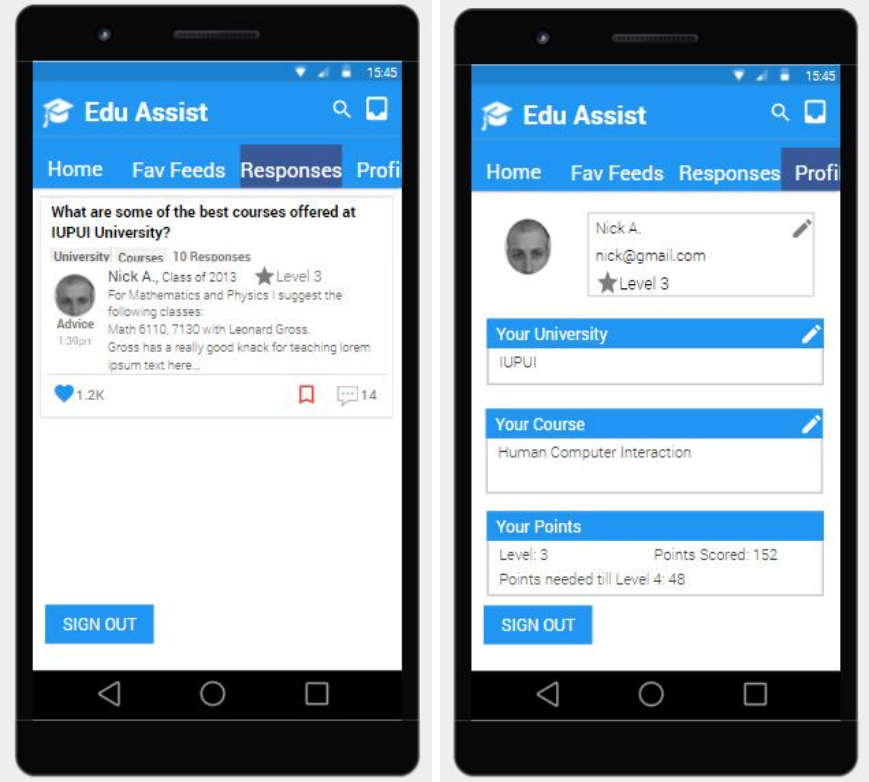

17
W. C
Name
Send Req
Cancel Req
Feeds
Once he accepts your request you will be in contact with him & he will be your personal guide for this journey.
18
W. C
Dedicated Guide
Search
Feeds
User

E. All screens of the dynamic prototype




Edu Assist
What are some of the best courses offered at Cornell University?
University Courses 10 Responses
Peter Morris, Class of 2013
For Mathematics and Physics I suggest the following classes:
Math 6110, 7130 with Leonard Gross.
Gross has a really good knack for teaching lorem ipsum text here...
Advice
Nick A. Class of 2013
I think my course CS is the best for coders out there!
Like | Award 5 points
Type something here...
1.2K
14
Home
Fav Feeds
UniHelp
Profi
SIGN OUT
Perfect Match
Courses
Universities
List of courses based on your picks of universities, courses and location
Human Computer Interaction (IUPUI, Indianapolis)
Human Computer Interaction (IUB, Indianapolis)
Computer Science (IUPUI, Indianapolis)
Courses picked by you
Computer Science (IUPUI, Indianapolis)
Human Computer Interaction (IUPUI, Indianapolis)
Courses suggested on basis of interest picked by you
Courses suggested on basis of location and university picked by you
Human Computer Interaction (UMCP, Maryland)
Alice A.
Alice@gmail.com
Universities picked by you
IUPUI
IUB
Courses picked by you
Human Computer Interaction
Computer Science
Locations picked by you
Indianapolis
Maryland


15:45
Edu Assist
IUPUI
Visit site
Details
Tour
Courses offered
Feeds
What are some of the best courses offered at Cornell University?
University
Courses
10 Responses
Peter Morris, Class of 2013
For Mathematics and Physics I suggest the following classes:
Math 6110, 7130 with Leonard Gross.
Gross has a really good knack for teachi
ipsum text here...
Advice
1:39pm
IUPUI
Courses Offered:
Computer Science
Architecture
Biological Science
Chemical Engineering
Accounting
IUPUI
Computer Science:
Professors
Subjects
Feeds about this course
About You
Your University:
IUPUI
Your Course:
HCI
About You
Your University:
IUPUI
Your Course:
HCI
Other courses you may like
Accounting and Finance
Architecture
Biological Science
Chemical Engineering
Computer Science
Computer Graphics
Ergonomics
Economics



F. Other relevant artifacts

We created an affinity mapping of the contextual inquiries we conducted. This helped us categorize the requirements and decide the features required by the students based on their comments.

