



NativeCoders

Tutoring Service Finder for University Students

TutorME

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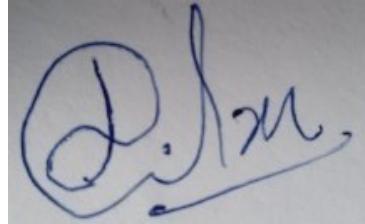
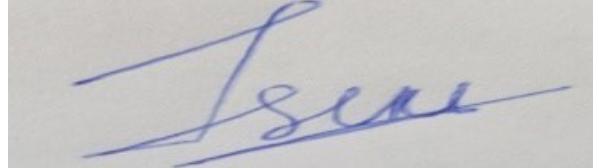
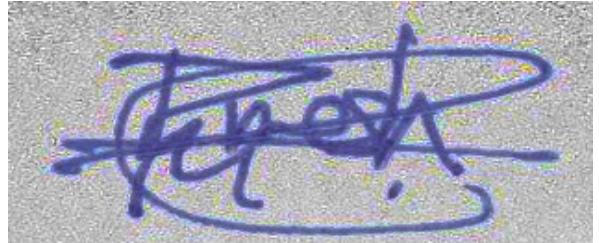
Group 08

User Experience Engineering SE3050

Department of Computer Science and Software Engineering, Faculty of Computing, Sri Lanka Institute of Information Technology (SLIIT)

Declaration

We declare that this is our own work, and this report does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any other university or institute of higher learning, and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgment is made in the text. Also, we hereby grant to Sri Lanka Institute of Information Technology the non-exclusive right to reproduce and distribute our report in whole or part in print, electronic, or another medium. We retain the right to use this content in whole or part in future works (such as articles or books).

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IT21291364	Rashen W.G.M.	2023-10-31	
IT21267772	Kumanayake I. A.	2023-10-31	
IT21388934	Siriwardhana S.M.R.R.	2023-10-31	

Abstract

This report addresses the absence of a mobile or web platform for university students to efficiently find and contact student tutors, highlighting the need for a tailored solution. The report's purpose is to chronicle the comprehensive process of designing and developing a mobile application to fulfill this void.

The main areas covered in this report encompass requirements gathering, UI design, prototyping, and implementation, with an emphasis on the Agile methodology for iterative development. The ultimate solution is a user-friendly mobile application exclusively designed for university students to easily find and engage with student tutors.

In conclusion, the establishment of a singular platform for university students to locate and connect with student tutors is a pivotal step towards enhancing academic success, streamlining the tutoring process, and promoting effective learning. The report underscores the vital role such a platform plays in fostering a conducive academic environment.

Table of Contents

Declaration	1
Abstract	2
List of Figures	5
List of Tables.....	5
List Of Abbreviations.....	6
1 Introduction.....	7
2 Background	8
2. 1 Problem identified	8
2. 2 Competitive product(s) and Identified Gaps	8
2. 3 Solution	8
2. 4 System Overview Diagram	9
2. 5 Design Purpose.....	9
2. 6 Team Members.....	10
2. 7 Contribution Table	10
3 Design Process	11
3. 1 User Involvement	11
4 Milestone 01: Identify user groups.....	12
4. Persona(s).....	12
4. Empathy maps.....	16
4. User stories.....	20
4. User flow(s).....	21
4. Service Blueprint(s) – 01 Service Blueprint from a group.....	26
4. Identify basic functionality of the proposed system.....	27
5 Milestone 2: Plan and conduct user research	28
6 Milestone 3: Verify the key-user flow(s)	45
6.1 IT21118340	48
6.2 IT21291364	52
6.3 IT21267772	55
6.4 IT21388934	58
7 Competitor Analysis.....	61
8 Milestone 4: Sketching & Wireframes	62
9 Milestone 5: Figma Prototype.....	85
9.1 Design 1	85
9.2 Design 2 - accepted	98
10 Milestone 6: User Feedback for your Prototype	99

11	Milestone 7: Implementation	130
12	Requirement Specification	150
12.	Usability Goals.....	150
12.	User Experience Goals	150
12.	Functional Requirements.....	150
12.	Non-Functional Requirements	150
13	Design Principles	151
14	Project Management.....	152
14.	Meetings	152
14.	Risk Management.....	152
14.	Milestones	152
14.	Problems Encountered.....	153
15	Conclusion	154
	References	155
	Glossary.....	156
	Appendix	157
15.	Initial User Survey Responses.....	157
15.	Contribution Table	157

List of Tables

1. Team Members	12
2. Contributions	12
3. Participant Profile	36
4. Tasks and Scenarios	37
5. Competitor Analysis	63
6. Participant Profile	101
7. Milestone Timeline	135
8. Contributions	138

List Of Abbreviations

- GUI – Graphical User Interface
- SLIIT – Sri Lanka Institute of Information Technology
- KDU – General Sir John Kotelawala Defence University
- SE – Software Engineering
- DS – Data Science
- IT – Information Technology
- UI – User Interface
- UX – User Experience

1 Introduction

In today's dynamic educational landscape, students often seek personalized guidance to excel in their academic journeys. TutorME emerges as a beacon, uniting university students with dedicated student tutors for enhanced learning experiences.

In an era where education extends beyond traditional classrooms, TutorME was conceived to address the growing need for accessible and effective tutoring. Our app acts as a digital bridge connecting university students striving for excellence and passionate student tutors eager to share their expertise.

The significance of this project is underscored by the evolving demands of modern education. With a focus on convenience and customization, TutorME harnesses the power of technology to facilitate seamless connections between students and tutors. Our platform empowers students to choose tutors based on their subject expertise, availability, and even peer reviews – nurturing an environment of trust and academic growth.

Designed to cater to the dynamic nature of higher education, TutorME caters to diverse subjects and a wide spectrum of students, ensuring relevance across the academic spectrum. With intuitive features and user-friendly interfaces, we aim to empower both students and tutors to engage in meaningful, collaborative learning experiences.

TutorME isn't just an app; it's a transformative tool that harmonizes education and technology, fostering learning journeys enriched by personalization, convenience, and mentorship. Join us as we embark on a journey to shape the future of learning, one connection at a time.

2 Background

2.1 Problem Identified

The problem that this mobile application sets out to address is the lack of a dedicated platform for university students and student tutors to effectively engage with each other. The current scenario presents considerable pain points and challenges for both groups. University students often encounter difficulties in locating suitable student tutors, while the tutors themselves lack a designated platform to showcase their expertise and connect with potential clients. In light of these challenges, there arises a compelling need for a distinctive solution in the market, one that offers a higher degree of accessibility and convenience for both students seeking academic assistance and tutors seeking opportunities to provide their services.

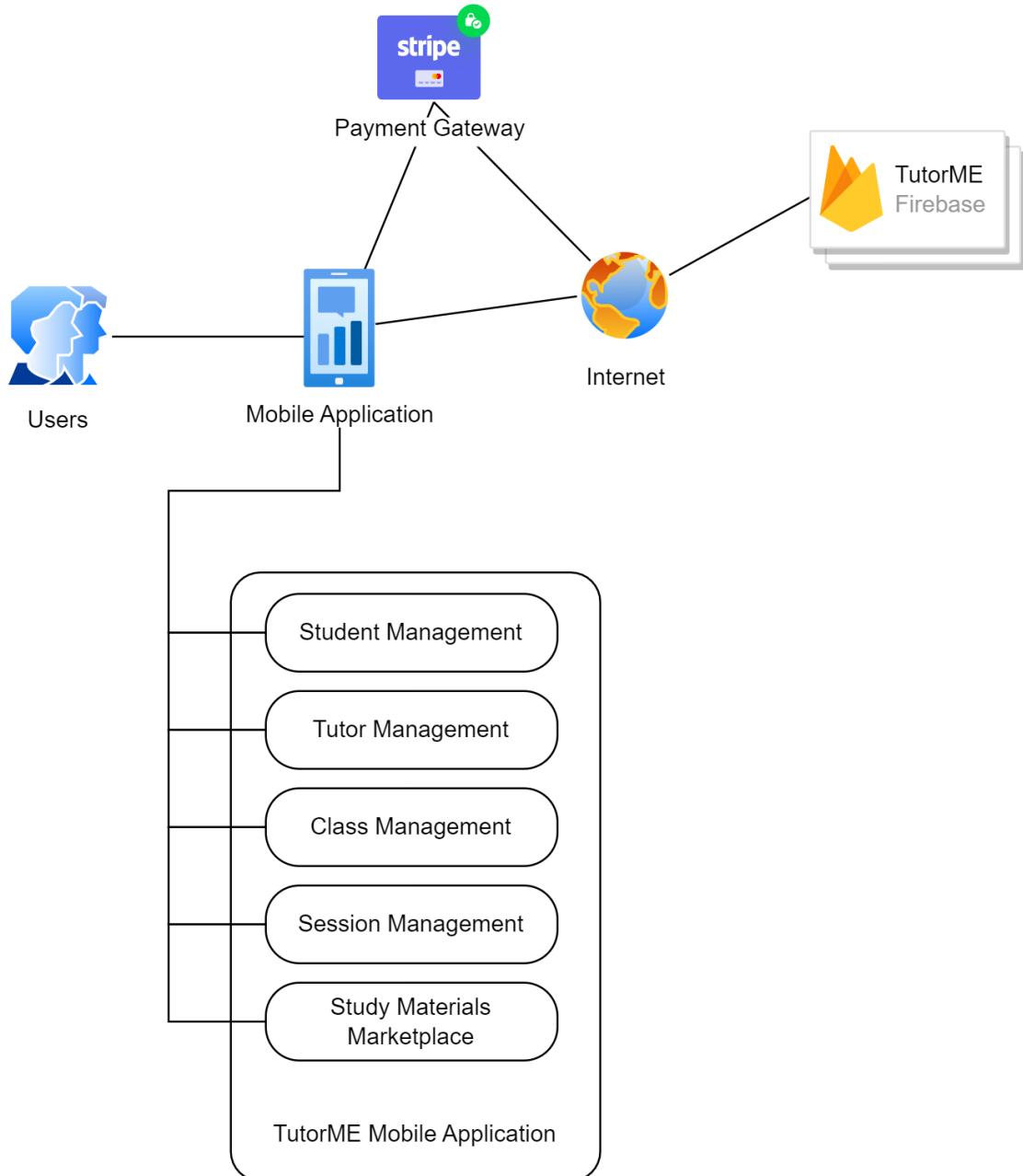
2.2 Competitive product(s) and Identified Gaps

Currently, our mobile application, designed to connect university students and student tutors, does not have any direct competitors. The remaining indirect competitors primarily provide web services that are limited to merely finding tutors. Although these services excel in facilitating tutor discovery, they fall short in enabling the complete engagement between students and tutors. This leaves a distinct gap in the market, which our mobile application seeks to address comprehensively. By offering a one-stop platform for locating tutors and establishing direct connections, our solution bridges this existing gap, creating a more seamless and comprehensive environment for academic assistance and knowledge exchange.

2.3 Solution

Our proposed solution is a cutting-edge mobile application designed to address the issue of connecting university students and student tutors in a distinctive manner. In a market with limited direct competitors, our app offers a unique advantage. It stands out by not only streamlining the process of finding tutors but also facilitating direct and efficient engagement between students and tutors. Key features include a user-friendly interface for both students and tutors, comprehensive tutor profiles, an in-app review system, a secure and transparent payment process, and the ability for students to access and download shared lecture materials. This multifaceted approach ensures that our mobile application addresses the identified problem comprehensively, creating an integrated platform that significantly enhances academic success and convenience for all users.

2.4 System Overview Diagram



2.5 Design Purpose

The primary goals we aim to achieve through the design of our GUI revolve around user-friendliness, efficiency, and attractiveness. By emphasizing user-friendliness, we intend to ensure that our mobile application is easy to navigate, making it accessible to a wide range of users, including those who may not be technically proficient. Efficiency is a core focus, as we strive to streamline the process of finding and connecting with student tutors, ultimately saving users time and effort. Moreover, we aspire to create an attractive and engaging interface that enhances the overall user experience, making the application not only functional but visually appealing, thus encouraging active and continued use.

2.6 Team Members

Member ID	Name	Role
IT21118340	Kumarathunga S. A. D. S.	Team leader
IT21291364	Rashen W.G.M	Team member
IT21267772	Kumanayake I. A,	Team member
IT21388934	Siriwardhana S.M.R.R.	Team member

TABLE 1. Team Members

2.7 Contribution Table

Member ID	Name	Function
IT21118340	Kumarathunga S. A. D. S.	Functionalities related to study materials marketplace and student management
IT21291364	Rashen W.G.M	Functionalities related to tutor management and calendar management
IT21267772	Kumanayake I. A.	Functionalities related to booking session and payment process
IT21388934	Siriwardhana S.M.R.R.	Functionalities related to class management

TABLE 2. Contributions

3 Design Process

The utilization of the Design Thinking model is instrumental in the development of our mobile application, particularly in addressing the identified problem and market gaps. This approach, based on empathizing with users and understanding their needs, allows us to innovate and devise a unique solution. By critically analyzing existing competitive products and recognizing their strengths and weaknesses, we can pinpoint the unmet requirements in the market. The absence of direct competitors in our domain, coupled with the limitations of current indirect competitors, underlines the distinctive value of our mobile application. Design Thinking facilitates the strategic identification of these market gaps and informs the creation of a more comprehensive and user-centric solution, ensuring our application's success in delivering enhanced experiences to both university students and student tutors.

3.1 User Involvement

To involve users in the user-centered design process, we will implement a multi-faceted approach. First, we will conduct surveys and focus group discussions to understand their needs, pain points, and preferences. We will also create interactive prototypes and conduct usability testing sessions, gathering feedback directly from users. Additionally, we plan to engage users in co-design workshops to collaboratively shape the app's features. Regular feedback loops and iterative design will ensure continuous user involvement, guaranteeing that the final product is tailor-made to address their specific requirements.

4 Milestone 01: Identify user groups

4.1 Persona(s)

4.1.1. IT21118340

Tharaka Sampath



"I want to sell my short notes and study materials."

AGE 24

ROLE Student

GENDER Male

LOCATION Gampaha

INSTITUTE SLIIT

STUDY AREA Engineering

BACKGROUND

Tharaka Sampath is a student at SLIIT's Engineering Faculty. He understands his previous year's subjects well and loves teaching. Tharaka enjoys helping his juniors and classmates excel in their studies and achieve higher grades. He wants to share his knowledge and make learning easier for them. Tharaka's passion for teaching and desire to assist his peers demonstrate his commitment to education and teamwork within the university.

GOALS

- Earn extra income by selling his own study materials and short notes.
- Find students who want help with engineering academic modules.

MOTIVATIONS

- Spend less time creating a user profile and class details.
- Enjoy an attractive interface and a familiar experience.

FRUSTRATIONS

- More time consumed for responses.
- Complex interface and unfamiliar experience.
- Unnecessary notifications.

SOURCE OF INFORMATION

- Facebook, Instagram, Twitter
- Local news
- Friends

4.1.2. IT21291364

Pawara Hasamal



"I want to share my knowledge with junior students."

AGE 24

ROLE Student

GENDER Male

LOCATION Akurella

INSTITUTE SLIIT

STUDY AREA Information Technology

BACKGROUND

Pawara, a student at Sri Lanka Institute of Information Technology, has a strong passion for programming and a desire to share his expertise. With a solid command of programming skills, he is eager to assist younger students in understanding programming concepts. His goal is to ensure that they thoroughly grasp the essential aspects of programming thoroughly. Pawara also aims to foster a sense of growth and collective learning among his friends. He believes in the significance of knowledge-sharing and envisions contributing to the success of his schoolmates by helping them excel academically. His commitment to supporting his peers and promoting a collaborative learning environment reflects his dedication to education and the betterment of his school community.

GOALS

- Showcase his skills and connect with students interested in learning or improving their programming skills.

MOTIVATIONS

- Present information in an attractive way.
- Provide quick responses.
- Share necessary information efficiently.

FRUSTRATIONS

- Unwillingness to meet individuals in person to inquire if they need help.
- Complex navigations.
- Unappealing user interface and a cumbersome user experience.

SOURCE OF INFORMATION

- Facebook, Instagram
- Local news
- Friends and family

Shashi Nimesha



"I want to learn mathematics."

AGE 21

ROLE Student

GENDER Female

LOCATION Nugegoda

INSTITUTE SLIIT

STUDY AREA Information Technology

BACKGROUND

Shashi, a Sri Lanka Institute of Information Technology student specializing in Data Science, holds an A/L background in Biology. Recognizing the significance of mathematics in comprehending Data Science, she aims to strengthen her foundational math skills. Seeking to bridge the knowledge gap, Shashi is determined to learn basic mathematics. Her goal is to enhance her understanding of the Data Science field. To achieve this, she is actively searching for a university tutor who can guide her through the fundamentals of mathematics, enabling her to excel in her chosen specialization.

GOALS

- Discover a knowledgeable volunteer at the university to guide her in mastering foundational mathematics, enhancing her Data Science studies.

MOTIVATIONS

- Spend less time finding a volunteer.
- Collaborate with some friends during the session.

FRUSTRATIONS

- Difficulty finding someone with in-depth knowledge of the subject.
- Limited interaction.
- Complex navigations.
- Unnecessary notifications.
- Inaccessible volunteer matching.

SOURCE OF INFORMATION

- Facebook, Instagram
- Local news
- Web news platforms

Prabhashi Sandipani



"I want to start classes to earn extra money."

AGE 23

ROLE Student

GENDER Female

LOCATION Kandy

INSTITUTE SLIIT

STUDY AREA Business Studies

BACKGROUND

Prabhashi Sandipani, a final-year student at SLIIT's Business School, possesses strong proficiency in her prior year's subjects and a passion for teaching. Her goal is to leverage her skills to create an additional income stream by offering academic assistance to fellow students. She envisions a platform where she can share her expertise, aiding those seeking guidance while earning simultaneously. Prabhashi's proactive and resourceful approach reflects her commitment to education and presents a mutually beneficial opportunity for both her and her peers.

GOALS

- Generate extra income by conducting sessions.
- Conduct a poll among students interested in attending the sessions.

MOTIVATIONS

- Minimal user interface.
- Stay in touch with students who join her sessions.

FRUSTRATIONS

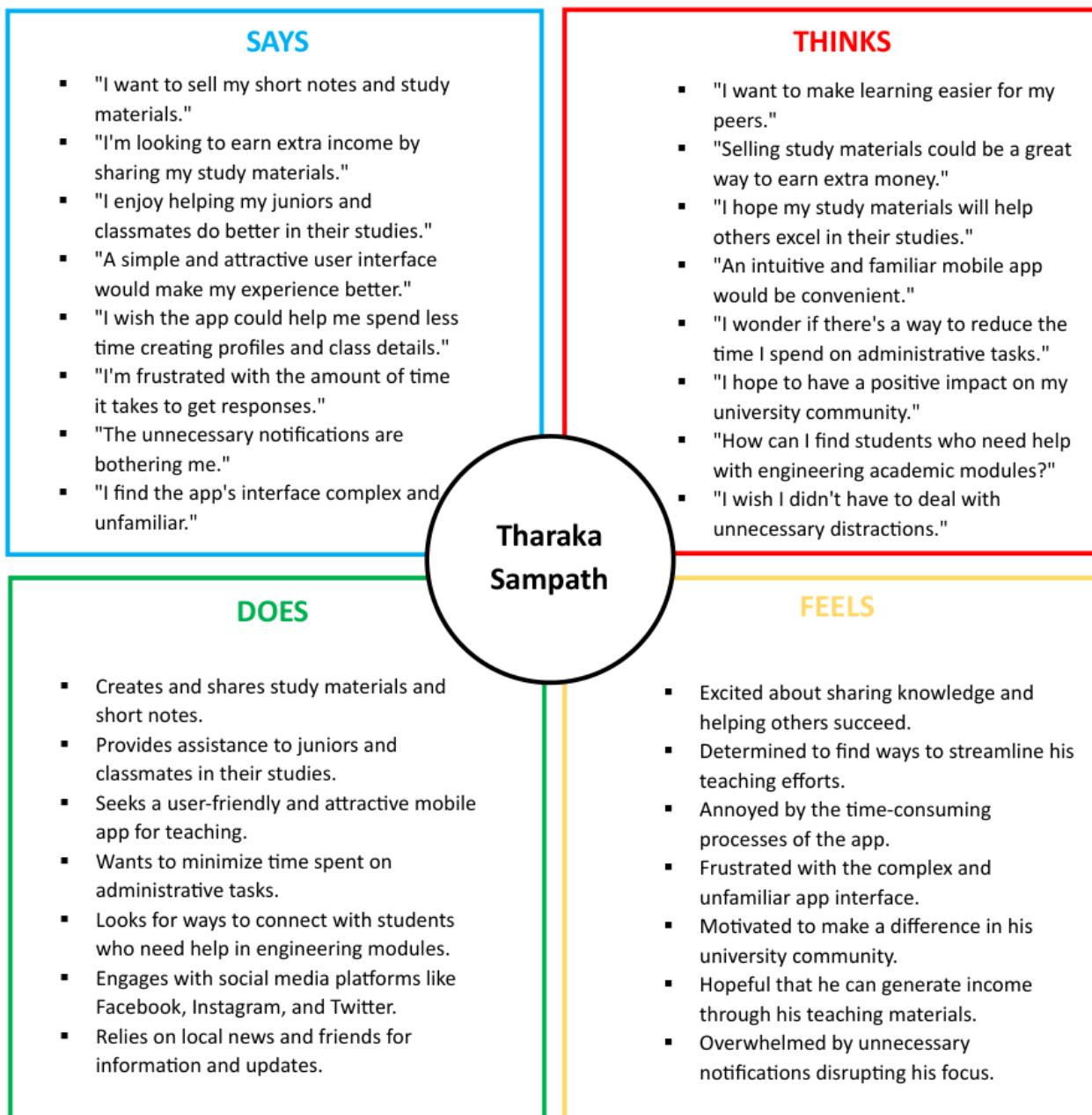
- Limited interaction.
- Unwanted and disruptive notifications.
- Complex user interface.
- Challenges in navigating the application.

