My IIT - Mobile app

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Introduction:

The Illinois Institute of Technology (IIT) faces significant challenges regarding its digital infrastructure, impacting users' access to essential university services and engagement with campus activities. These challenges stem from a multifaceted digital environment requiring users to navigate multiple logins across browsers. Additionally, the university needs to work on efficient communication channels, hindering the dissemination of crucial information. Managing academic and extracurricular commitments further complicates the situation, affecting the productivity and satisfaction of the IIT community.

My focus shifted towards developing a user-friendly solution, prompting the creation of a comprehensive user research strategy. Through surveys, user interviews, and the development of user personas, I have gathered valuable insights to inform the project's direction. Surveys provided a broad understanding of user needs, while interviews offered more profound insights into individual challenges and preferences. User personas were a reference point for designing tailored solutions aligned with user requirements.

Moreover, users expressed the need for features like notifications and a calendar function to enhance their experience. In response to these findings, the project evolved from planning a website to developing a user-friendly mobile application. This solution aims to provide seamless access to essential university services, streamline communication, and enhance user experience within the IIT community.

The UX design process was a dynamic and iterative journey, involving wireframing, low-fidelity prototyping, and high-fidelity designs. Each step was meticulously focused on

simplicity, usability, and consistency with IIT's branding. Interactive prototyping was instrumental in facilitating user testing sessions, ensuring that the application's functionality and usability were in line with user expectations. Further enhancements are proposed for the future, including integrating events with the calendar, incorporating campus maps, and consolidating essential portals within the application.

Overall, this project provided valuable insights into user-centered design principles, emphasizing the importance of understanding user needs and iteratively refining solutions to enhance user experience.

How I understood the problem:

During my project research, I discovered that Illinois Tech (IIT) operates with a complex digital infrastructure, making it challenging for users to access essential services and engage with campus activities. To address this issue, I decided to develop a user-friendly website. Recognizing the importance of understanding user needs, I used various user research methods such as surveys, user interviews, and user personas to gather valuable insights.

User research:

1. **Surveys:**

    Initially, I considered conducting surveys to understand users' needs better. I aimed to determine if other students encountered navigation difficulties while trying to achieve their goals. Surveys provide an effective means to reach a wide range of users and comprehend their requirements. Therefore, I created a Google

Form with a few questions and distributed it around the campus and in the library. The library is the best source to contact students from different fields. Users found the survey convenient, taking less than 5 minutes to complete.

2. **User Interviews:**

   After conducting the user surveys, I sought to delve deeper into their needs and understand their challenges. I emailed several students, including graduates, PhD candidates, and undergraduates, to invite them for interviews. While some students didn't respond, others graciously accepted and dedicated their time to the interviews. I conducted these interviews both through Zoom calls and in person. One in-person interviewee was a new graduate student who suggested meeting at the library for convenience, so I reserved a study room to ensure a comfortable and uninterrupted environment. The other interviewee, a second-year undergraduate, participated in a Zoom call. I aimed to create a relaxed atmosphere in both settings and structured the interviews as conversations. Each interview session lasted approximately 30 to 40 minutes.

3. **User personas:**

   This user persona offers a comprehensive overview of a fictional graduate student at Illinois Tech, showcasing her background, goals, motivations, behaviors, needs, and pain points. It serves as a valuable reference for me to design solutions and features tailored to meet the needs of similar users within

your target audience. I have created a problem statement and user story templates based on this.

What questions did I ask?

1. How would you rate your overall satisfaction with Illinois Tech's digital infrastructure?

2. Which digital services or platforms do you use most frequently for academic purposes at Illinois Tech?

3. Have you experienced difficulties or issues using Illinois Tech's portals?

4. How would you rate the accessibility of Illinois Tech's digital infrastructure for students with disabilities?

5. Do you find Illinois Tech's digital infrastructure user-friendly and easy to navigate?

6. What improvements or additions would you like to see in Illinois Tech's digital infrastructure to enhance your academic experience?