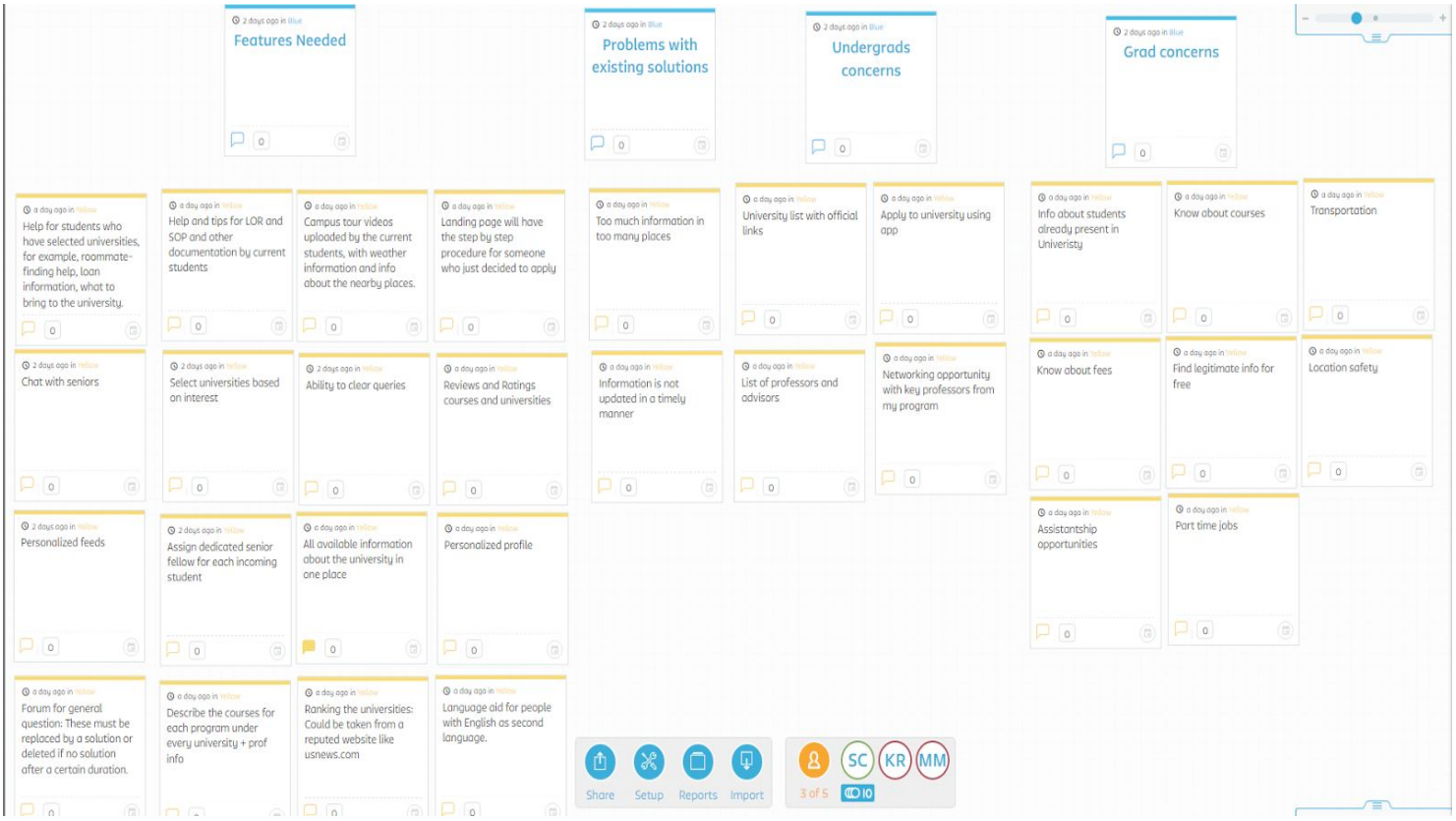


Image: Online Affinity Mapping