SOURCE OF INFORMATION

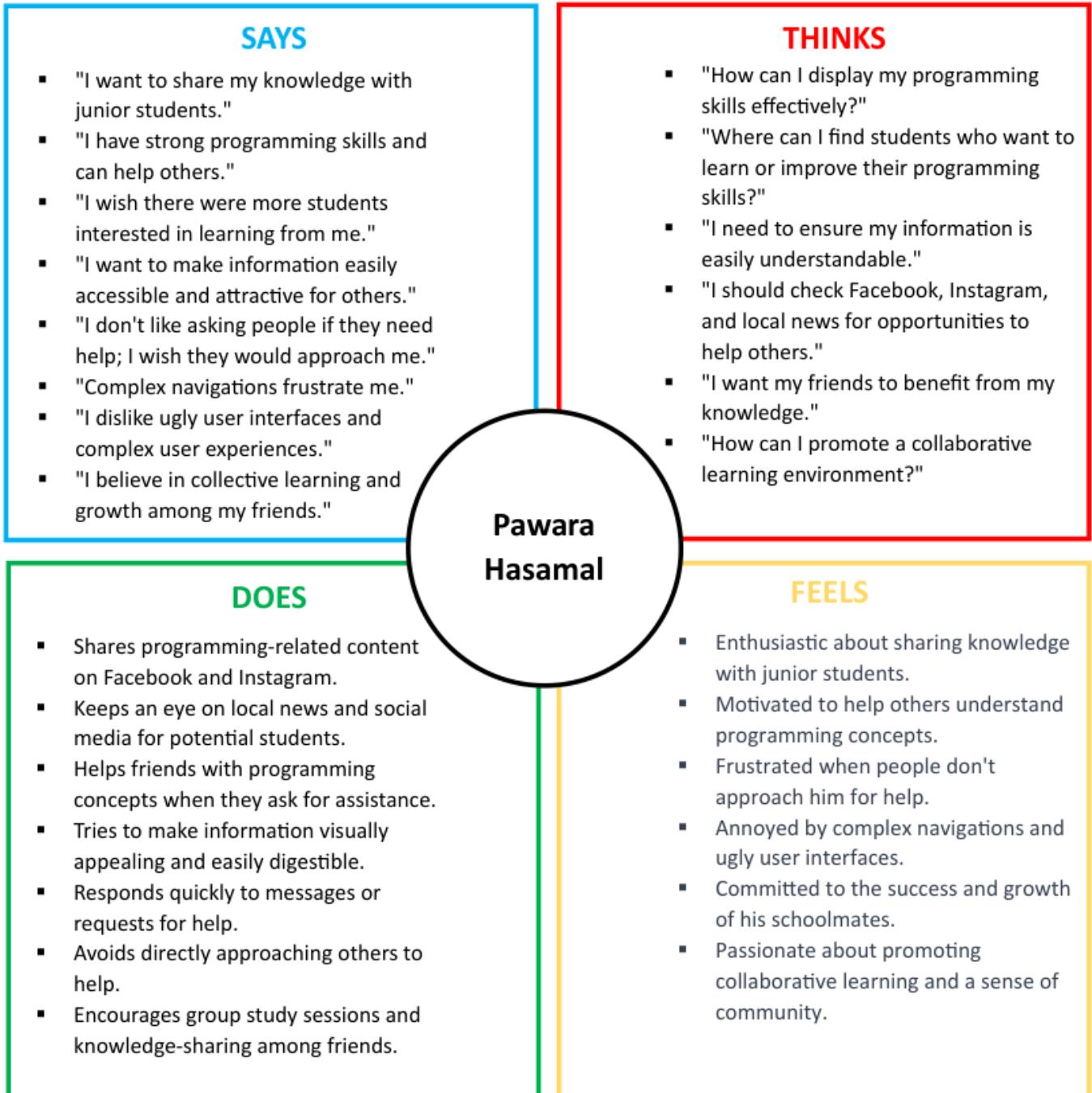
- Web news platforms
- Local news
- Facebook, Instagram

4.2 Empathy maps

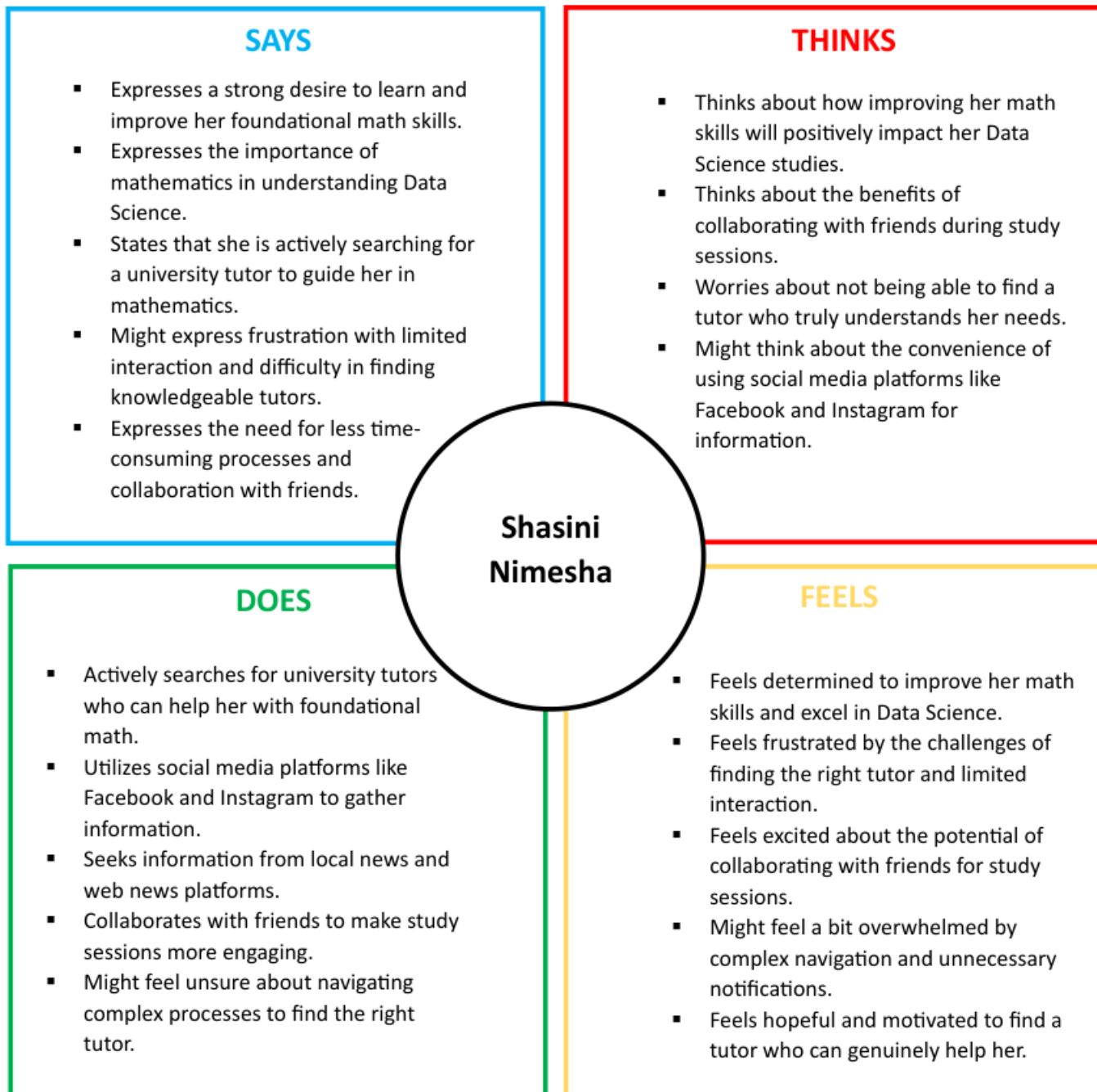
4.2.1. IT21118340



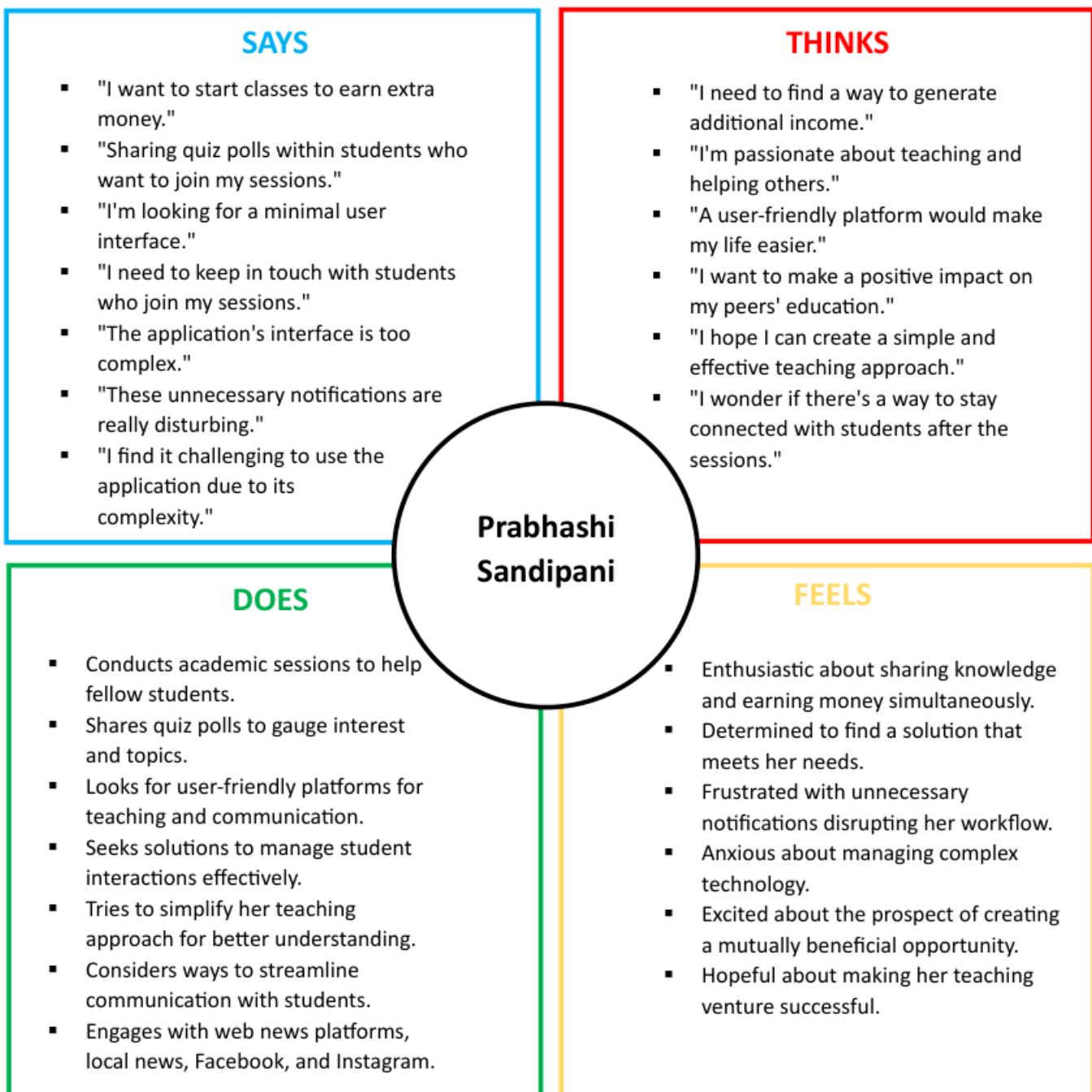
4.2.2. IT21291364



4.2.3. IT21267772



4.2.4. IT21388934



4.3 User stories

4.3.1. IT21118340

As a student tutor,

I want to sell my short notes and study material

So that I can earn extra income

4.3.2. IT21291364

As a university student,

I want to rate the tutor,

So that I can provide feedback about their abilities

4.3.3. IT21267772

As a university student,

I want to easily request a session with a student tutor

So that I can schedule a session with them

4.3.4. IT21388934

As a student tutor,

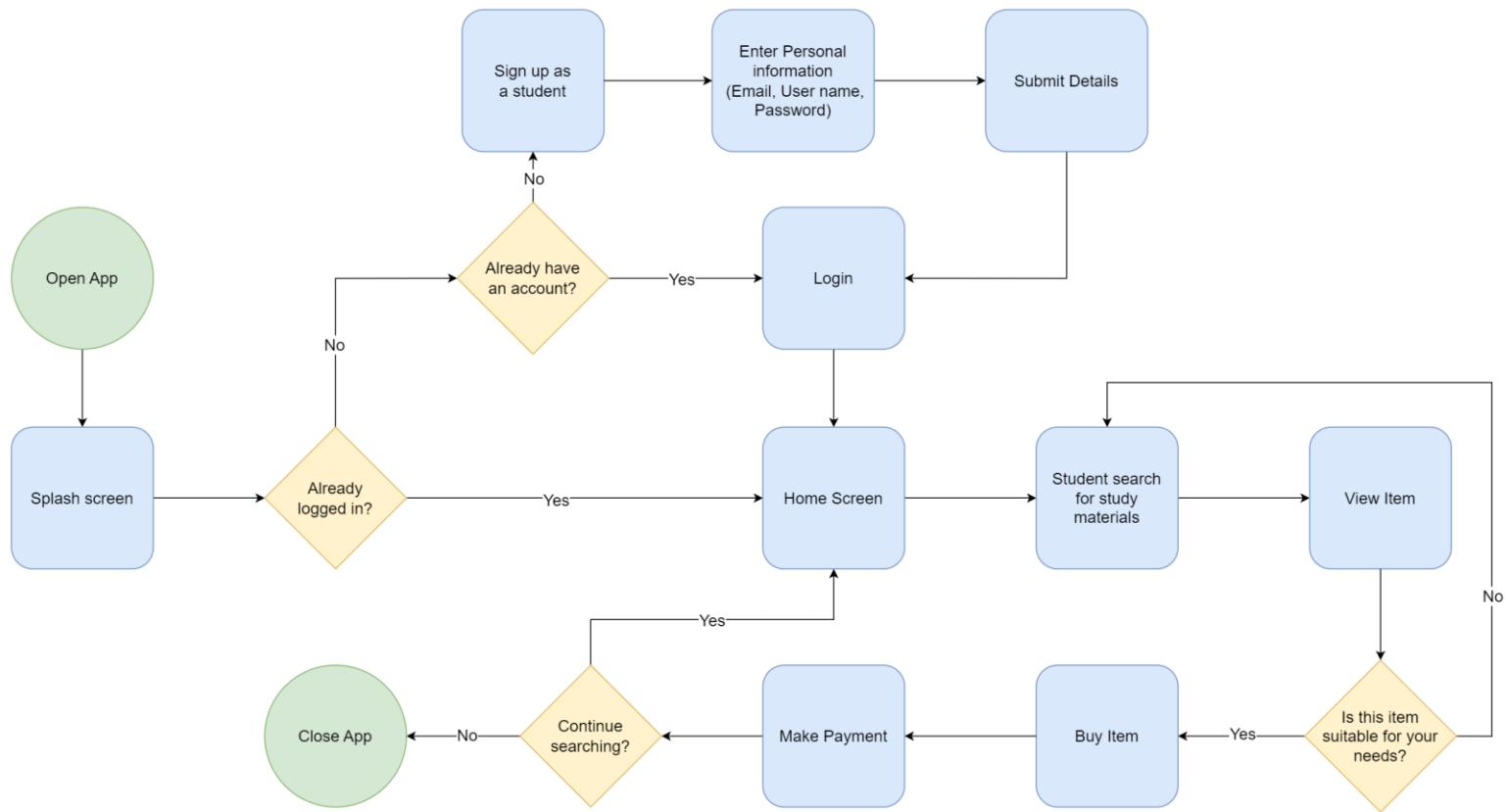
I want to create and display information regarding classes I conduct

So that students seeking tutoring can make informed decisions

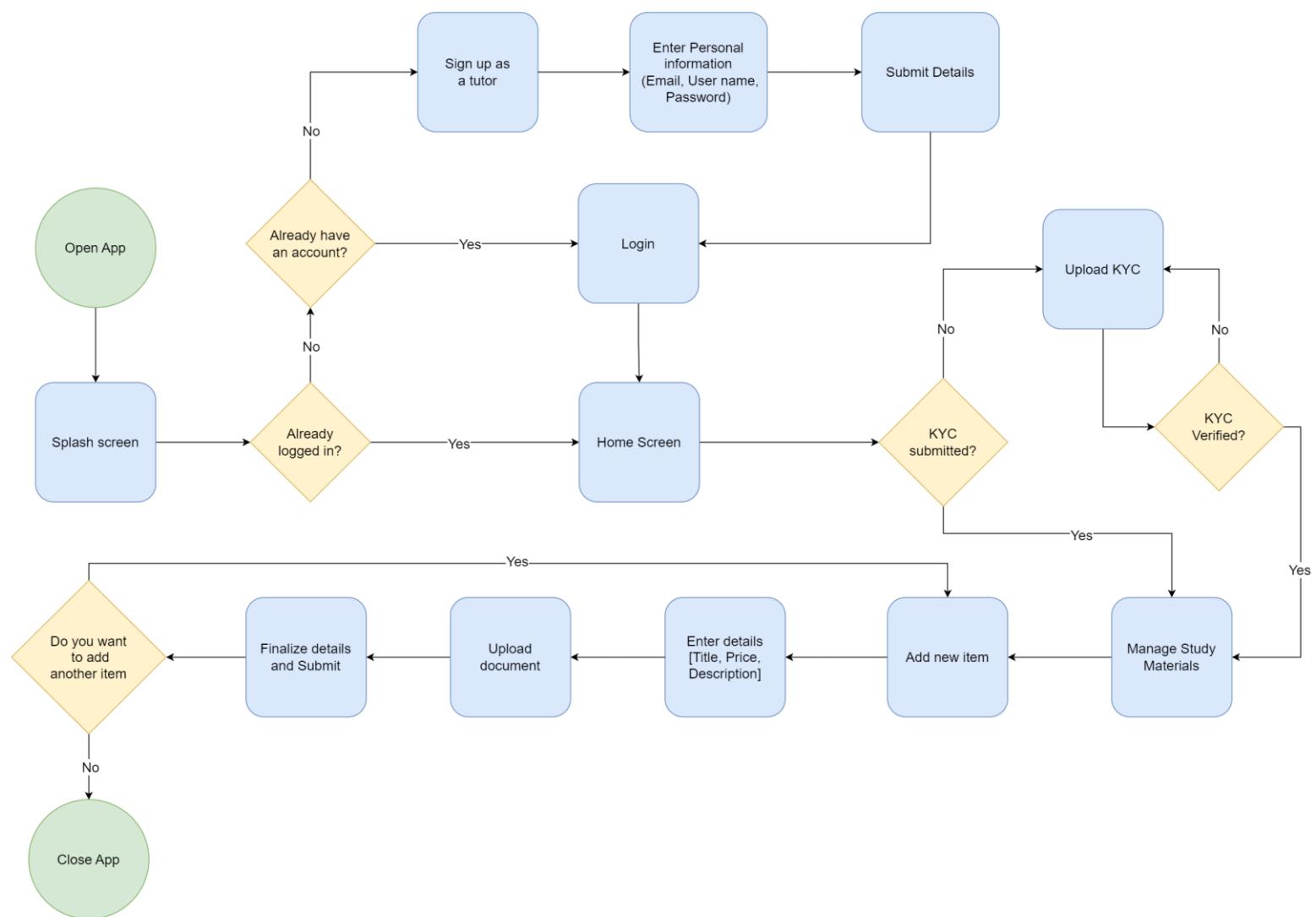
4.4 User flow(s)