7. How often do you encounter issues accessing online resources such as databases, e-books, or academic journals through Illinois Tech's digital platforms?

8. Overall, how would you rate Illinois Tech's efforts in keeping its digital infrastructure up-to-date and aligned with the evolving technological needs of students?

9. How would you describe your experience during your initial days at Illinois Tech?

10. Can you share your experience using [specific digital platform/service] at Illinois Tech?

11. Have you faced any challenges in locating services at Illinois Tech?

12. As an international student, did you feel confident navigating campus resources?

13. Did you encounter difficulties finding solutions to your problems?

14. Can you share any memorable experiences you've had while using it?

15. Are any features or functionalities you find particularly useful or valuable in IIT?

16. How do you prefer to receive updates or information about changes to digital services or platforms offered by Illinois Tech?

17. How often do you utilize mobile devices to access digital resources or platforms provided by Illinois Tech?

18. Have you ever used any alternative digital tools or platforms to supplement the services provided by Illinois Tech? If yes, which ones are available and for what purposes?

19. Can you describe any instances you felt frustrated or confused using IIT portals? What aspects contributed to these feelings?

20. What improvements or enhancements could you make to meet your needs better or streamline your experience?

21. How important is it for you to have access to technical support or assistance when using digital resources or platforms at Illinois Tech?

22. Are there any specific accessibility features or accommodations that should be implemented to make digital resources more inclusive for all students?

23. Can you share any concerns or reservations about the security and privacy of your data when using digital platforms provided by Illinois Tech?

How I Fixed It:

Initially, I planned to develop a college website integrating all the servers and portals. However, after conducting user research, I realized that users needed access to their portals, blackboards, and grades anytime and anywhere throughout the day. Some students mentioned living far from campus, requiring them to travel for half an hour or more. During this time, they

wanted to log into their blackboards and watch lectures from their classes. They expressed frustration with navigating through the browser for this purpose. Additionally, they suggested that having notification options for alerts and reminders would significantly improve their experience.

One undergraduate student specifically requested a calendar feature. They explained that their class schedule should automatically populate the calendar at the beginning of each semester, sending notifications for due dates, Class readings, and exams. With the heavy course load of undergraduate studies, it was challenging for them to remember everything, and they spent much of their time setting up their calendar every day.

Considering these frustrations and needs, I realized that a website alone would not be enough; a mobile app would be more impactful. Therefore, I decided to focus on developing a user-friendly mobile app for the Illinois Tech community.

Solution:

Developing a user-friendly mobile application for Illinois Tech (IIT) students. This application will provide seamless access to essential university services, including portals, blackboards, grades, and campus announcements. Users can log in securely using their university credentials, eliminating the need for multiple logins across various browsers. The application will also offer features such as notifications for important announcements, upcoming events, and deadlines and a calendar function that automatically populates users' class schedules and sends reminders for due dates and exams. This mobile app will streamline access to resources and enhance communication and collaboration within the IIT community, ultimately improving the overall user experience for students and faculty.

UX Design:

1. Wireframing:

I began by creating wireframes to outline the basic layout and structure of the application. I focused on key features such as login, quick links, news, events, notifications, navigation menu, and more to provide easy access to essential services.
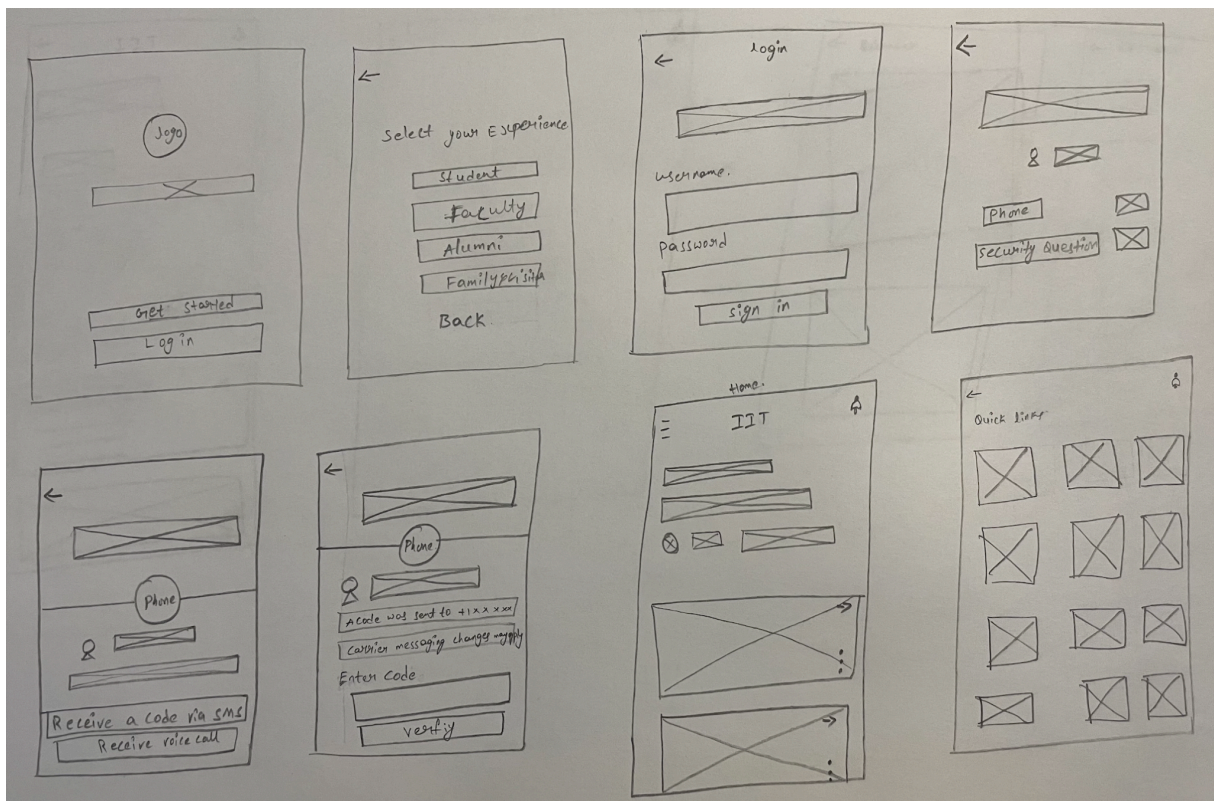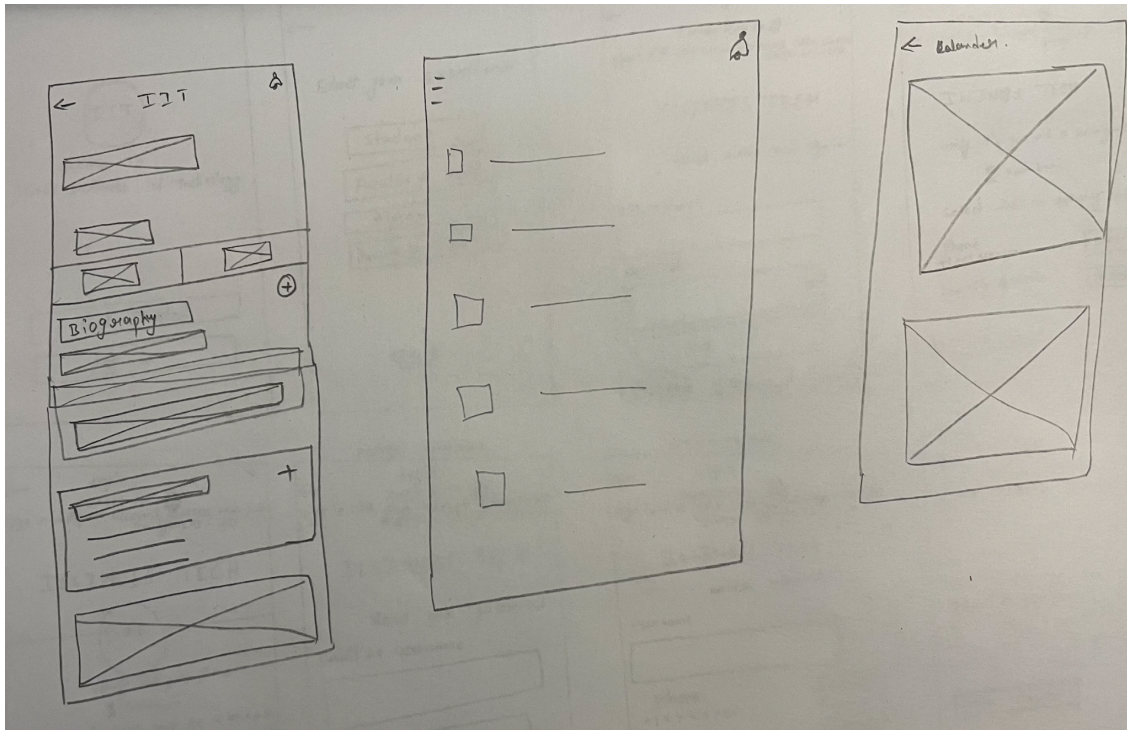
2. Low-fidelity prototyping:

Next, I designed low-fidelity prototypes based on the wireframes to visualize the application's flow and functionality. I aimed to keep the design simple and intuitive, focusing on usability and ease of navigation.

Screen 1 — Welcome

IIT

welcome To
Illinois Institute of Technology

Get Started

Log in

Screen 2 — Select your Experience

←

Select your Experience

Student

Faculty & Staff

Alumni

Family & Visitor

Back

Screen 3 — Login

login   ?
←

Connecting to ❷
Sign in with your account to access Okta cinnus
Bridge CAS-UID

ILLINOIS TECH

Access Illinois Tech-Sign in

UserName

Password

Sign in

Forgot password | Unlock account | Help

Screen 4 — Verify

Login   ?
←

Connecting to ❷
Sign in with your account to access okta cinnus
Bridge CAS-UID

ILLINOIS TECH

verify it's you with a security method

👤 Knambwi

Select from the following options

phone
+1 xxx xxxx xxxx   select

security question   select

Back to sign in

Screen 5 — Verify with phone

←   login
Connecting to ❷
Sign in with your account to access okta cinnus
Bridge CAS-UID

ILLINOIS TECH

phone

verify with your phone

👤 Knambwi

send a code via SMS to +1 xx xx xxxx
canadian messaging charges may apply

Receive a code via SMS

Receive a voice call instead

verify with something else
Back to sign in

Screen 6 — Enter code

login   ?
←

Sign in with your account to access okta cinnus
Bridge CAS-UID

ILLINOIS TECH

phone

verify with your phone
👤 Knambwi

A code was sent to +1×xxxx
Enter the code below to verify
carrier messaging charges may apply

Enter Code

verify

verify with something else

Back to sign in

Screen 7 — Forgot Password

Forgot Password

login   ?
←

Sign in with your account to access okta
cinnus Bridge CAS-UID

ILLINOIS TECH

Reset your password.