4.4.1. IT21118340

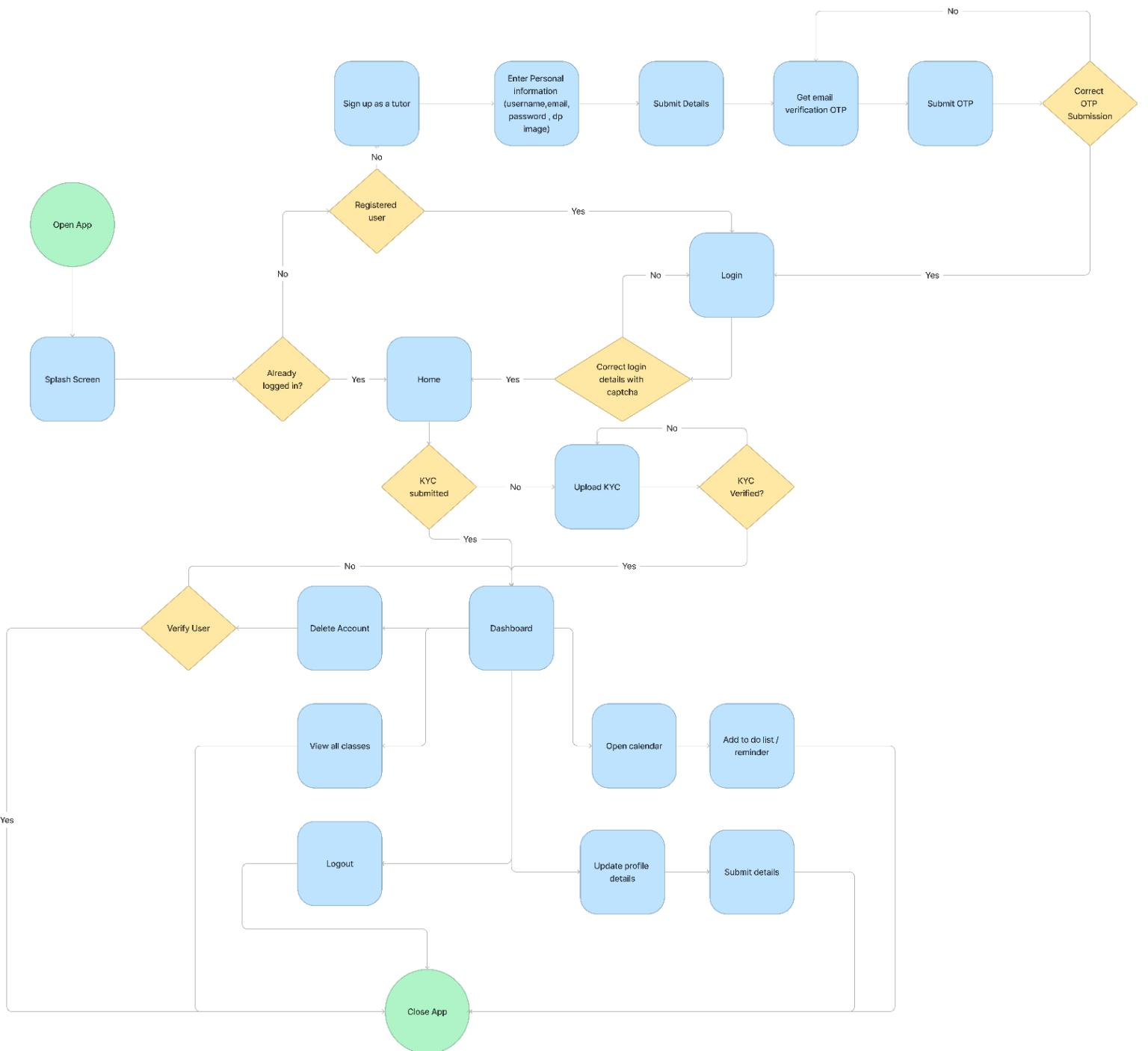
Student: Buy Study Materials



Tutor: Upload Study Materials

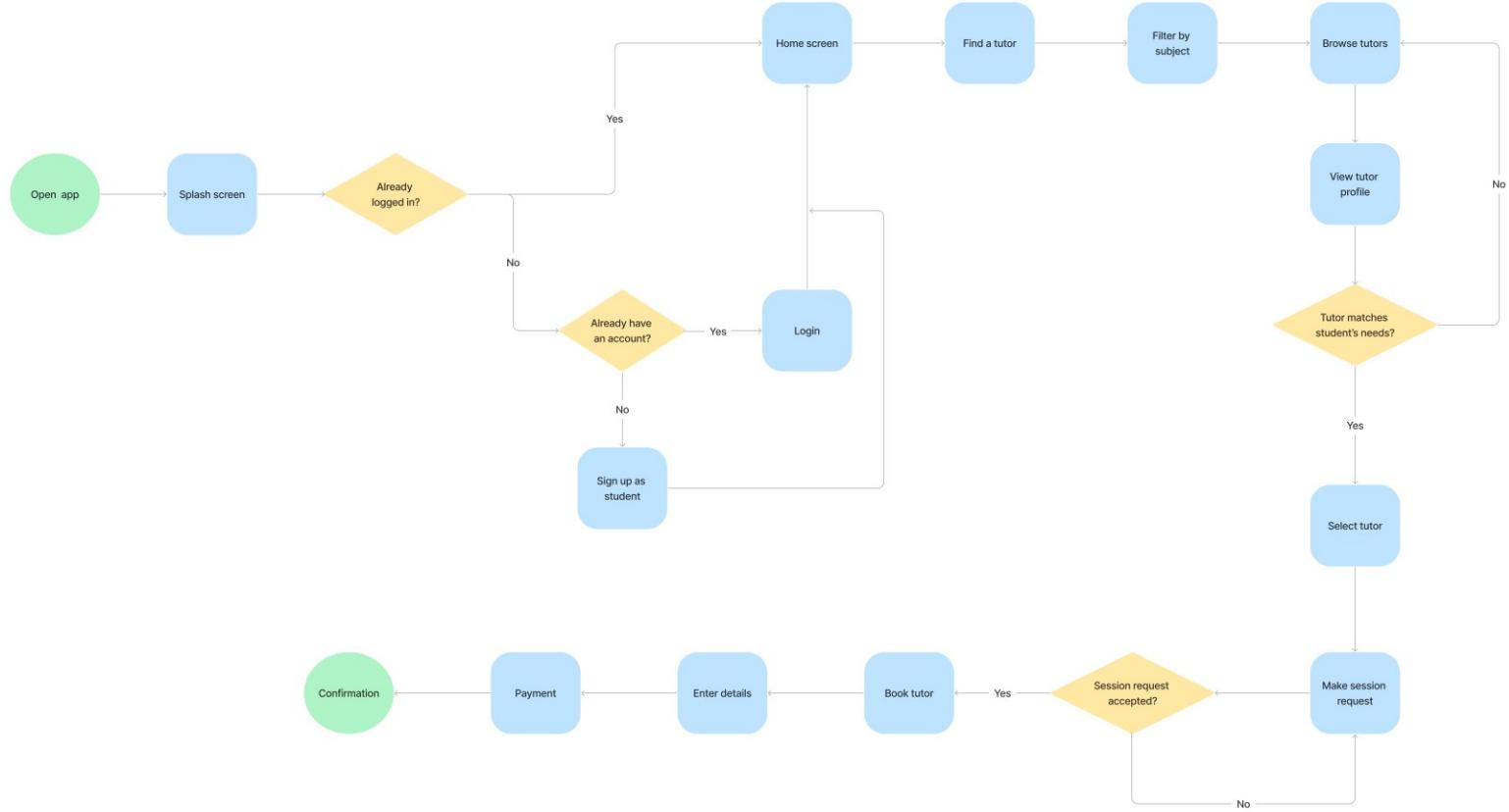


4.4.2. IT21291364



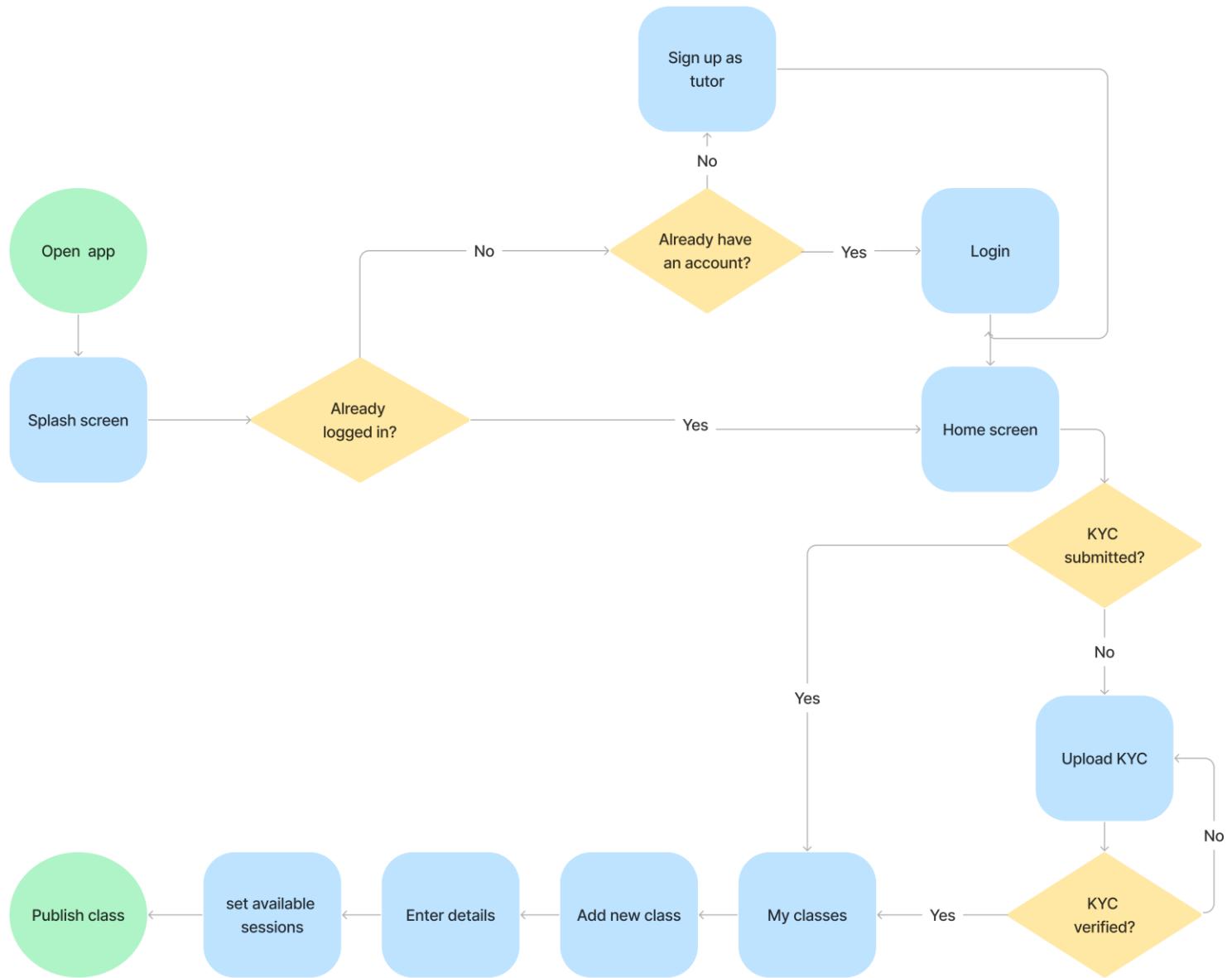
4.4.3. IT2126772

Student: Booking Class



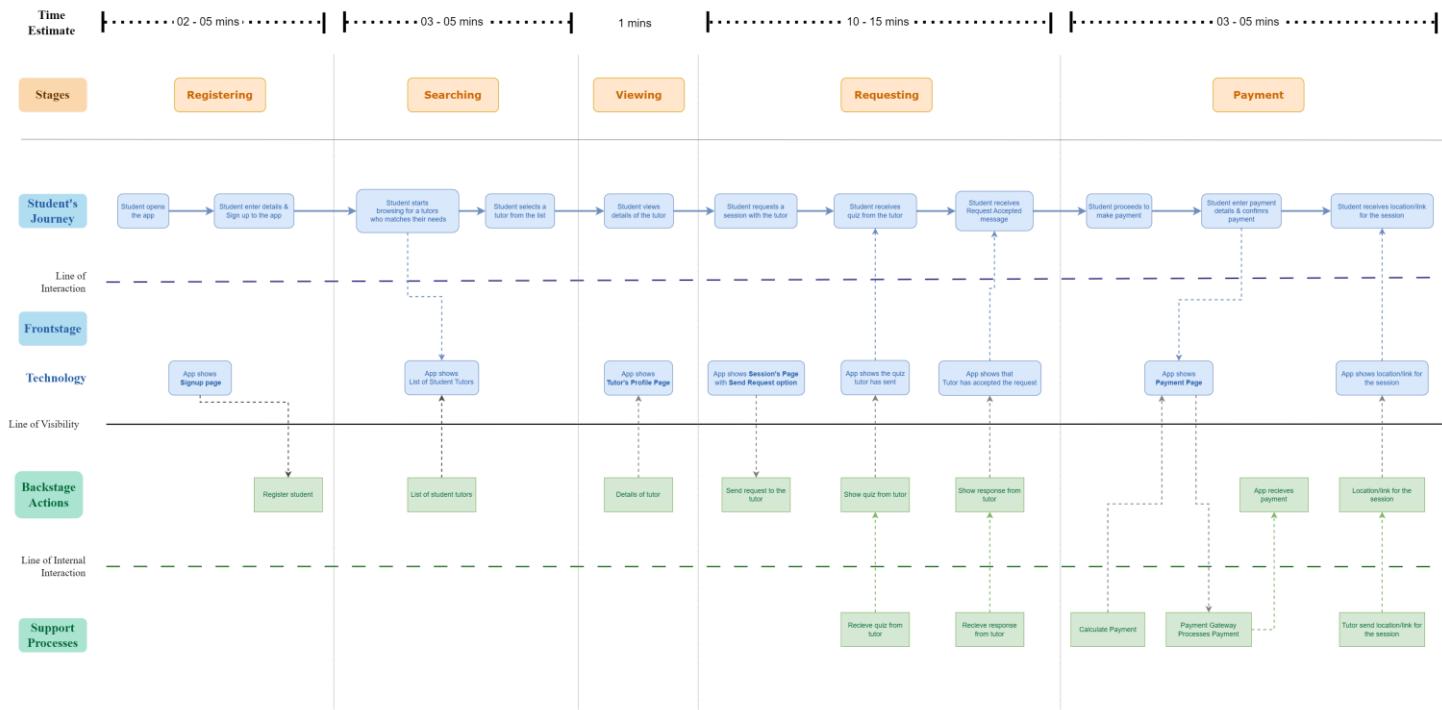
4.4.4. IT21388934

Tutor: Publish Class

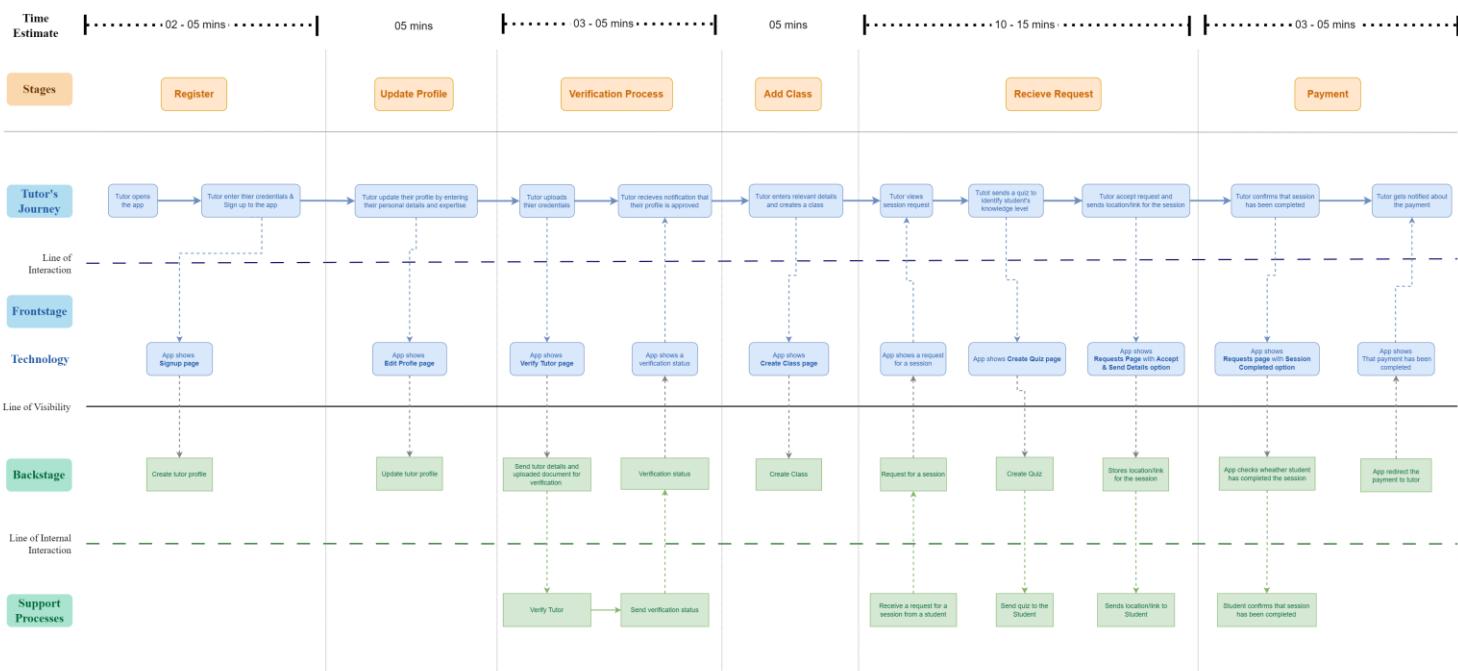


4.5 Service Blueprint(s) – 01 Service Blueprint from a group

From Student's Perspective



From Tutor's Perspective



4.6 Identify basic functionality of the proposed system

1. **User Registration:** Allow users to create accounts by providing necessary information.
2. **Tutor Search:** Enable students to search for available tutors based on criteria like subject, availability, and location.
3. **Tutor Selection:** Allow students to select and connect with tutors for academic assistance.
4. **Payment Processing:** Facilitate secure payment transactions for tutoring services.
5. **Review and Rating:** Allow users to rate and review tutors, fostering transparency and trust.
6. **Session Management:** Enable users to schedule and manage tutoring sessions with chosen tutors.
7. **Tutor Profiles:** Provide detailed profiles of tutors, including their qualifications, ratings, and reviews.
8. **Class management:** Enable tutors to schedule and manage classes.
9. **Document Sharing:** Allow the exchange of study materials, notes, and slides between students and tutors.
10. **Notifications:** Keep users informed about upcoming sessions, new tutors, and relevant updates.

5 Milestone 2: Plan and conduct user research

5.1 Test Objectives

1. Identify factors that motivate students to seek or offer tutoring services
2. Identify challenges faced by students when they want to seek or offer tutoring services
3. Evaluate user's willingness to pay for tutor services or study materials
4. Identify features or incentives that would enhance user engagement

5.2 Methodology

Firstly, two structured questionnaires will be distributed among a selected group of thirty university students from different subject areas and academic levels. Afterward, in-depth video interviews will be conducted with four students to gain a better understanding of user behavior and motivation. Google Forms and WhatsApp will be used to conduct the questionnaires, while Zoom will be the platform of choice for the video interviews.

5.2.1 Questionnaire

Structured questionnaires will be distributed among thirty university students. Students will be selected from the Computing, Humanities, and Engineering faculties. From each faculty, five students will be selected for their tutoring experience, while five students will be selected based on their academic level and seniority.

Two structured questionnaires will be created for tutors and students, using Google Forms, a survey platform developed by Google. Google Forms provides a comprehensive suit of tools for creating questionnaires, analysing, and visualizing user responses.

Selected students will be contacted via the WhatsApp messaging platform. After they agree to the interview, the relevant questionnaire will be shared with the participant.

Questionnaire for Students

Section 01

Student - Questionnaire

Questions Responses 11 Settings

Section 1 of 2

Student - Questionnaire

User research for 3rd Year project - UEFF Module

Which academic year are you currently in? *

Year 01
 Year 02
 Year 03
 Year 04

What semester are you in? *

Semester 01
 Semester 02

Have you ever participated in a tutoring session at the university?

Yes
 No

If yes, how helpful were they for your exams?

1 2 3 4 5
Not really Extremely helpful

How did you find out about the tutoring sessions?

Word of mouth
 Social Media (WhatsApp, Telegram, Facebook)
 Email
 Other..

After section 1: Continue to next section

Section 2 of 2

Requesting tutoring sessions

Description (optional)

Have you ever participated in a one on one tutoring session with another student? *

Yes
 No

If yes, how helpful were they for your exams?

1 2 3 4 5
Not really Extremely helpful

How did you request the session?

Word of mouth
 Social Media (WhatsApp, Telegram, Facebook)
 Email
 Other

What are the challenges you faced when requesting the session?

Finding a tutor
 Contacting a tutor
 Organizing a time and location

How would you rate your experience of requesting that session?

1 2 3 4 5
Easy Difficult

If you had the option, would you be willing to pay a small amount of money for the student who conducted a session? *

Yes
 No

If you had the option, would you be willing to purchase lecture notes from a senior student? *

Yes
 No

What do you think about an app that will make it easy for someone to request a session? *

Love it
 Hate it

Do you have any additional suggestions?

Long answer text

Section 02

Student - Questionnaire

Questions Responses 11 Settings

Section 1 of 2

Student - Questionnaire

User research for 3rd Year project - UEE Module

Which academic year are you currently in? *

Year 01
 Year 02
 Year 03
 Year 04

What semester are you in? *

Semester 01
 Semester 02

Have you ever participated in a tutoring session at the university? *

Yes
 No

If yes, how helpful were they for your exams?

1 2 3 4 5
 Not really Extremely helpful

How did you find out about the tutoring sessions?

Word of mouth
 Social Media (WhatsApp, Telegram, Facebook)
 Email
 Other...

After section 1 Continue to next section

Section 2 of 2

Requesting tutoring sessions

Description (optional)

Have you ever participated in a one-on-one tutoring session with another student? *

Yes
 No

If yes, how helpful were they for your exams?

1 2 3 4 5
 Not really Extremely helpful

How did you request the session?

Word of mouth
 Social Media (WhatsApp, Telegram, Facebook)
 Email
 Other

What are the challenges you faced when requesting the session?

Finding a tutor
 Contacting a tutor
 Organizing a time and location

How would you rate your experience of requesting that session?

1 2 3 4 5
 Easy Difficult

If you had the option, would you be willing to pay a small amount of money for the student who conducted a session? *

Yes
 No

If you had the option, would you be willing to purchase lecture notes from a senior student? *

Yes
 No

What do you think about an app that will make it easy for someone to request a session? *

Love it
 Hate it

Do you have any additional suggestions?

Long answer text

Questionnaire for Tutors

Tutor - Questionnaire

Questions Responses 15 Settings

Tutor - Questionnaire

User research for 3rd Year project - UEE Module

Which academic year are you currently in? *

Year 01
 Year 02
 Year 03
 Year 04

What semester are you in? *

Semester 01
 Semester 02

Have you ever conducted a tutoring session? *

Yes
 No

Have you ever charged money for a tutoring session? *

Yes
 No

If no, would you be open to receiving a small financial donation from other students?

Yes
 No

How did your students find you or request your service? *

Word of mouth
 Email
 Social Media (WhatsApp, Telegram, Facebook)
 Phone

What are the challenges you faced when organizing the session?

Marketing my teaching skills
 Organizing a time and location
 Receiving payment for my efforts

How would you rate your experience when organizing the session?

1 2 3 4 5
Easy Difficult

If you had the option, would you be willing to sell your old study materials like lecture notes, diagrams etc.? *

Yes
 No

What do you think about an app that will make it easy for someone to organize a session? *

Love it
 Hate it

5.2.2 Video Interviewing

Four students will be selected for a video interview: one to represent the student's perspective and three to represent the tutor's perspective. Students will be selected based on their tutoring experience and academic level.

Selected students will be contacted via the WhatsApp messaging platform. After they agree to the interview, a video interview will be conducted via the Zoom platform.

- Interview Questions

Student:

- Have you ever participated in a one-on-one tutoring session with another student?
- How helpful were they to your exam?
- What motivated you to seek tutoring services?
- How did you request the session?
- Can you describe your experience when requesting the session?
- What are the challenges you faced when requesting the session?
- If you had the option, would you be willing to pay a small amount of money to the student who conducted a session?
- If you had the option, would you be willing to purchase study materials from a senior student?
- What would you think about an app that will make it easy for someone to request a session?
- Do you have additional suggestions for the app?

Tutor:

- Have you ever conducted a tutoring session?
 - What motivated you to offer tutoring services?
 - How did your students find you or request your service?
 - How did your students contact you to request your service?
 - Have you ever been paid for a tutoring session?
 - Can you describe your experience when organizing the session?
 - What are the challenges you faced when organizing the session?
 - If you had the option, would you be willing to sell your old study materials like lecture notes, diagrams etc.?
 - What would you think about an app that will make it easy for someone to organize a session?
 - Do you use any separate app to manage your availability and set reminders for yourself when conducting sessions? If so, can you describe it?
 - Do you have any additional suggestions?
-
- Interviewing – All Video Link:
https://drive.google.com/drive/folders/1It7_XEsuAzOBSU0OnGVB_mGOKA-zAMH2?usp=drive_link

- Participant Profiles

The table below provides a breakdown of the participants selected for video interview:

Name	Demography	Date & Time
<i>Sathsarani Wijeratne</i>	<i>3rd year Information Technology student at SLIIT.</i>	<i>2023-08-25 18.30</i>
<i>Dananjaya Siriwardhana</i>	<i>3rd year Data Science student at SLIIT.</i>	<i>2023-09-18 18.30</i>
<i>Rosara Dayaratne</i>	<i>3rd year Software Engineering student at SLIIT.</i>	<i>2023-09-22 18.30</i>
<i>Sasini Nimesha</i>	<i>1st year Computer Science student at KDU</i>	<i>2023-09-20 18.30</i>

TABLE 3. Participant Profile

- Tasks and Scenarios

Task	Target	Probe
Tutor - Login & Register	User registers as a tutor by providing details and then login to land in the tutor home page.	
Publish class	Tutor publishes a class by adding class details and the session times.	
Upload study materials	Tutor uploads a study material to be downloaded by a student.	
Make a withdrawal	Tutor withdraws money from the wallet after conducting a session.	
Student - Login & Register	User registers as a student by providing details and then login to land in the student home page.	
Make session request	Student searches a class by the category and then requests a session with the tutor by providing details.	
Download study materials	Student downloads a study material uploaded by a tutor.	

TABLE 4. Tasks and Scenarios

- o Interview 01

Participant: Sathsarani Wijeratne

Description: 3rd year Information Technology student

Role: Tutor

Date: 2023-09-03

Link:

https://drive.google.com/file/d/1ReHpQ4KsjQ8TbbwVjMKX2fWNRXD8oDFO/view?usp=drive_link

Transcript:

Manuka: Hey Sathsarani, I'm Manuka, and these are my teammates Dilru, Rumesh, and Isuru. We're developing an app that will help university students connect with tutors. So, we're really excited to talk with you today to get your thoughts as a tutor. We think your insights will be really helpful for us in making our app even more user-friendly. First can you introduce you yourself?

Sathsarani: Hi everyone, My name is Sathsarani, and I'm currently in my third year of studying Information Technology.

Manuka: Have you ever conducted a tutoring session?

Sathsarani: Yes, I've done quite a few tutoring sessions, mostly covering programming-related topics.

Isuru: What motivated you to offer tutoring services?

Sathsarani: I just really wanted to help my friends do well in their studies. Back in my university days, I saw some of my friends really struggling with tough subjects. That's when I got the idea to set up my very first tutoring session. It felt amazing to see my friends make real progress in their studies.

Isuru: How did your students find you or request your service?

Sathsarani: Usually, my students discovered me through a mix of recommendations and online presence. It was often friends who had experienced my tutoring would suggest me to others. On top of that, I used to upload my tutoring sessions on YouTube, and, some people came across them and reached out to me.

Rumesh: How did your students contact you to request your service?

Sathsarani: They usually reached out to me through email or text messages.

Rumesh: Have you ever been paid for a tutoring session?

Sathsarani: Yes, back in my university days, I noticed that some of my fellow students were really grateful for my tutoring help and even wanted to pay me for it. It was a pleasant surprise and a big help financially. It not only eased my money worries but also made me realize how much they valued what I was doing.

Manuka: Can you describe your experience when organizing the session?

Sathsarani: Setting up a tutoring session takes some thoughtful steps. First, I chat with the student to figure out when and where works best for them. If it's an online session, we decide on the video call platform.

Next, I change the session material to match what the student's studying, so it's relevant. When we're in the session, I keep things organized by following a plan. We go through what they need to learn, and I'm always open to questions and discussions to make sure they really get it.

Isuru: What are the challenges you faced when organizing the session?

Sathsarani: When it comes to setting up tutoring sessions, I've faced a few problems. Scheduling can be a real puzzle, especially when exams are near. Finding a peaceful spot for face-to-face sessions without interruptions is not easy either. Plus, working with students who have different learning preferences means I've got to be flexible and really good at talking things through.

Dilru: If you had the option, would you be willing to sell your old study materials like lecture notes, diagrams, etc.?

Sathsarani: Yes! I believe in sharing knowledge and resources. I thought about selling my old study materials like lecture notes and diagrams to help fellow students, but I don't want to burden them with high costs. I'm leaning towards giving them away for free. It's a way for me to showcase my teaching skills and assist others at the same time.

Rumesh: Akke, What would you think about an app that will make it easy for someone to organize a session?

Sathsarani: I think that is really great idea. Being a tutor myself, I know firsthand how tricky it can be to juggle schedules, handle payments, and keep in touch with students. Having an app tailor-made for managing tutoring sessions could really make things smoother, making life easier for both tutors and students.

Manuka: Do you use any separate app to manage your availability and set reminders for yourself when conducting sessions? Can you describe it?

Sathsarani: Right now, I rely on a calendar app to keep track of my schedule and remind me of important events. I put in all my tutoring appointments, study sessions, and other personal commitments into the calendar. It's good for preventing conflicts in my schedule, but it's missing specific features that would make tutoring even easier. Like, it doesn't have any way for me to handle payments or communicate directly with my students. So, I'm pretty excited to check out a tutoring app that's designed just for those needs.

Isuru: Do you have any additional suggestions?

Sathsarani: Yes. What do you think about adding a feature where tutors can assess students' understanding of the topics they want to concentrate on.

Manuka: Yes. We will definitely consider about it. Thank you so much for taking the time to do this interview. We genuinely appreciate it!

Sathsarani: Thank you guys for having me. I wish you all the very best.

- o Interview 02

Participant: Dananjaya Siriwardhana

Description: 3rd year Data Science student

Role: Tutor

Date: 2023-09-15

Link: https://drive.google.com/file/d/1yQ80PozVELbcb1F1Fsc71fo_3I-JHYjM/view?usp=drive_link

Transcript:

Dilru: Hey Dananjaya, I'm Dilru, and these are my teammates Manuka, Rumesh, and Isuru. We're developing an app that will help university students connect with tutors. In this interview, we'd like to ask you a few questions and gather your thoughts as a tutor. We think your insights will be really helpful for us in making our app even more user-friendly. First can you introduce yourself?

Dananjaya: Hi everyone, My name is Dananjaya! and I'm currently in my third year of studying Data Science.

Dilru: Have you ever conducted a tutoring session?

Dananjaya: Yes, I've conducted several tutoring sessions, primarily focusing on topics related to engineering and mathematics.

Manuka: What motivated you to offer tutoring services?

Dananjaya: In previous years, I noticed some of my classmates having a hard time with certain subjects. That's when I thought of starting some tutoring session, to help them.

Isuru: How did your students find you or request your service?

Dananjaya: Most of my students find me through word of mouth or online. It's usually friends who've had tutoring sessions with me and then recommend me to others. And I used to maintain a blog about engineering related topics, so some people stumbled upon them and got in touch.

Rumesh: How did your students contact you to request your service?

Dananjaya: They usually reached out to me through email or WhatsApp. It is not easy for them to find me as there is no specific platform for this.

Rumesh: Have you ever been paid for a tutoring session?

Dananjaya: Yes, I did some research and found out that there are so many students out there who could really use some extra academic help. So, I started offering tutoring services to students who needed it. It actually helped improve my finances without putting too much pressure on my parents.

Manuka: Can you describe your experience when organizing the session?

Dananjaya: When I'm setting up a tutoring session, I like to keep things organized. First, I chat with the student to find out a time and location, it's most convenient for them. If it's going to be online, we choose a video call platform that works for both of us. Then, I create some study materials to help them understand the session further. During the session, We discuss what they need to learn, and I give them a small quiz to make sure they really understand everything.

Isuru: What are the challenges you faced when organizing the session?

Dananjaya: When arranging tutoring sessions, scheduling and payment are the trickiest parts, especially trying to find that perfect time when both of us are available, and making sure everything gets settled smoothly.

Dilru: If you had the option, would you be willing to sell your old study materials like lecture notes, diagrams, etc.?

Dananjaya: Yes, but you know, I've been thinking that sharing them for free might actually be a better idea. I mean, you can easily get old lecture notes from another senior without paying anything, right? So, instead of charging for them, I give them away for free. This way, I can not only showcase my teaching skills but also lend a hand to others. It's a win-win situation.

Rumesh: What would you think about an app that will make it easy for someone to organize a session?

Dananjaya: I think that is really great idea. Being a tutor myself, I know firsthand how difficult it can be to juggle schedules, handle payments, and keep in touch with students. Having an app specifically made for managing tutoring sessions could really make things easier for both tutors and students.

Manuka: Do you use any separate app to manage your availability and set reminders for yourself when conducting sessions? Can you describe it?

Dananjaya: Currently, I'm using Google services to manage my schedule and set reminders for important stuff. I put all my tutoring sessions, study meet-ups, and personal plans into my Google Calendar. It's great for avoiding schedule clashes, but it lacks some features that could make tutoring smoother. For instance, there's no built-in payment system or direct communication with my students. That's why I'm really looking forward to trying out this new tutoring app, specially designed to cater to those needs.

Isuru: Do you have any additional suggestions?

Dananjaya: Yes. What do you think about adding a feature where tutors can send a quiz to students, so they can know what topics to focus on.

Dilru: Yes. We will definitely consider about it. Thank you so much for taking the time to do this interview. We genuinely appreciate it!

Dananjaya: Thank you guys for having me. I wish you all the best.

- o Interview 03

Participant: Rosara Dayaratne

Description: 3rd year Software Engineering student

Role: Tutor

Date: 2023-09-16

Link: https://drive.google.com/file/d/1bHxC8pnL_uWpyrf3bxMRPMUhrk96pG0N/view?usp=drive_link

Transcript:

Dilru: Hello Rosara, I'm Dilru, and these are my teammates Manuka, Rumesh, and Isuru. We're developing a mobile application that will help university students connect with tutors. In this interview, we'd like to ask you a few questions and gather your thoughts as a tutor. We think your insights will be really helpful for us in making our app even more user-friendly. First can u introduce ur urself?

Interviewee: Hi everyone, My name is Rosara! and I'm currently in my third year of studying Software Engineering.

Dilru: Have you ever conducted a tutoring session?

Interviewee: Yes, I've conducted several tutoring sessions, primarily focusing on topics related to java and mobile app development.

Manuka: What motivated you to offer tutoring services?

Interviewee: Some of my classmates told me they are having a hard time with programming subjects. That's when I thought of starting some tutoring session, to help them.

Isuru: How did your students find you or request your service?

Interviewee: Most of my students find me through word of mouth or online. And I maintain a youtube channel about mobile app development, so some people watched them and got in touch.

Rumesh: How did your students contact you to request your service?

Interviewee: They usually reached out to me through email or WhatsApp.

Rumesh: Have you ever been paid for a tutoring session?

Interviewee: Yes, I did some research and found out that there are so many students out there who could really use some extra academic help. So, I started offering tutoring services to students who needed it. It actually helped improve my finances without putting too much pressure on my parents.

Manuka: Can you describe your experience when organizing the session?

Interviewee: I only conduct online sessions. First, I chat with the student to find out a time and video call platform that works for both of us. Then, I create some the study materials to help them understand the

session further. During the session, We discuss what they need to learn. After the session, I give them some coding problems to make sure they really understood everything.

Isuru: What are the challenges you faced when organizing the session?

Interviewee: Trying to find a time perfect for both of us can be challenging. Next pain point is payment process. Since there isn't a dedicated platform for this kind of thing, I had little idea about how much to charge and how to do the payment process.

Dilru: If you had the option, would you be willing to sell your old study materials like lecture notes, diagrams, etc.?

Interviewee: Yes, If there are students willing to buy them for a fair price.

Rumesh: What would you think about an app that will make it easy for someone to organize a session?

Interviewee: I think that is really great idea. Being a tutor myself, I know firsthand how difficult it can be to handle scheduling and payments. Having an app specifically made for managing tutoring sessions could really make things easier for both tutors and students.

Manuka: Do you use any separate app to manage your availability and set reminders for yourself when conducting sessions? Can you describe it?

Interviewee: Yes, I put all my tutoring sessions, study meet-ups, and personal plans into the Calendar app. It's good for avoiding schedule clashes. I use whatsapp to communicate with my students. But If there was single tutoring app with all thses features, It would be super convenient.

Isuru: Do you have any additional suggestions?

Interviewee: No, Seems like this app covers every important feature.

Dilru: Thank you so much for taking the time to do this interview, Sashin. We really appreciate it!

Interviewee: Thank you guys for having me. I wish you all the best.

Interview 04

Participant: Sasini Nimesha

Description: 1rd year Computer Science student

Role: Student

Date: 2023-09-14

Link: https://drive.google.com/file/d/1CA31GiZzQK0_b0Z6jL-0dueaFLQSiS1W/view?usp=drive_link

Transcript:

Dilru: Hey Sasi, I'm Dilru, and these are my teammates Manuka, Isuru, and Rumesh. We're developing an mobile application that will help university students connect with tutors. So, we're really excited to talk with you today to get your thoughts as a student. We think your insights will be really helpful for us in making our app even more user-friendly. First can u introduce your yourself?

Sasini: Hi everyone, My name is Sasini, and I'm currently in my first year of studying Computer Science.

Dilru: Have you ever participated in group tutoring sessions?

Sasini: Yes. I have participated in several group tutoring sessions.

Dilru: Have you ever participated in a one-on-one tutoring session, with another student?

Sasini: Yes. I have also participated in one-on-one tutoring session with another student.

Dilru: What was your experience with them? How helpful were they to your exam?

Sasini: They were really helpful. In my experience one-on-one tutoring session are much better than group tutoring sessions. It is easier to communicate with the tutor,

Manuka: What motivated you to seek tutoring services?

Sasini: I was struggling with several subjects. So I felt it would be better to ask help from someone.

Isuru: How did you request the session?

Sasini: I communicated with them the via WhatsApp.

Isuru: Can you describe your experience when requesting the session?

Sasini: It wasn't easy. There is no specific platform to find this type of service. Therefore I had to lot of searching and asking around to find a tutor.

Rumesh: What are the challenges you faced when requesting a session?

Sasini: Finding a tutor was the main challenge. As I mentioned earlier, there isn't a dedicated platform for this kind of thing. And even when I did manage to find a tutor, it was still tricky to figure out if they were the right fit for me or not.

Manuka: If you had the option, would you be willing to pay small amount of money for the student who conducted the session?

Sasini: Absolutely, especially if they made a difference in my studies.

Dilru: If you had the option, would you be willing to purchase study materials from a senior student?

Sasini: Yes. But I will need to get a preview of the materials before purchasing, just to make sure it's worth the price.

Rumesh: What would you think about a app that will make it easy for someone to request a session?

Sasini: I think that is really great idea. It would save me lot of time, if an app like that exist.

Dilru: Do you have any additional suggestions?

Sasini: Yes. What do you think about adding a feature, which allows students to send a list of topics to our tutor. That way we can communicate what specific areas we'd like to concentrate on

Dilru: Yes. We will consider about it. Thank you so much for taking the time to do this interview. We genuinely appreciate it!

Sasini: Thank you, guys, for having me. I wish you all the best.

- Plan for Data analysis

Interview transcripts were prepared to better understand the user responses. User responses were analyzed both qualitatively and quantitatively. Quantitative data were entered into an excel sheet to visualize using bar charts and pie charts. Qualitative data was thoroughly reviewed and categorized to identify recurring themes and patterns in the feedback. We conducted in-depth interviews with a diverse group of university students who have experience as tutors and those who seek tutoring services. These interviews delved into various aspects, including user preferences, pain points, and expectations within the context of a student tutor app.

For the quantitative analysis, responses were organized into structured categories and entered into an Excel spreadsheet. This allowed for the creation of informative visualizations such as bar charts and pie charts. These graphical representations aided in presenting statistical insights into user preferences and usage patterns, providing valuable quantitative data for decision-making.

On the other hand, the qualitative data analysis involved a thorough examination of the interview transcripts. We identified recurring themes, feelings, and insightful suggestions shared by participants. This qualitative analysis helped us better grasp the finer details and hidden reasons behind user responses, allowing us to discover what users really need, what worries them, and where we could make the app better.

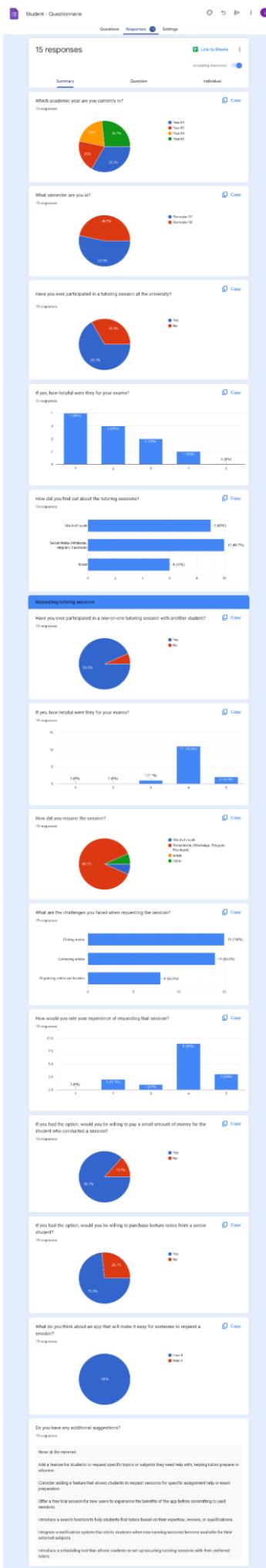
By combining both quantitative and qualitative analysis methods, we aimed to gain a comprehensive understanding of user needs, enabling us to make informed decisions during the app development process and ensure that the final product aligns closely with the expectations and preferences of both student tutors and those seeking tutoring services within the university community.

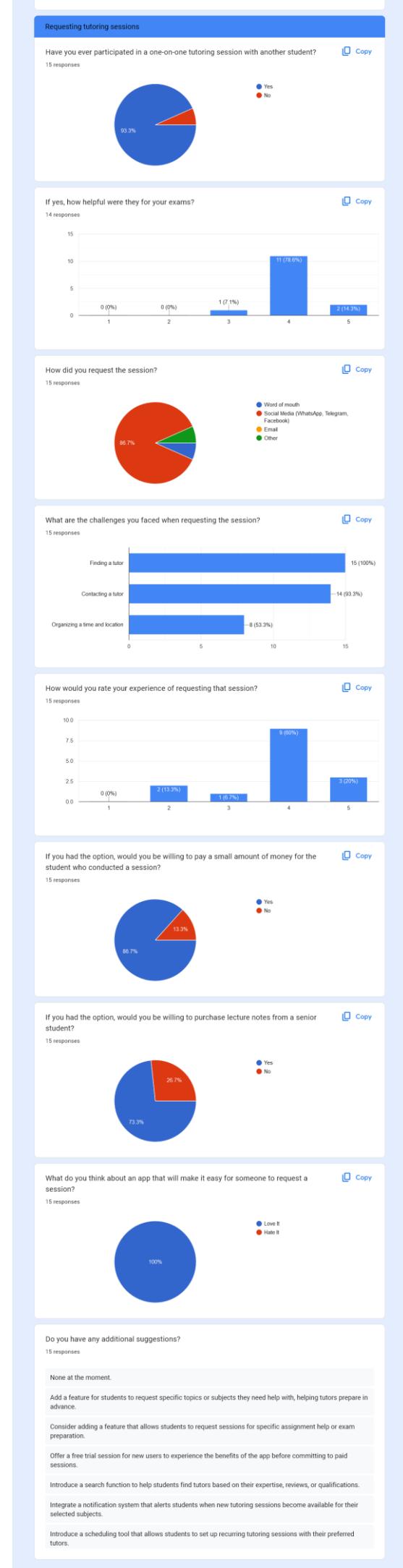
Two separate questionnaires were designed and conducted using Google Forms, one for students comprising 15 questions and another for tutors with 10 questions. These questionnaires were distributed to gather valuable user feedback for our student tutor app.

The collected data was then analyzed through Google Forms analysis tools. For the student questionnaire, we sought insights on various aspects, including user preferences, experiences, and expectations from the app. On the other hand, the tutor questionnaire focused on understanding tutor perspectives and requirements within the app.

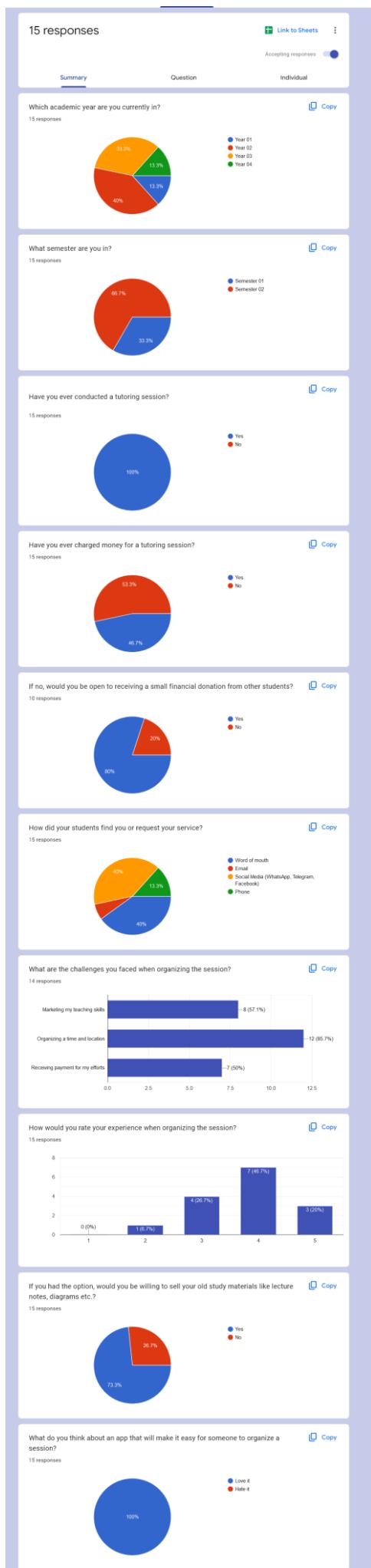
Google Forms' analysis features allowed us to efficiently process and visualize the gathered data. We used the platform's built-in tools to generate summary statistics, charts, and graphs, providing a clear and organized overview of the responses. This analysis enabled us to identify patterns and areas for improvement based on user feedback from both students and tutors.

o Questionnaire Results - Student





o Questionnaire Results - Tutor



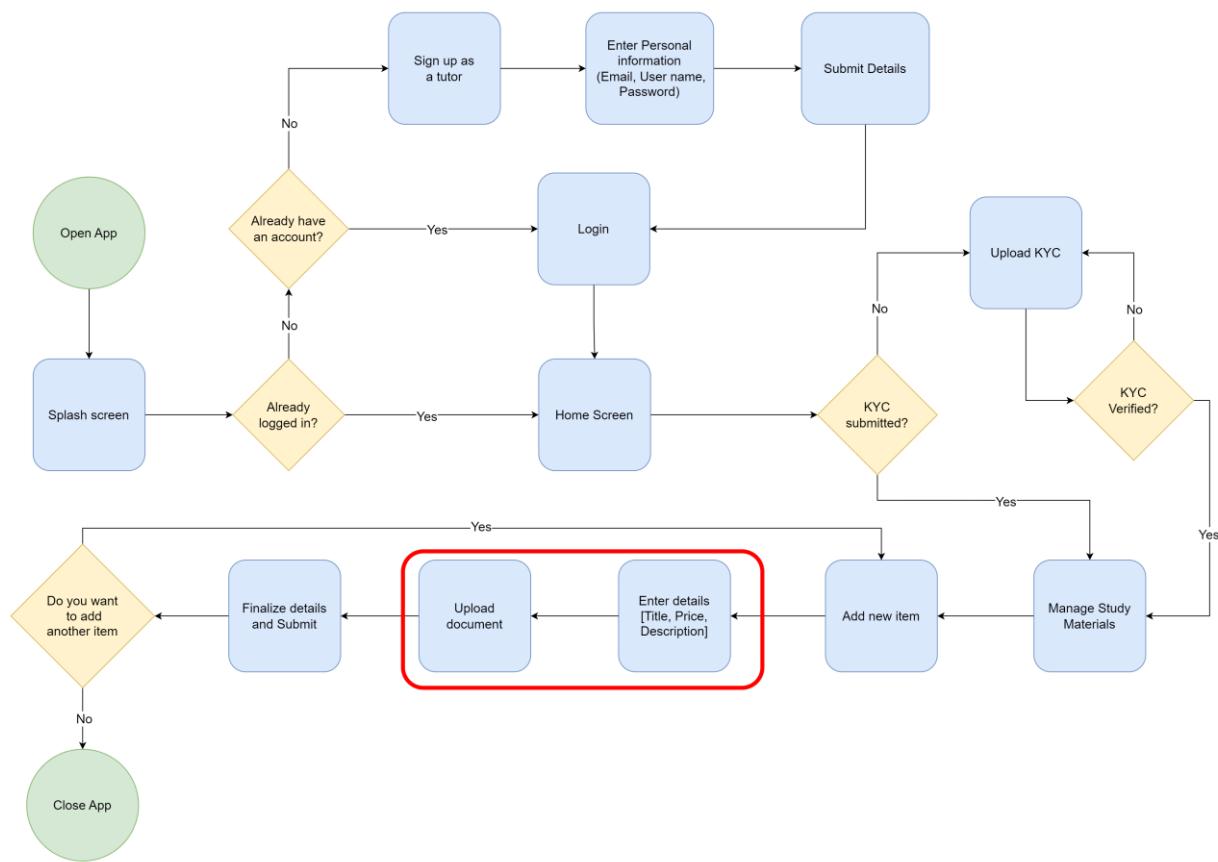
6 Milestone 3: Verify the key-user flow(s)