Email or username

Next

Back to sign in

Screen 8 — Unlock account

Unlock account

login   ?
←

Connect to ❷
Sign in with your account to access okta
cinnus Bridge CAS-UID

ILLINOIS TECH

unlock account

username

Phone.   select
+1×xxxxxx

Email   select

Back to sign in

Screen 9 — Help

←   Help

school related question

- - - - - -
- - - - - - -
- - - - -

other Questions

- - - - - -
- - - - - -

Help Center

Screen 10 — Quick links

←   ⌂

Quick links

⊠ Tutoring   ⊠ Library   ⊠ Email

⊠ Events   ⊠ myIIT portal   ⊠ Canvas

⊠ grad ceremonies   ⊠ Academic Calendar   ⊠ maps

⊠ Blackboard   ⊠ manage my Account   ⊠ Handshake
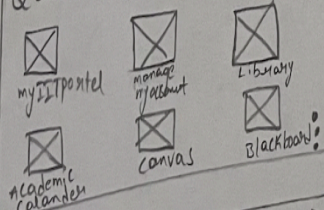
Screen 1

Good morning,

Kartheeka Nambusi?

56°F 🌧 Thursday, April 1st
Chicago

Discover [New] →

New sections are showcased here
you've shared how we can improve your
experience in the app and we're listening
This is where you'll find the latest
updates.

Quick links →

☒ myIITportal ☒ manage my account ☒ Library
☒ Academic Calander ☒ canvas ☒ Blackboard

News →

Events →

Screen 2

Kartheeka Nambusi

[Student]

0	0
Reminders	Likes

Biography ⊕
Knambusi@hawk.iit.edu

Reminders [0]

Likes [0]

Connections ⊕
Linkedin
Handshake
Digital profile

Career Resources
⊘ Career milestones

Screen 3

Notifications

unread Read ✿

Screen 4 — Academic Calendar

IIT

Quick links
Spring 2024
Summer 2024
Fall 2024
Calendars

Related links
Final Exam schedule
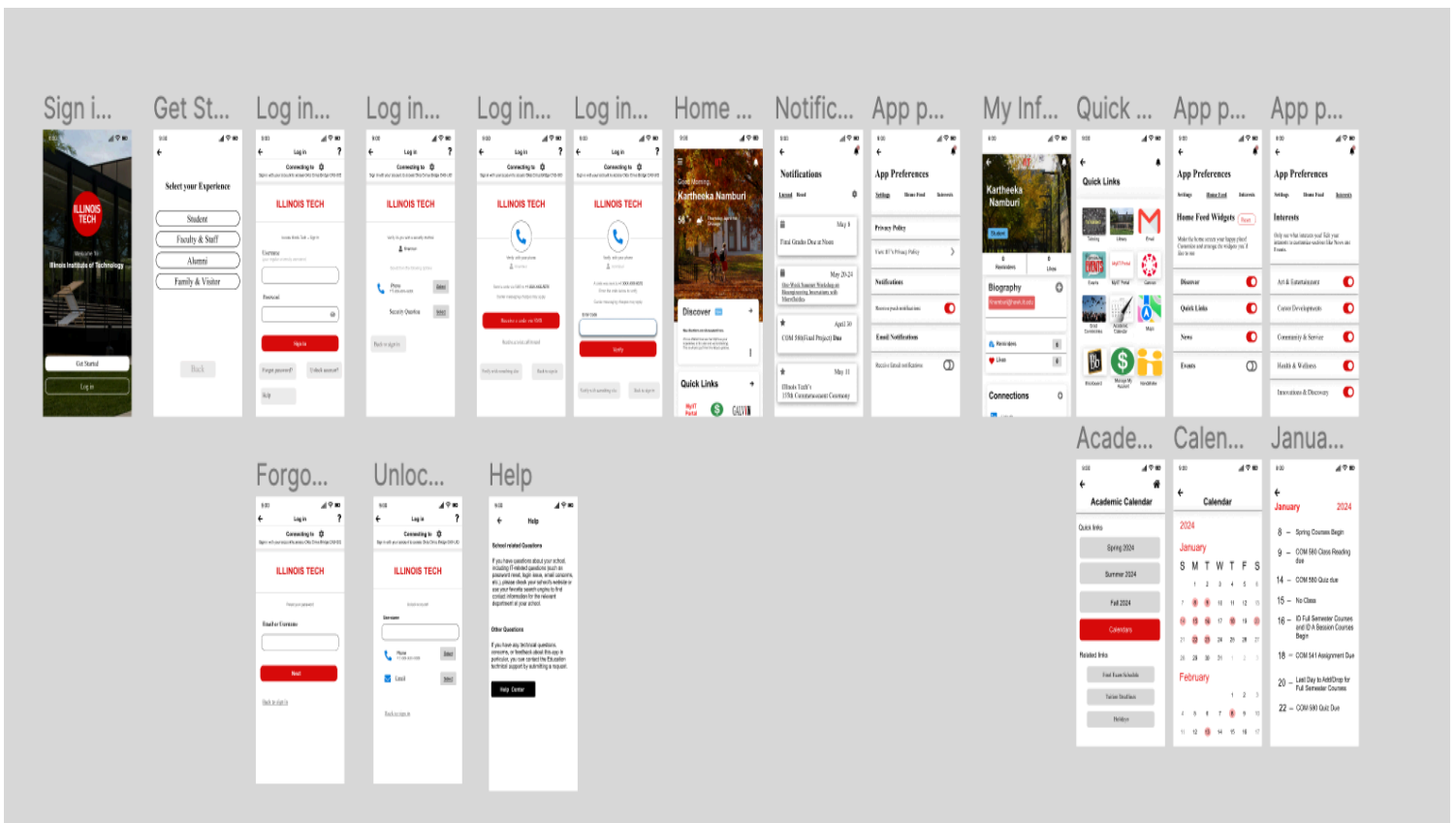Tuition Deadlines
Religious Holidays