6.1 IT21118340

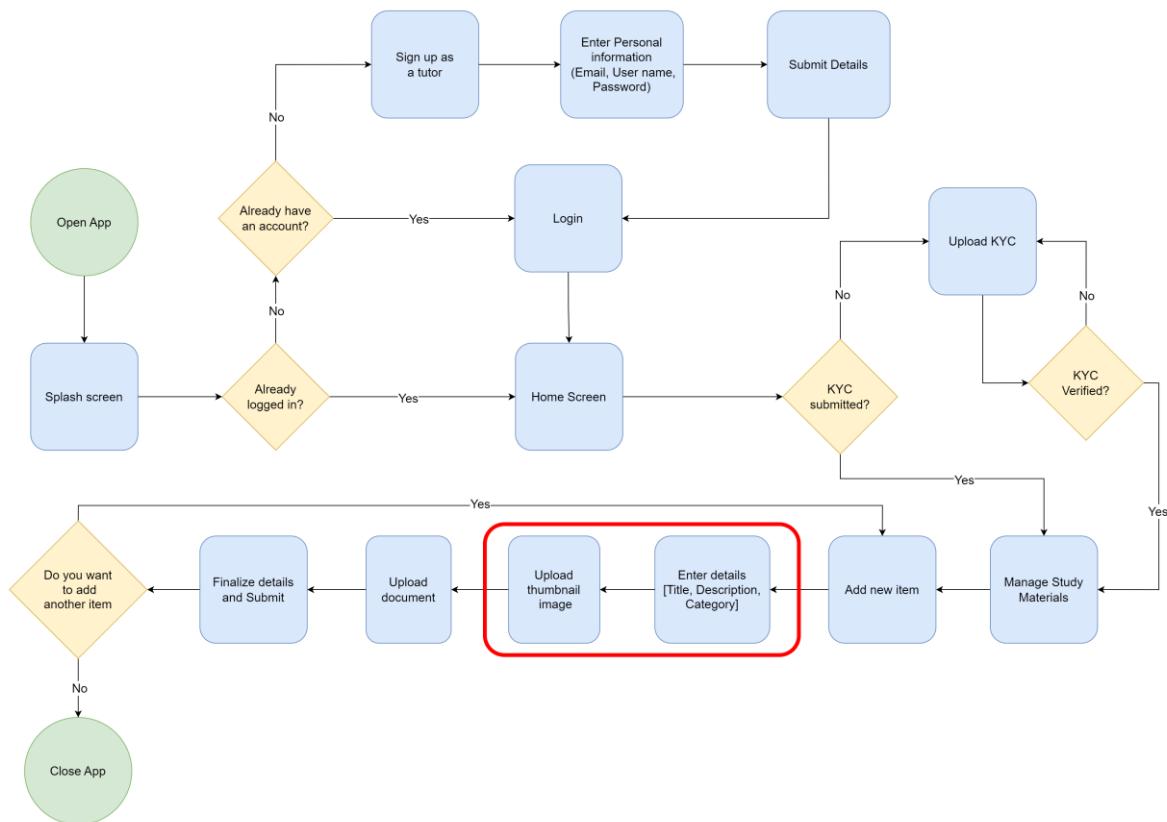
Fail Points

1. Tutors mention in the interview that they prefer to share study materials.
 - Change the user flow by, modifying input details for the study materials.
2. Tutors mention in the interview that they want to add a thumbnail image for the study materials.
 - Change the user flow by, adding a new step to upload a thumbnail image.
3. Students mention in the interview that they don't prefer to buy study materials.
 - Change the user flow by, removing the buying and payment processes and adding downloading process.

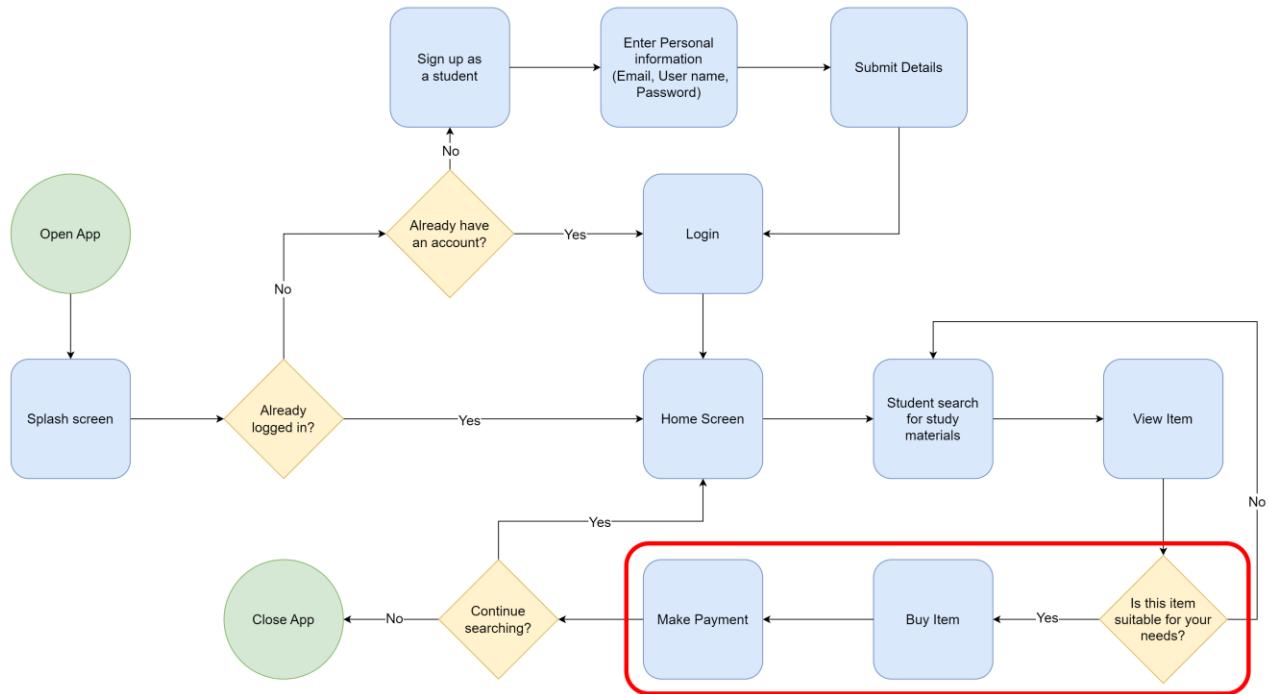
Previous User Flow – Tutor → Upload study materials



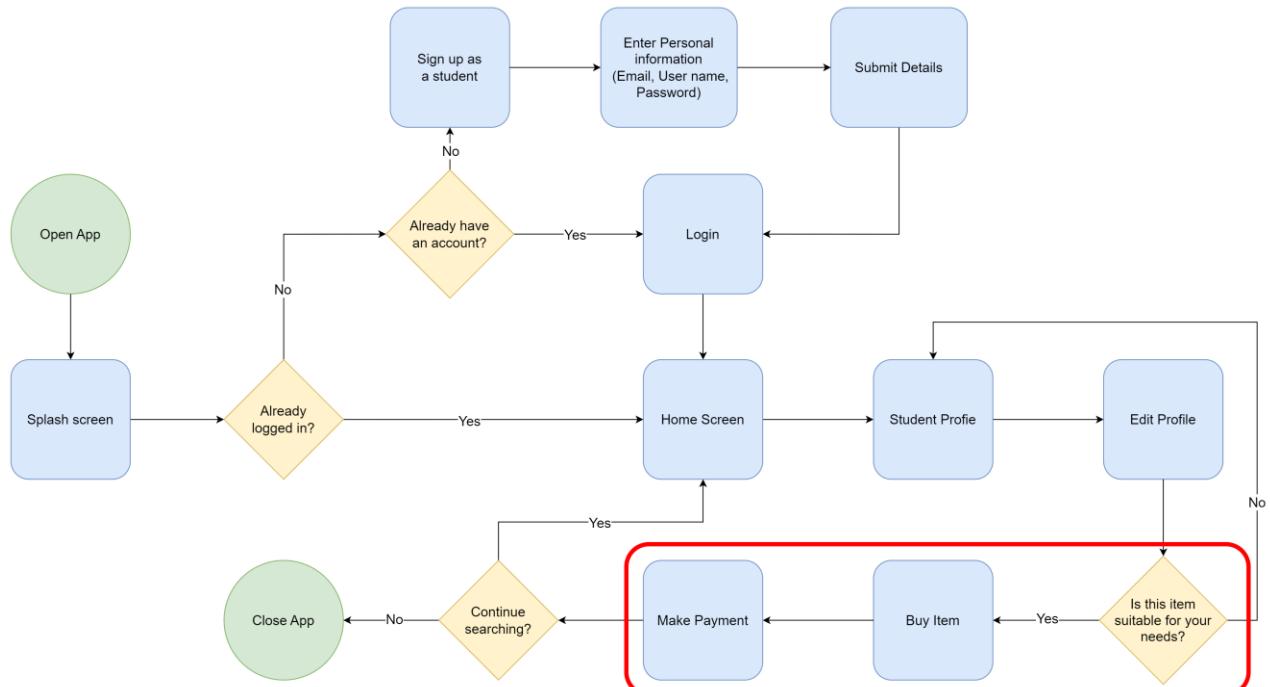
Modified User Flow (Fail points 01 & 02)



Previous User Flow – Student → Download study materials

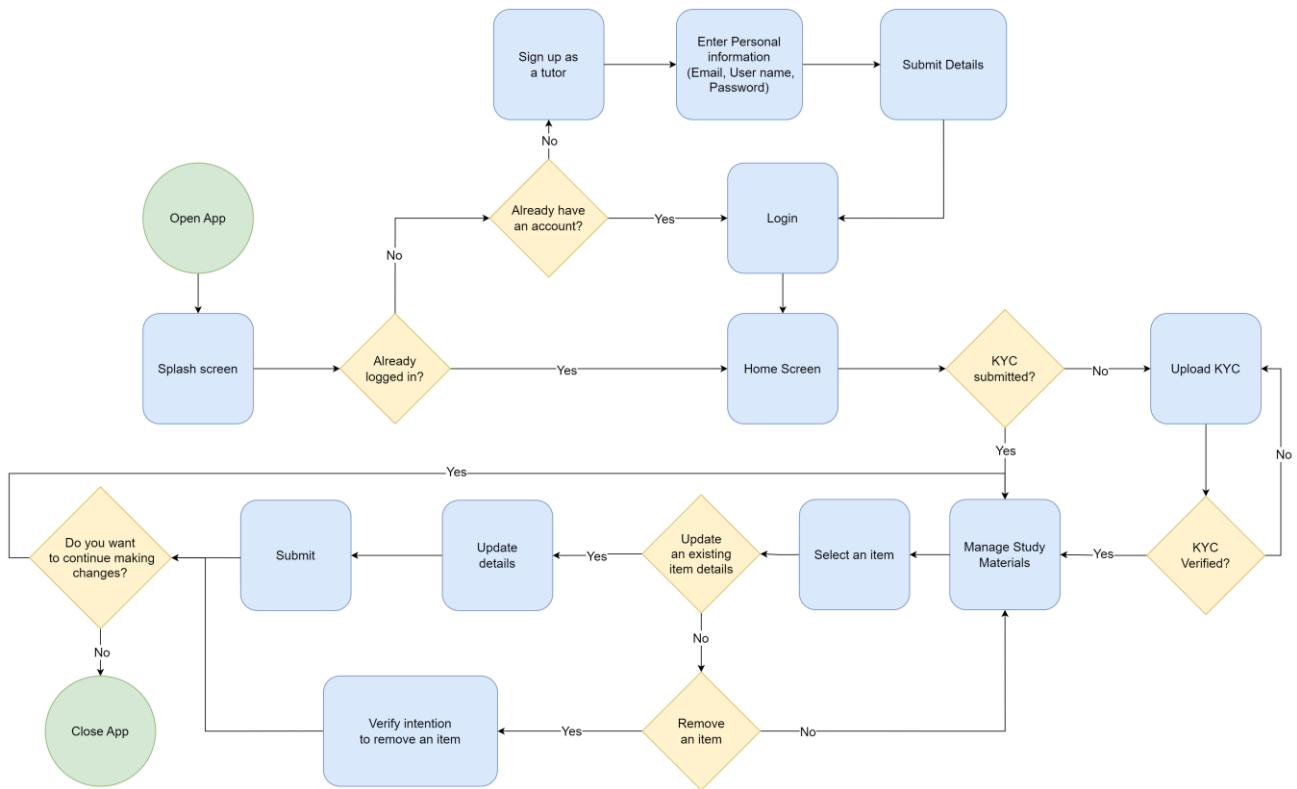


Modified User Flow (Fail point 03)

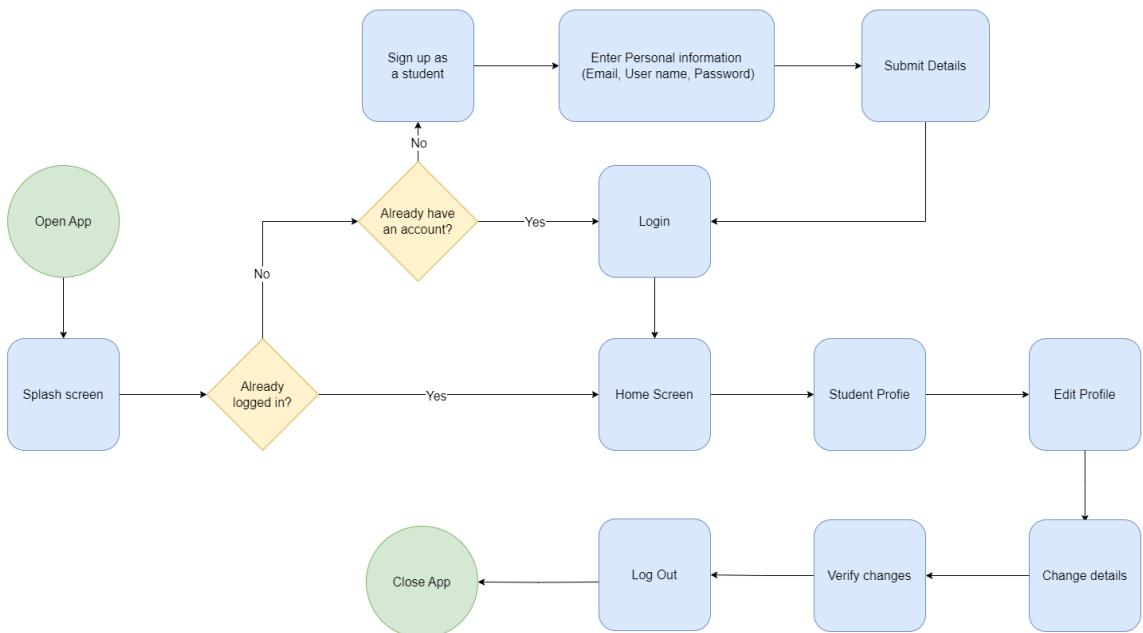


Other User Flows

Tutor → Update study materials



Student → Update profile



Fail Points

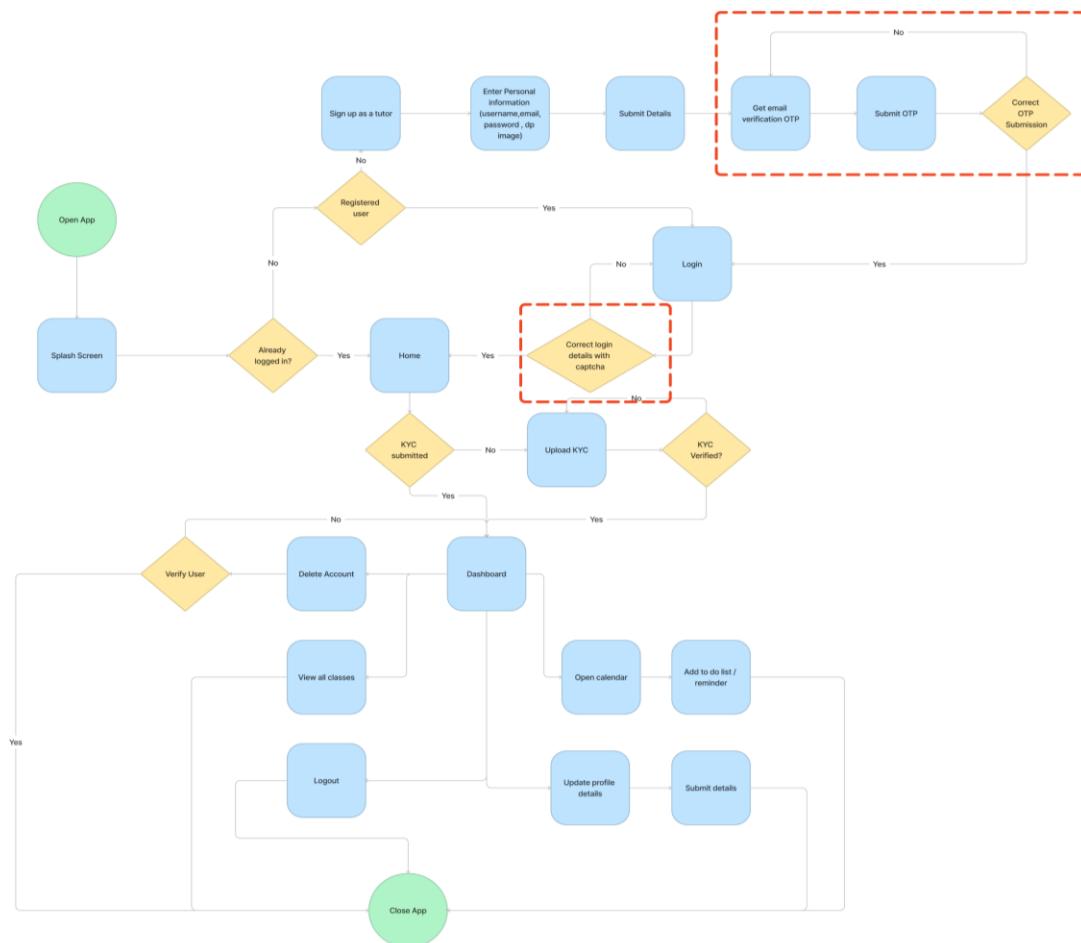
4. Tutors asked to make the registration process shorter.

- Change the user flow by, removing the path where user needs enter OTP, to register to the app.

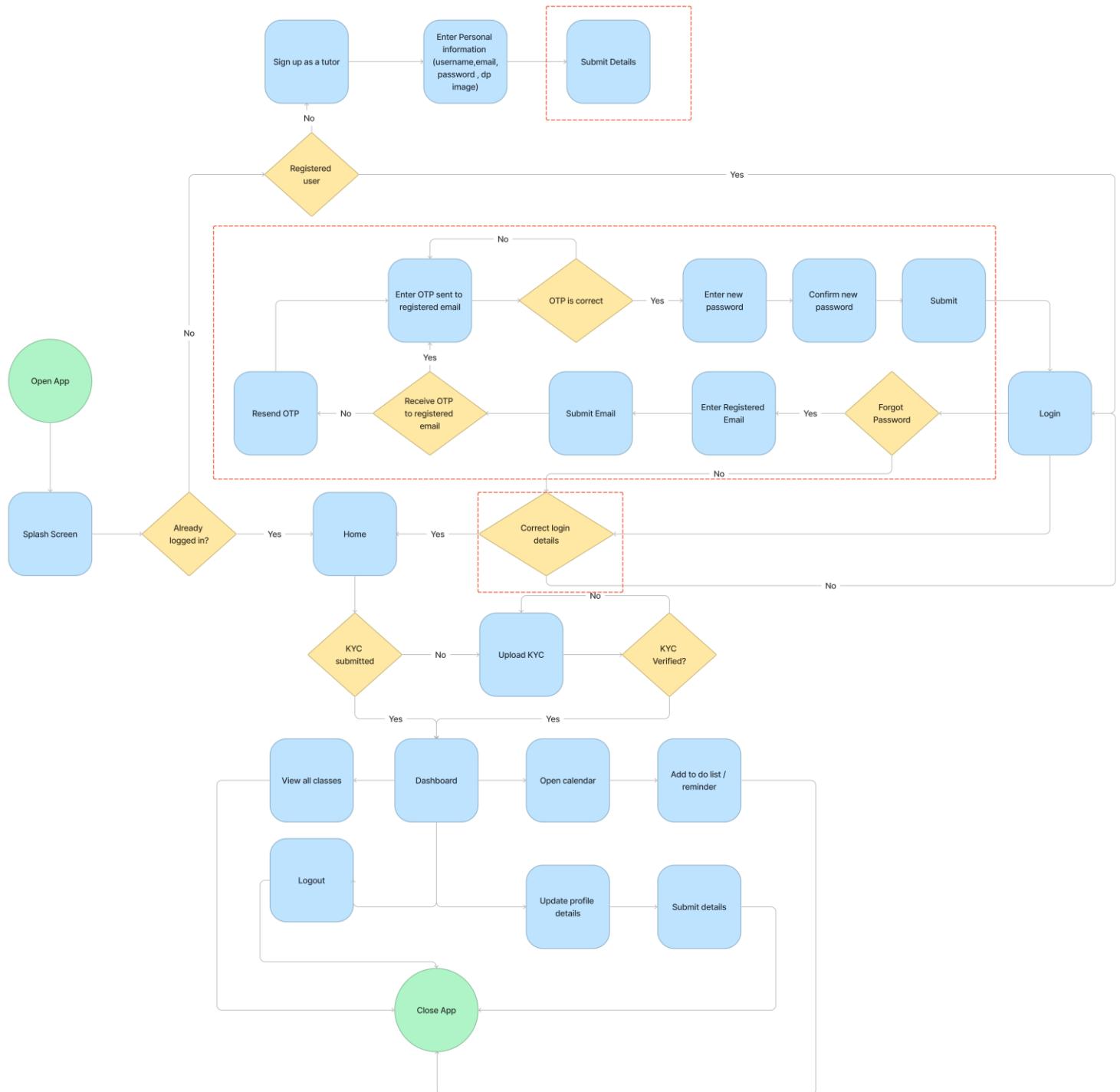
5. Tutors asked to make the login process shorter.

- Change the user flow by, removing the path where user needs to fill a captcha, to log into the app.

Previous User Flow – Tutor

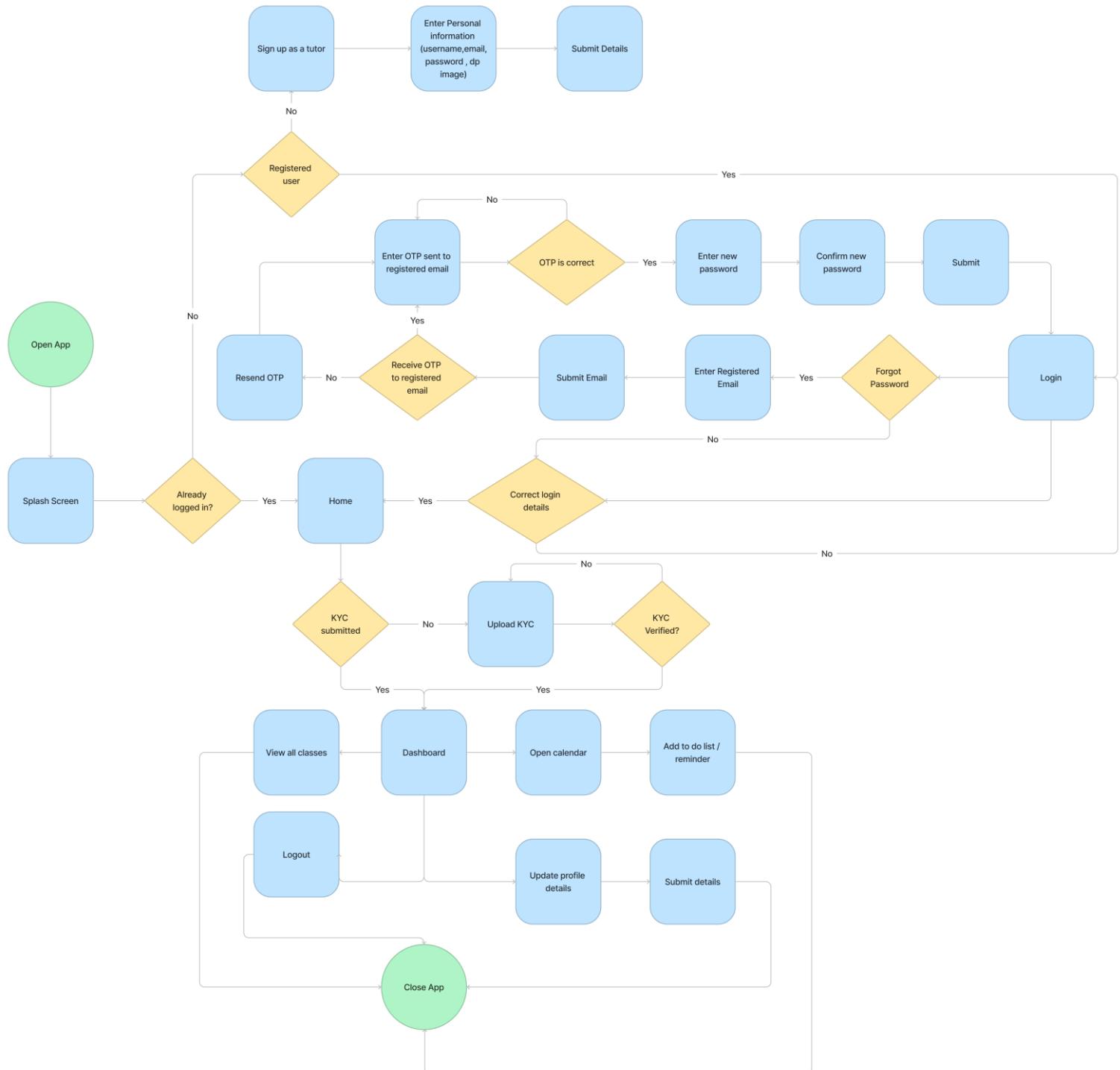


Modified User Flow – Tutor (Fail points 04 & 05)



Other User Flows

Tutor → Manage tutor (With reset password feature)



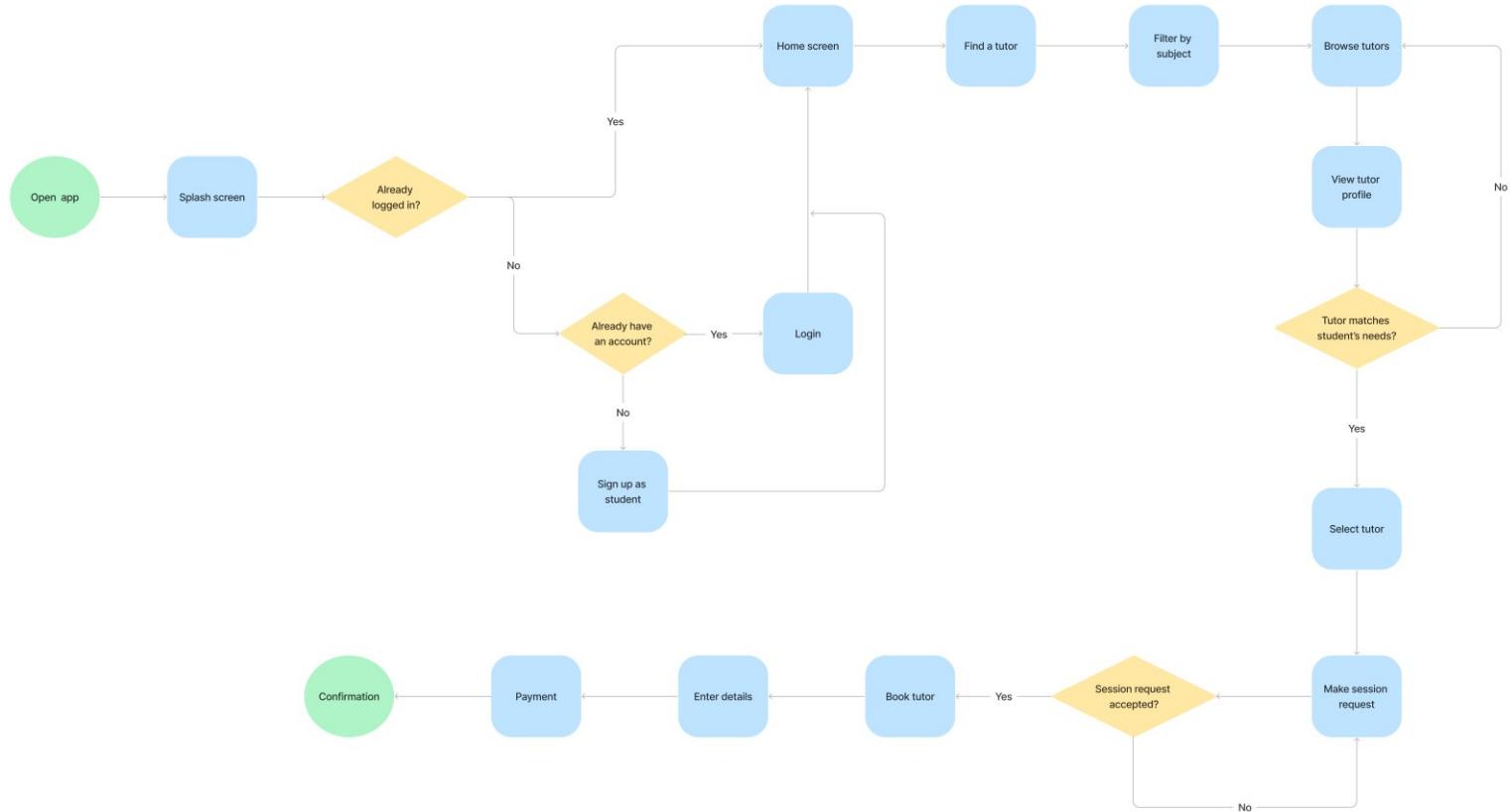
Fail Points

6. Students asked for a feature that allows them to view the reasons for rejection.
 - Change the user flow by, adding the path where user can view reason for rejection.

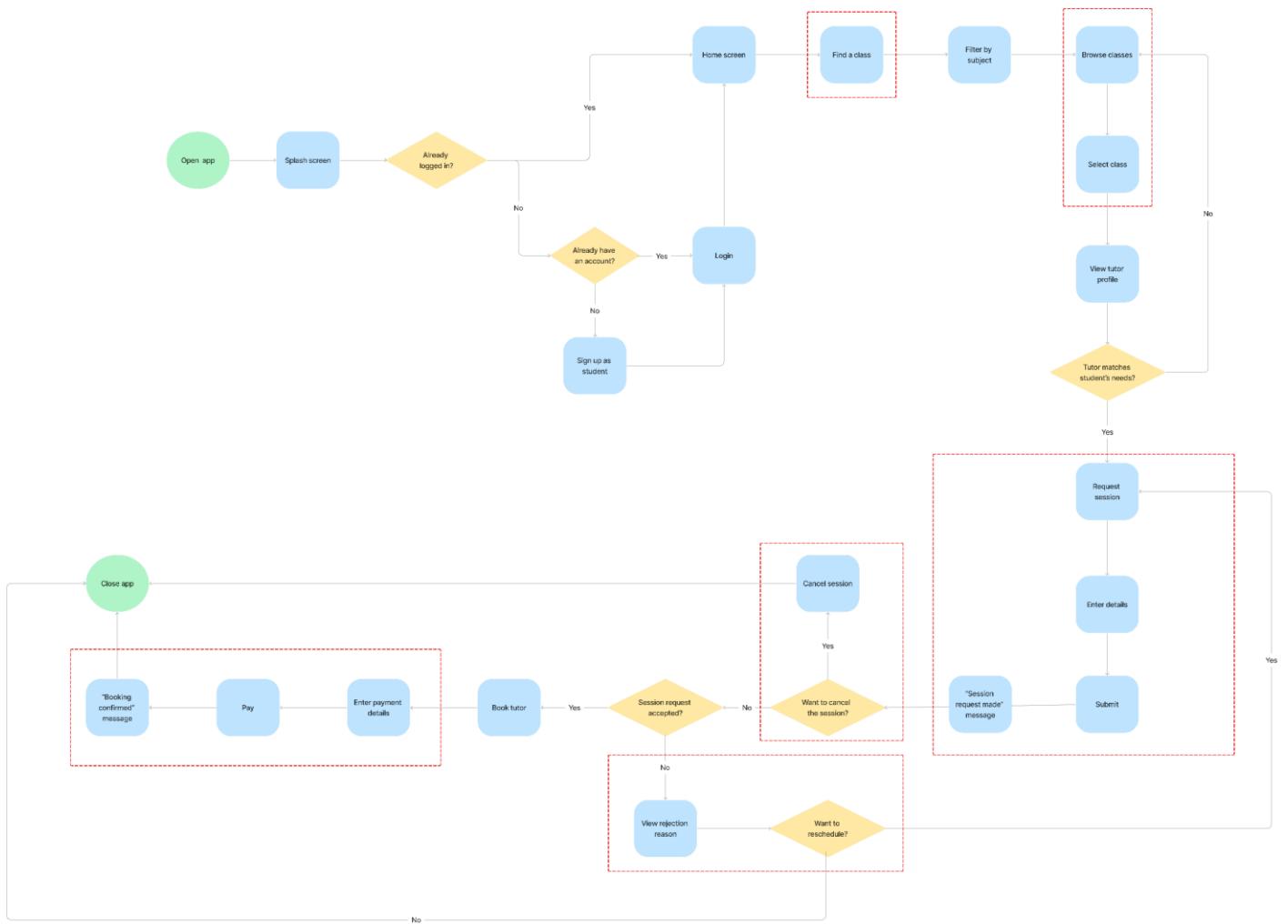
7. Student asked for a feature that allows them to enter additional details when requesting the session.
 - Change the user flow by, adding the path where user can enter additional details.

8. Student asked for a feature that allows them to cancel session.
 - Created a new user flow where user can cancel sessions.

Previous User Flow – Student

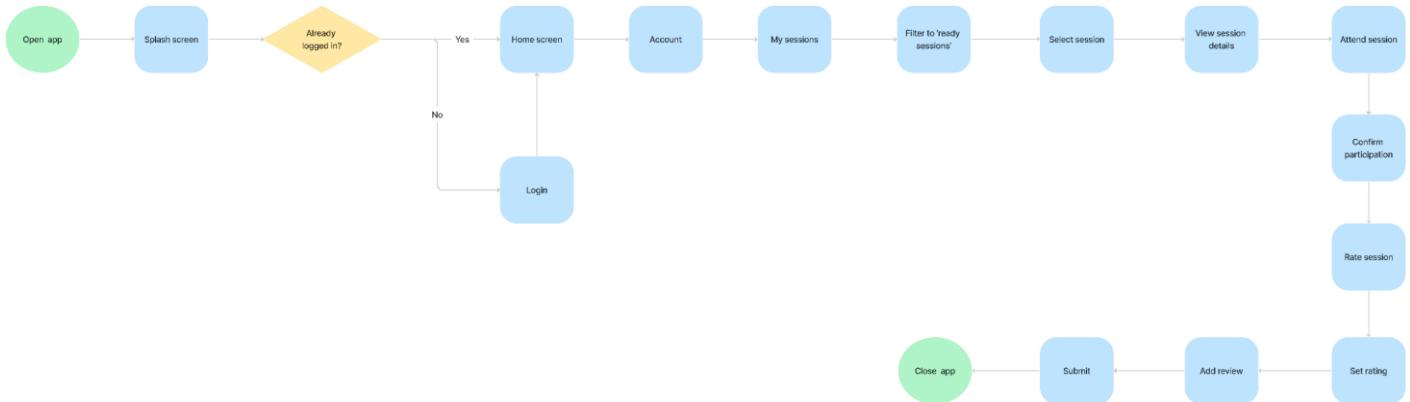


Modified User Flow – Student

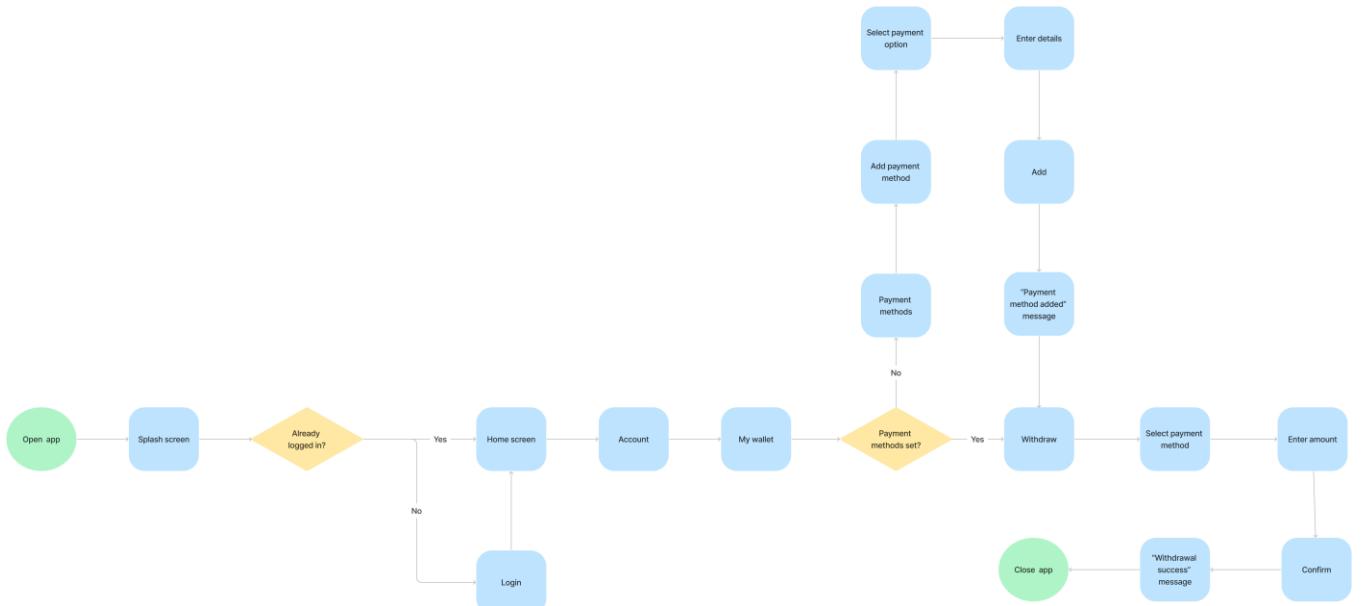


Other User Flows

Student → Rate tutor



Student → Cancel session



Fail Points

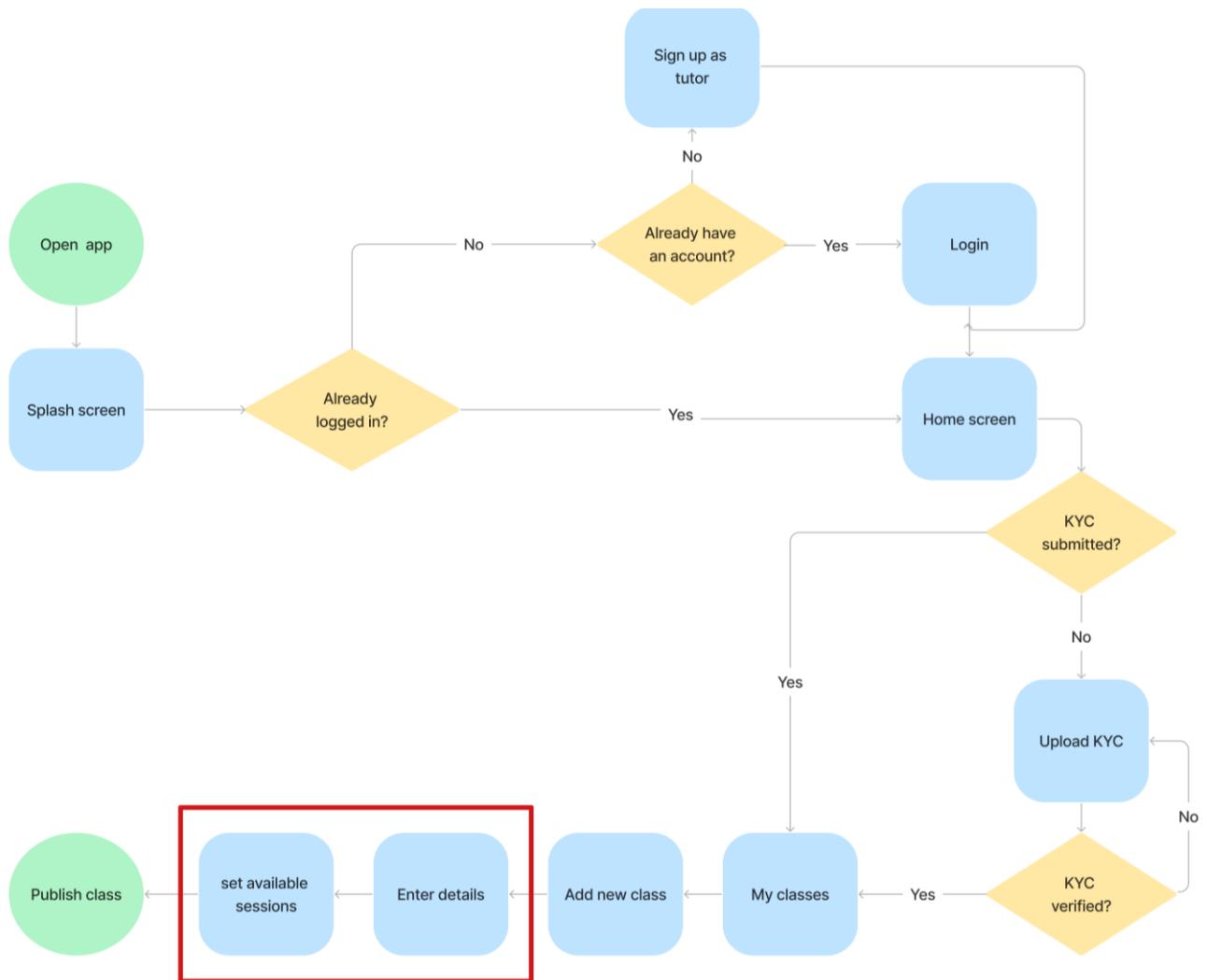
9. Tutors mention in the interview that they want to enter more details when publishing the class.

- Change the user flow by, expanding the *add class details* step.

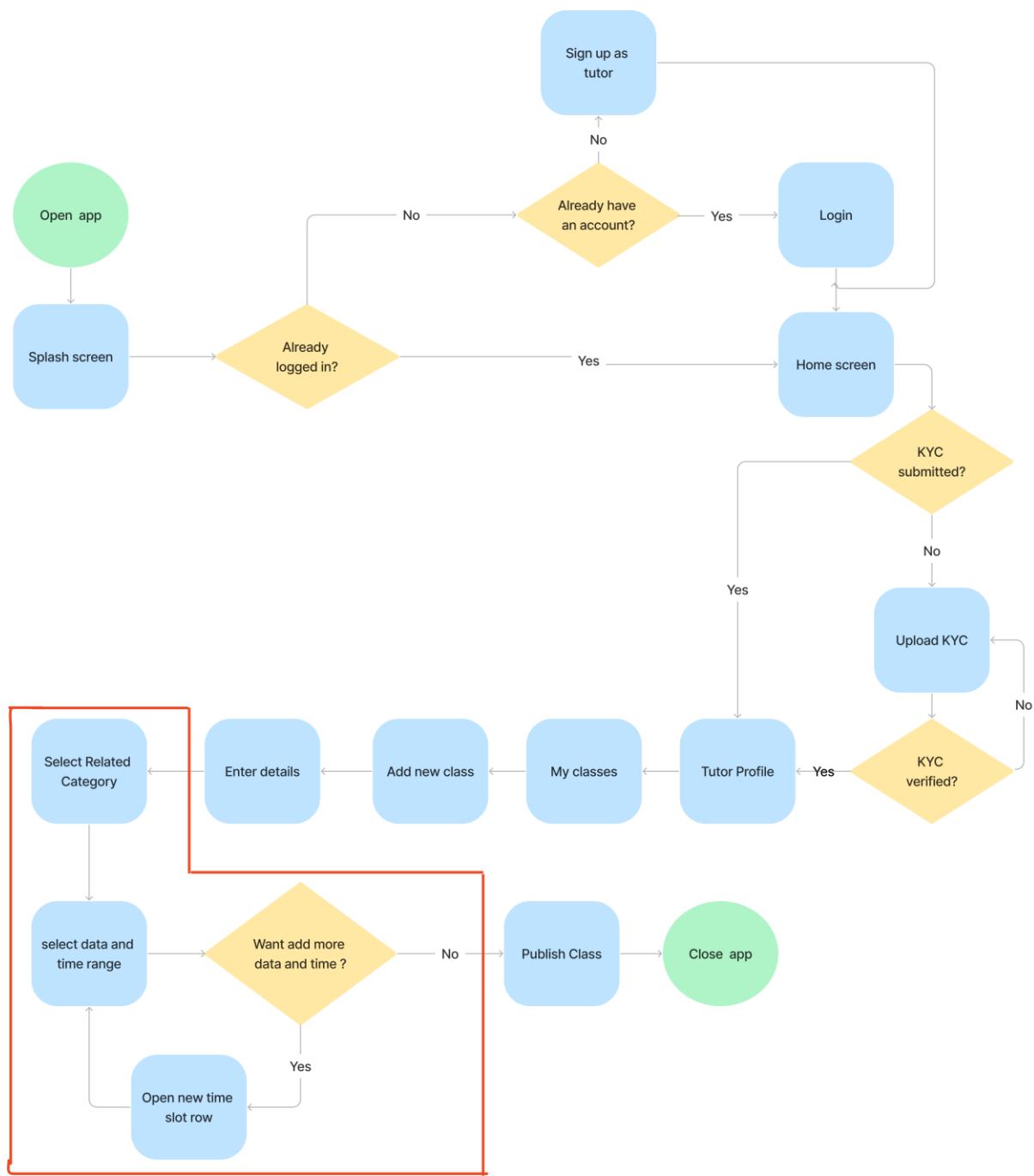
10. Tutors mention in the interview that they want to add multiple time slots for a class.