Screen 5

8 - spring Courses Begin
9 - com 580 - Introduction
   com 541 - "
14 - com 580 - Quiz due
15 - No class
16 - ID full semester courses
18 - Com 541 - Assignment
   due
20 - Last day to add/drop
22 - com 580 - Quiz due
23 - Last day to add drop

Screen 6 — Calendar

Calendar
Jan 2024

S	M	T	W	T	F	S
		1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

3. **High-fidelity prototyping:**

After finalizing the basic layout, I created high-fidelity designs using Figma, incorporating detailed visual elements such as colors, typography, and images. I ensured consistency with the university's branding guidelines to maintain a cohesive look and feel. I opted to retain the same login pages to maintain familiarity for users, as they are accustomed to this interface.


Link:

https://www.figma.com/file/zWTeLkg9q6y8XSlR3qGYc5/My-IIT-Mobile-App?type=design&node-id=0%3A1&mode=design&t=L1aAN8aIVqOdAmmg-1

4. Interactive:

I utilized interactive prototyping tools to develop clickable prototypes that simulate navigating the application's user experience. This approach enabled me to conduct thorough user testing sessions and gather valuable feedback on the design's usability and functionality.
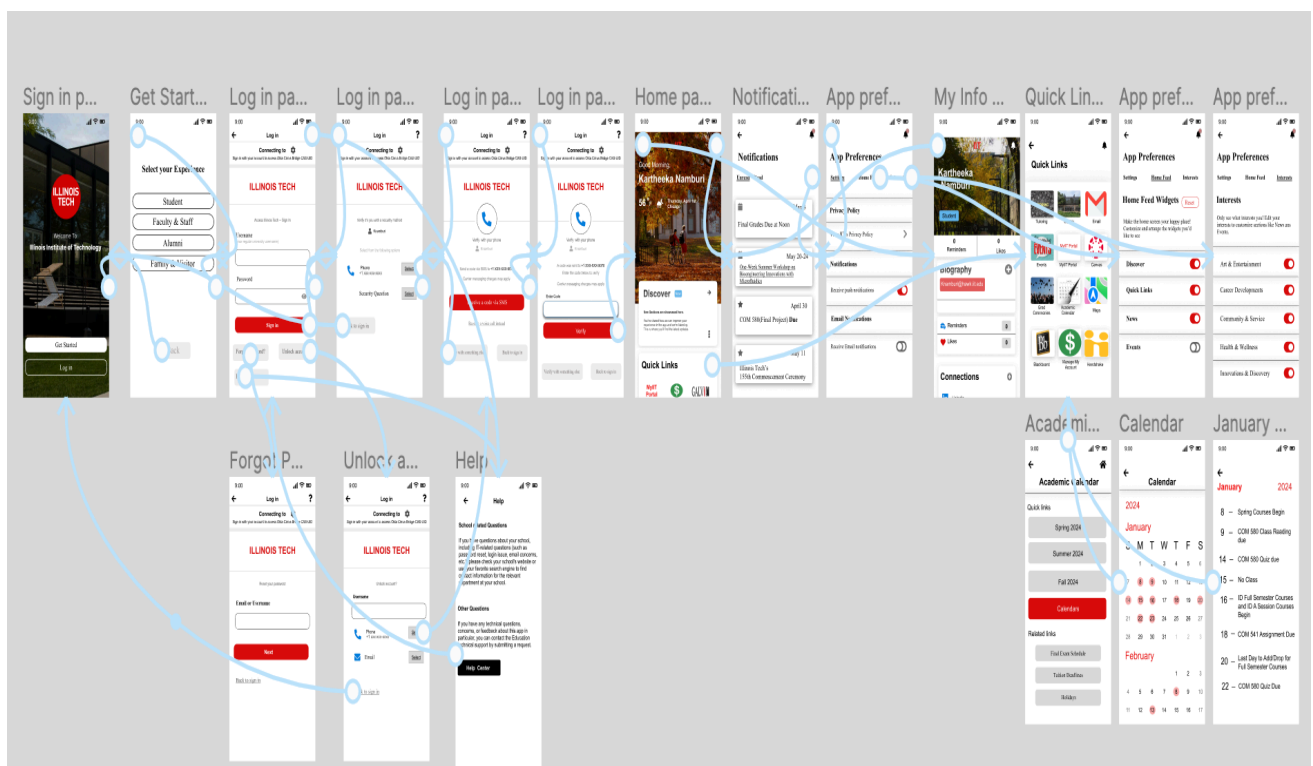
5. Branding:

I have ensured adherence to Illinois Tech's branding elements, including logos, colors, and style, to strengthen the university's identity and foster a sense of familiarity among users. Consistency in branding elements across the application

reinforces the university's image and enhances trust and recognition among the IIT community.

6. **Usability:**

I conducted usability testing sessions with representative users to evaluate the effectiveness of the application design. During these sessions, I gathered feedback on usability, navigation, and the overall user experience to identify areas for improvement. Additionally, I observed how users interacted with the application and noted any issues or challenges they encountered. This feedback was invaluable in refining the design and ensuring that the mobile application meets the needs and expectations of Illinois Tech students.

What are the further improvements?

We can make several enhancements to the My IIT mobile application. Integrating registered events with the calendar functionality would give users a comprehensive view of their schedule and upcoming activities. Incorporating notifications for calendar events would ensure that users stay informed and organized. Integrating maps of the Illinois Tech campus within the app would assist new students in navigating unfamiliar surroundings with confidence. Another valuable addition is printing details, such as locations and availability, to facilitate students' and faculty's printing needs. Consolidating all essential portals required by students and faculty into a single, easily accessible location within the app would streamline access to critical resources and services etc.

What have I learned from this project?

This project gave me valuable insights into user-centered design principles and methodologies. I learned how to effectively interact with users to understand their needs and preferences and create a comfortable environment that encourages open and honest feedback. Additionally, I acquired proficiency in using design tools such as Figma to develop prototypes, allowing me to visualize and iterate on my designs efficiently. Overall, this project provided me with hands-on experience in UX design and research, enhancing my skills and knowledge in creating user-friendly digital solutions.