- Change the user flow by, expanding the *set sessions* step.

Previous User Flow – Tutor



Modified User Flow – Tutor (Fail point 09 & 10)



Other User Flows

Tutor → Accept or decline session request



7 Competitor Analysis

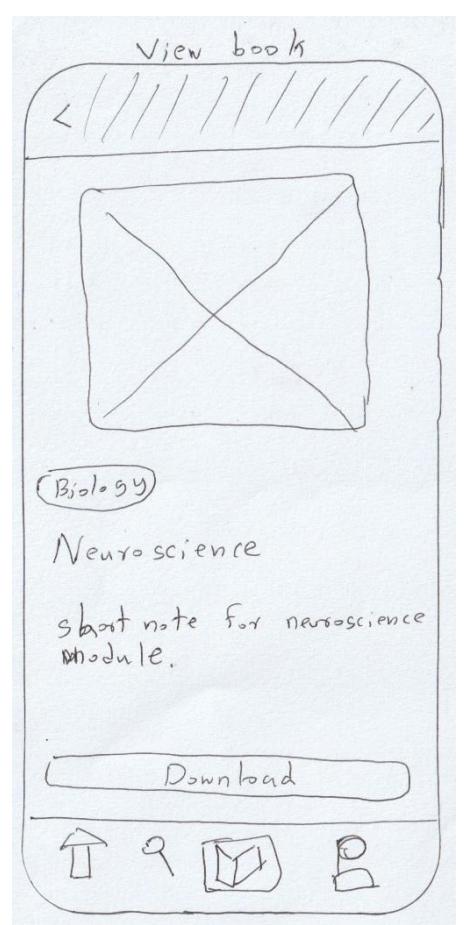
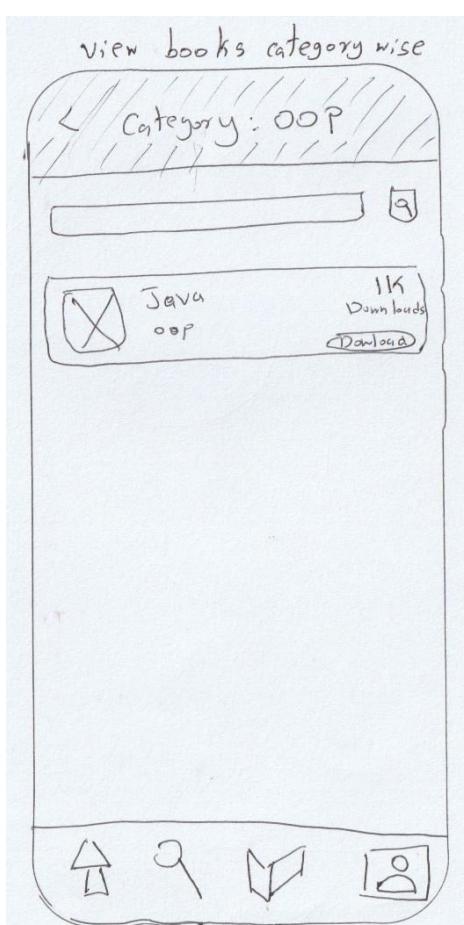
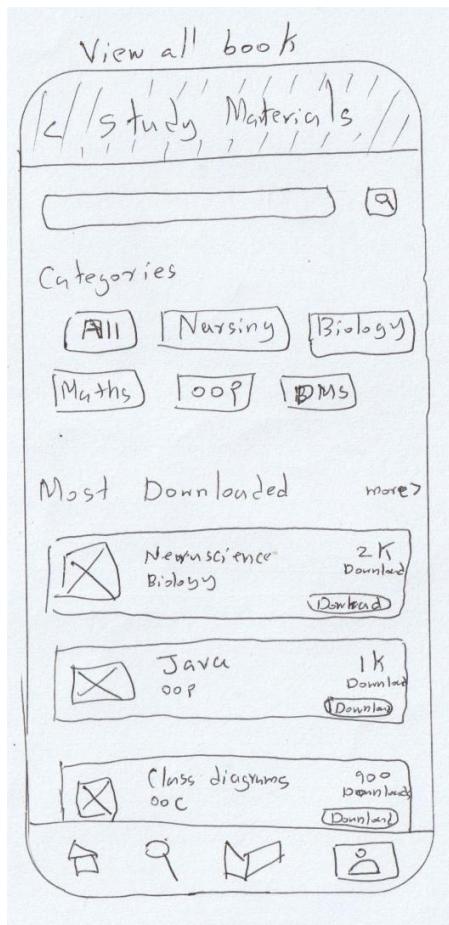
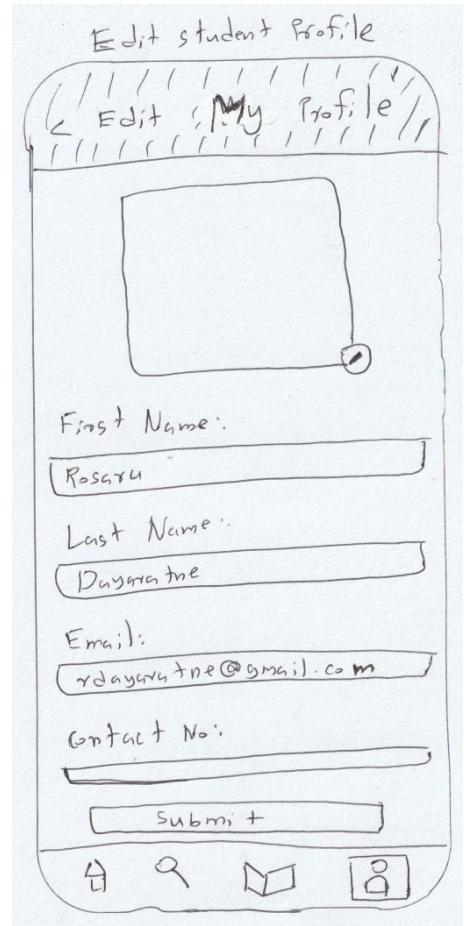
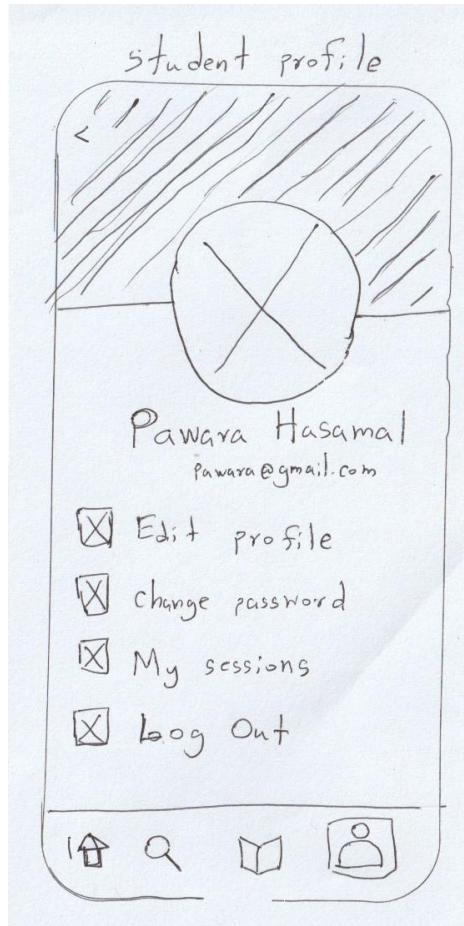
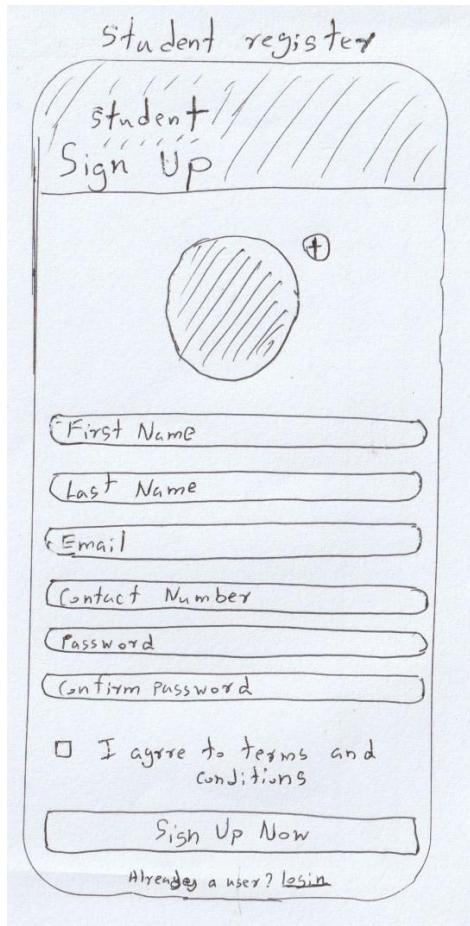
Competitor	Advantages	Disadvantages
MyTutor ¹	<ul style="list-style-type: none"> • Large user base • Name recognition 	<ul style="list-style-type: none"> • Mainly focus on O/L and A/L exams • No Mobile Application • No Online Payment feature
Siplo ²	<ul style="list-style-type: none"> • Mobile payment • Parental monitoring 	<ul style="list-style-type: none"> • Mainly focus on O/L and A/L exams • No Mobile Application • Currently inactive
OnlineTuition.lk ³	<ul style="list-style-type: none"> • Large user base 	<ul style="list-style-type: none"> • Mainly focus on O/L and A/L exams • No Mobile Application

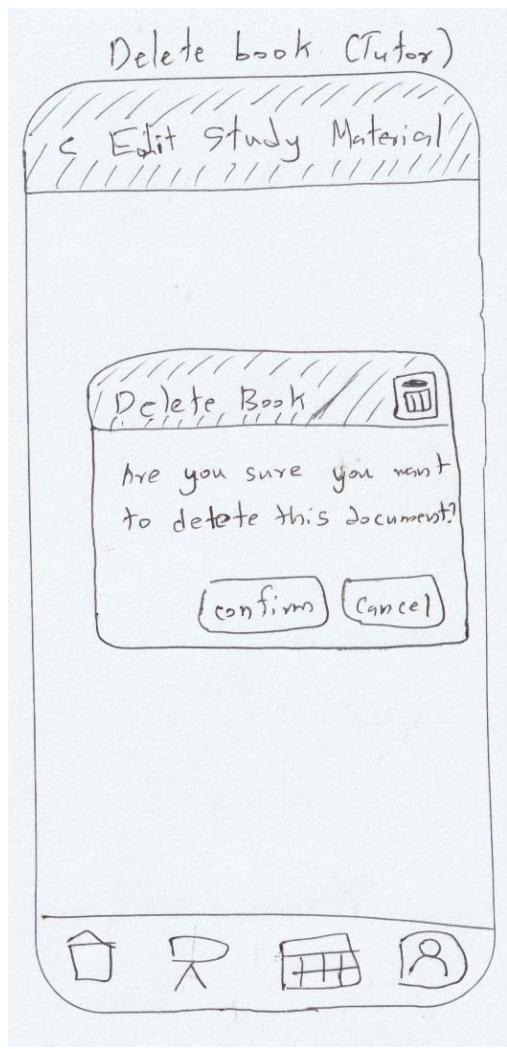
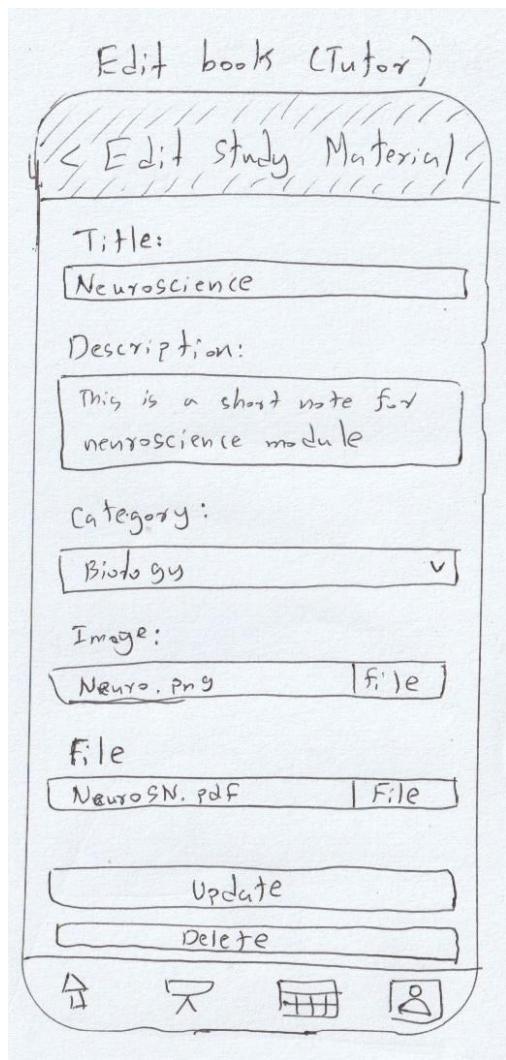
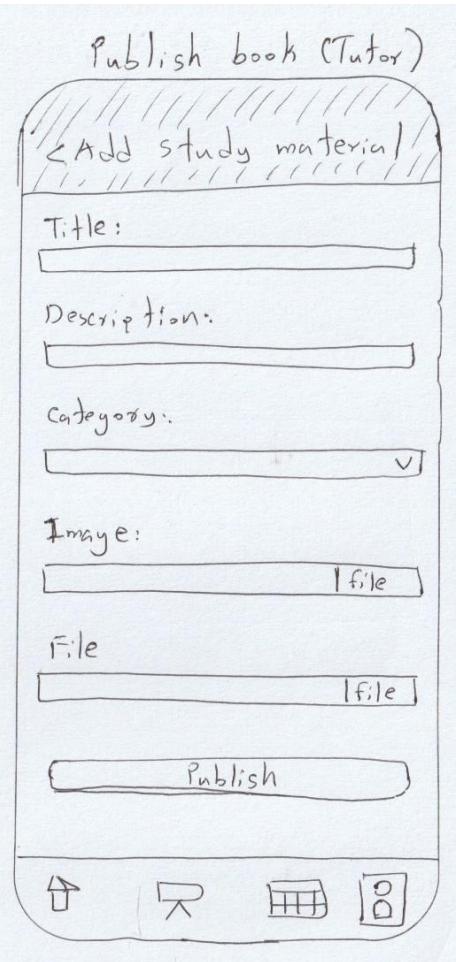
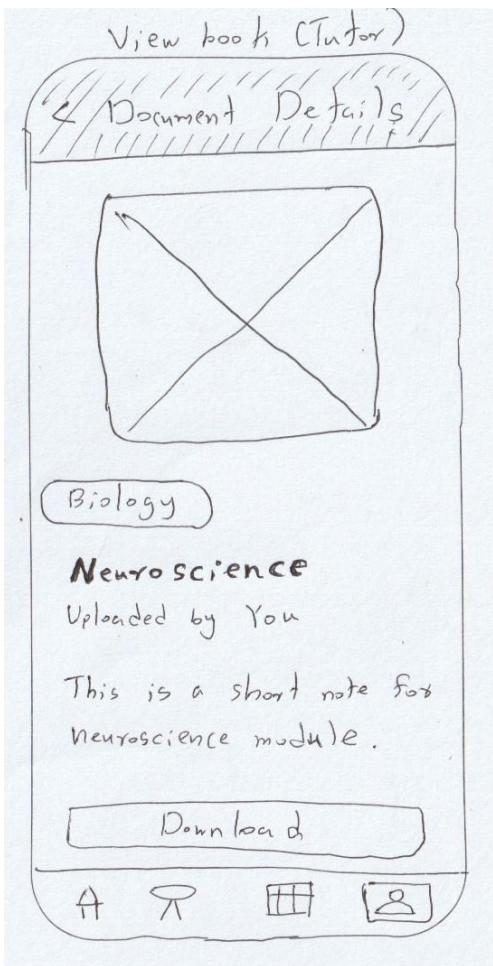
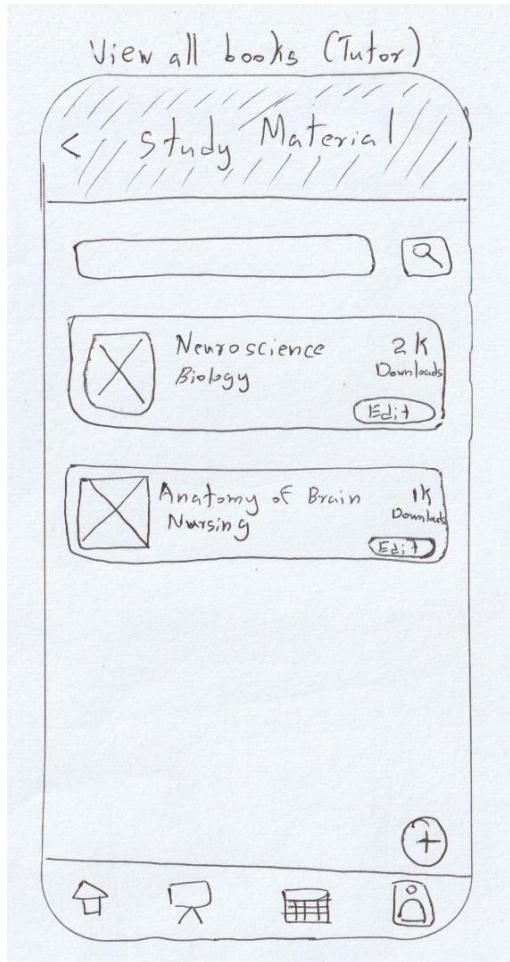
TABLE 5. Competitor Analysis

8 Milestone 4: Sketching & Wireframes

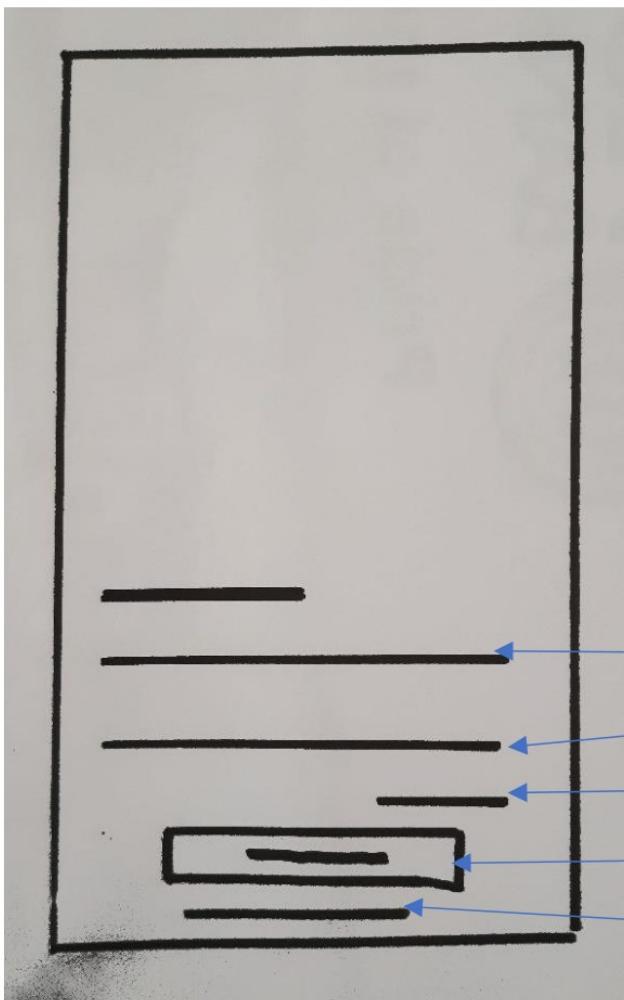
8.1 Sketches

8.1.1. IT21118340





8.1.2. IT21291364



Login Page

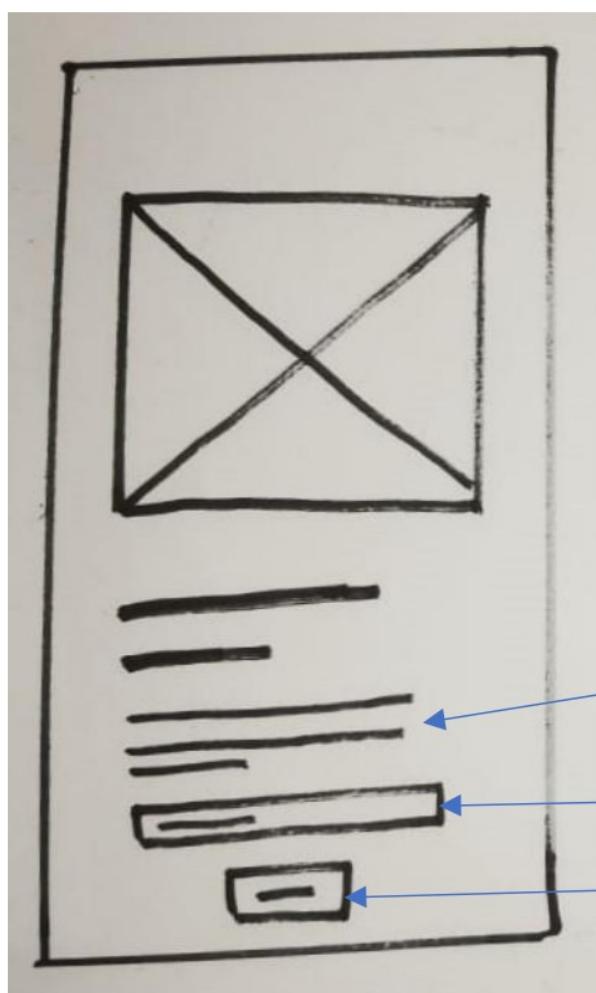
Enter User name

Enter Password

Forgot password (Hyperlink)

Login (Button)

Register (Button)

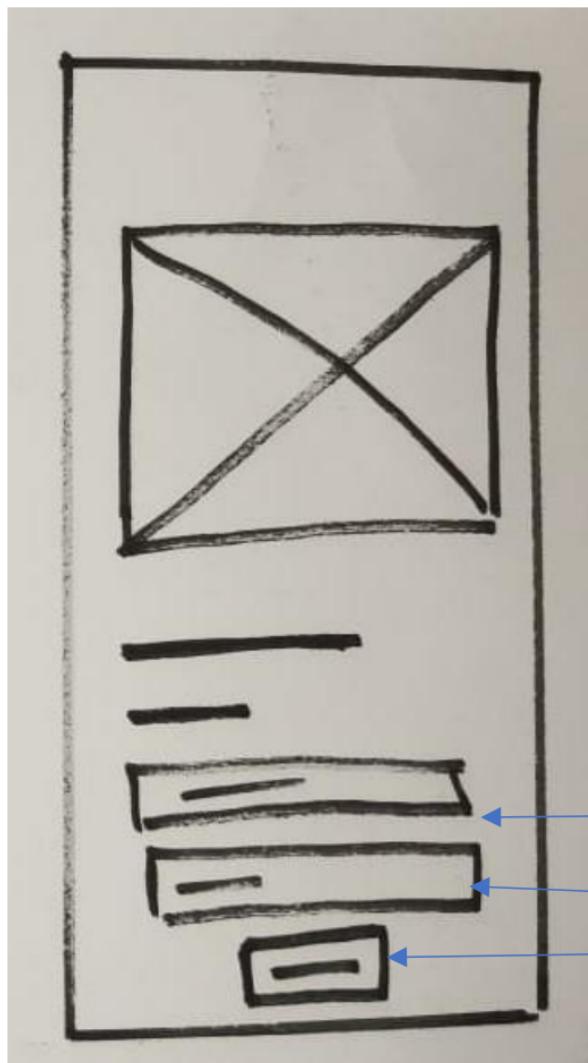


Forgot Password

Description about forgot password.

Enter registered email address

Submit (Button)

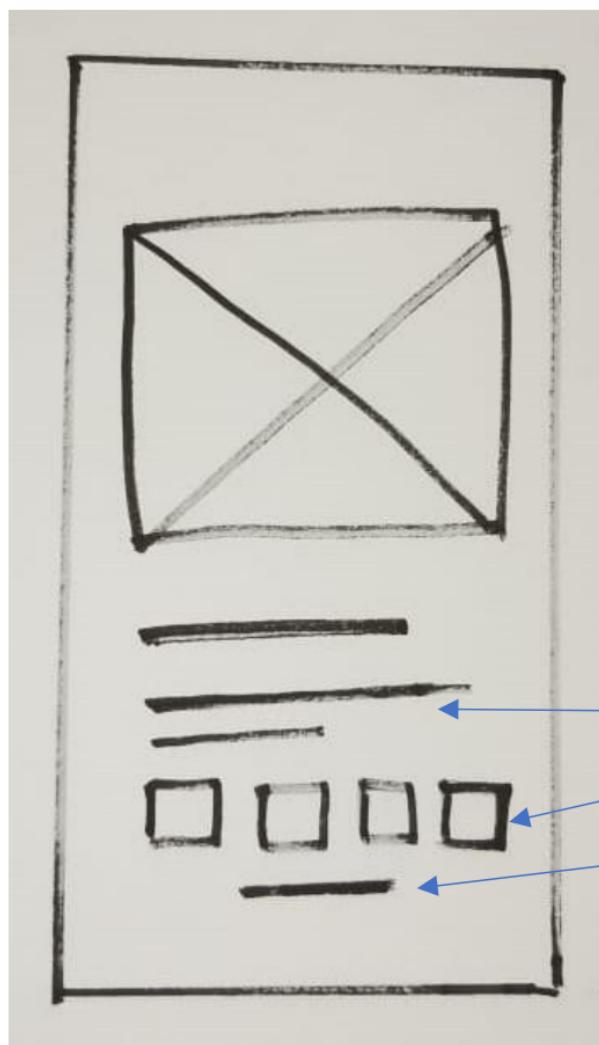


Reset Password (Forgot Password)

Enter User name

Enter Password

Submit (Button)

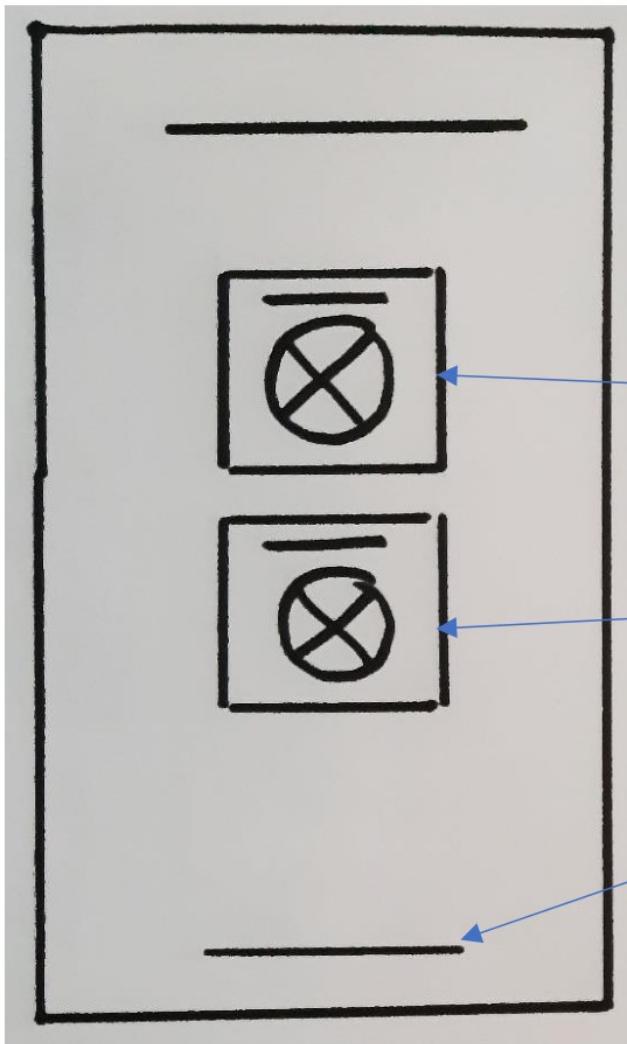


Enter OTP (Forgot Password)

Details with registered mobile number

OTP entering blanks.

Resend OTP(Hyperlink)



Sign up Options

Sign up as a student

Sign up as a tutor

Login (Hyperlink)

A screenshot of a mobile application interface titled "Tutor Sign Up". The screen shows a profile image placeholder with a crossed-out icon, followed by several input fields represented by horizontal lines. To the right of the input fields, three curly braces group them into categories: "Add personal details" groups the first six lines; "Add academic details" groups the next four lines; and "Submit (Button)" points to a rectangular button at the bottom.

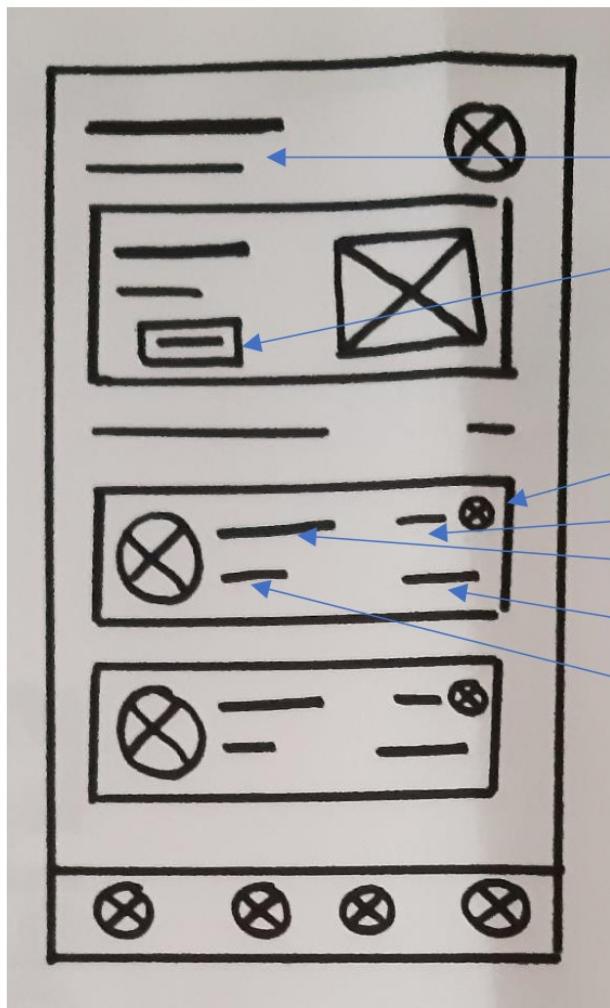
Tutor Sign Up

Add profile image

Add personal details

Add academic details

Submit (Button)



Home Page(Student View)

User name

Explore Details of tutors(Button)

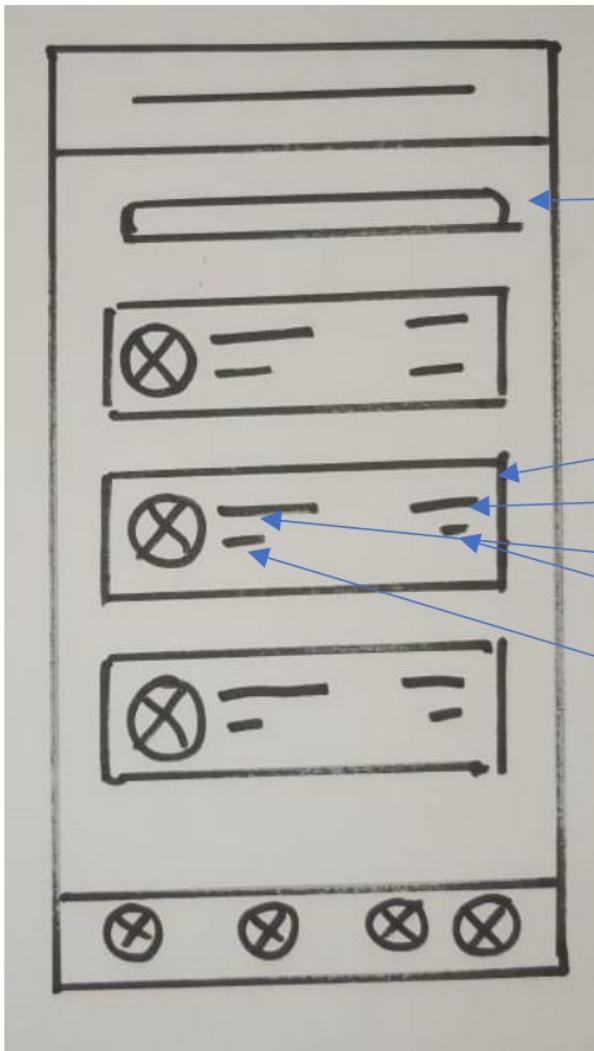
Tutor Component

Level

Name

Rating

Subjects



Tutor List

Search button

Tutor Component

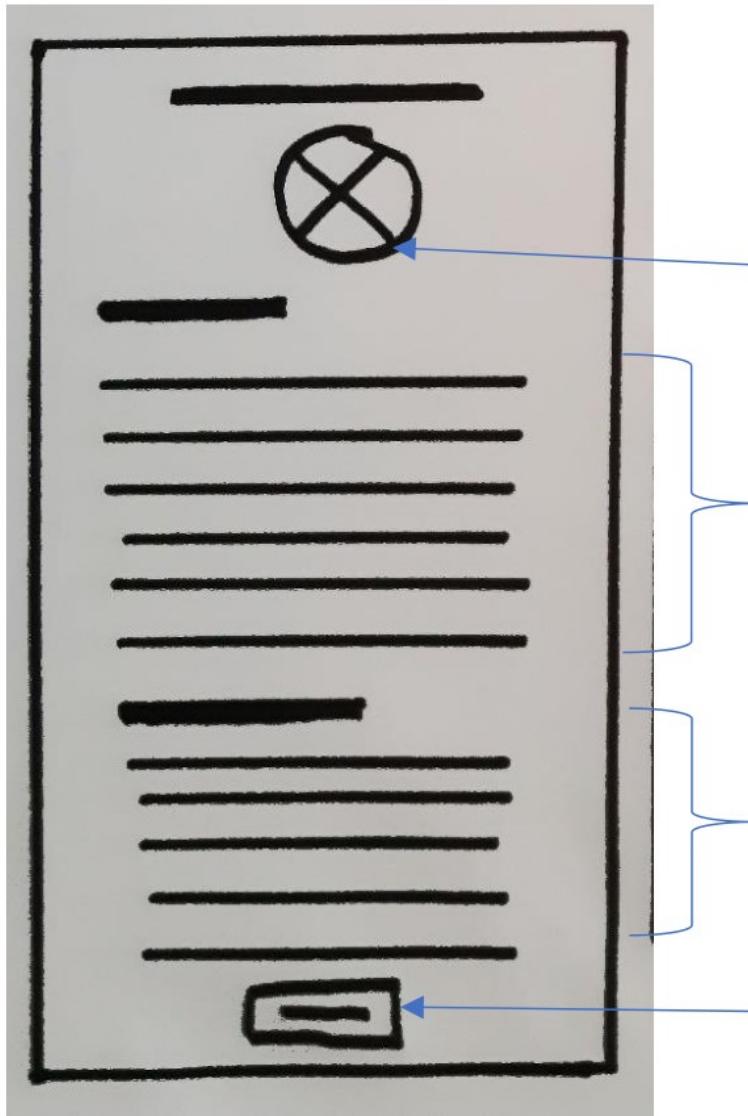
Level

Name

Rating

Subjects

Tutor Edit Profile



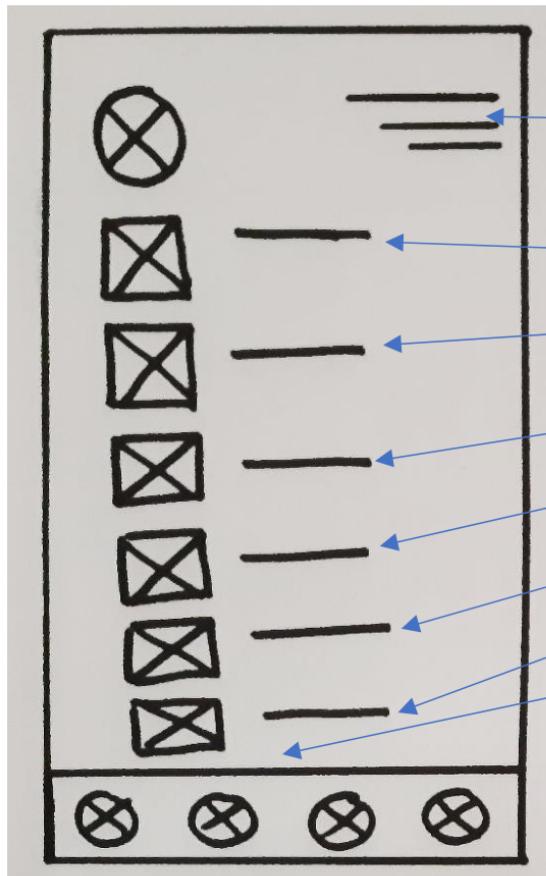
Edit profile image

Personal details edit

Academic details edit

Submit (Button)

Tutor Profile



Tutor Details (Name / Faculty/Academic Year)

Edit Profile

Change password

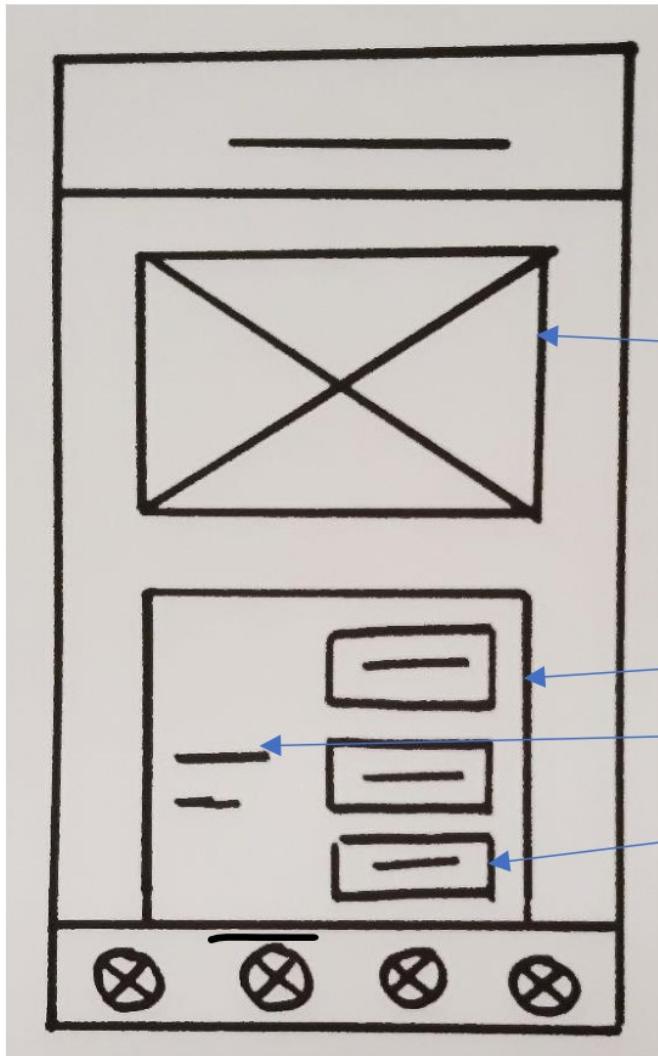
My classes

My calendar

Publish study materials

My wallet

Logout (Hyperlink)



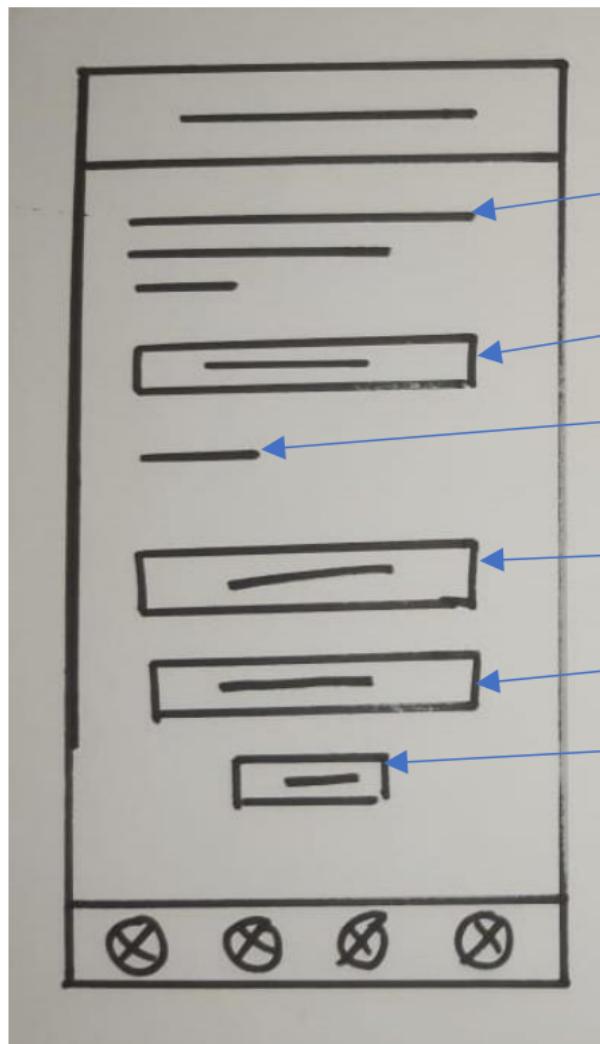
Tutor's Calendar

Calendar with dates

Selected date component

Date

Schedule component with details



Change Password

Description about change password

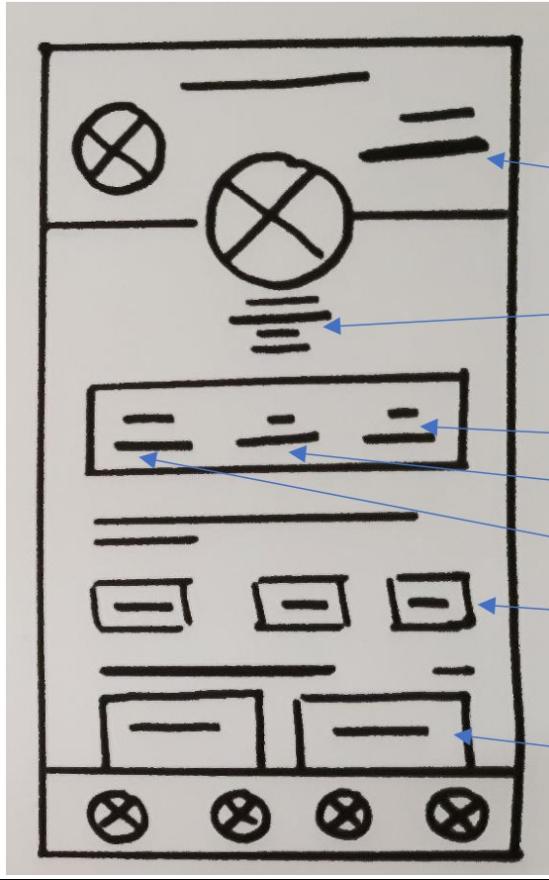
Enter Current password

Forget Password hyperlink

Enter New Password

Confirm Password

Submit Password (Button)



Tutor Information

Module name

Tutor details (Rank/ name / faculty / academic year)

Rating

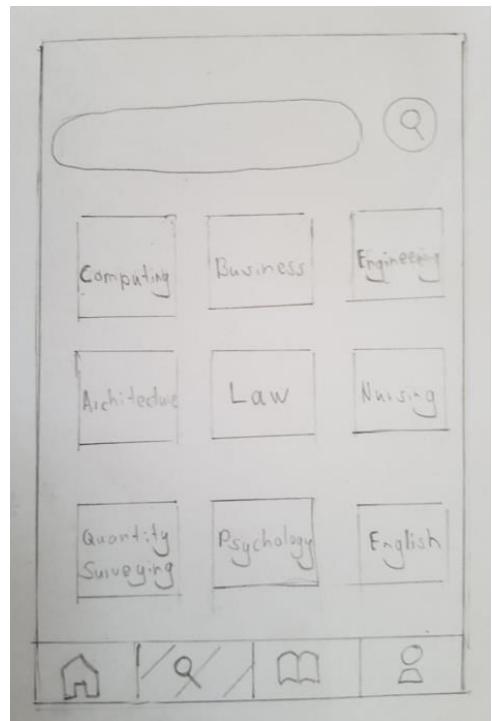
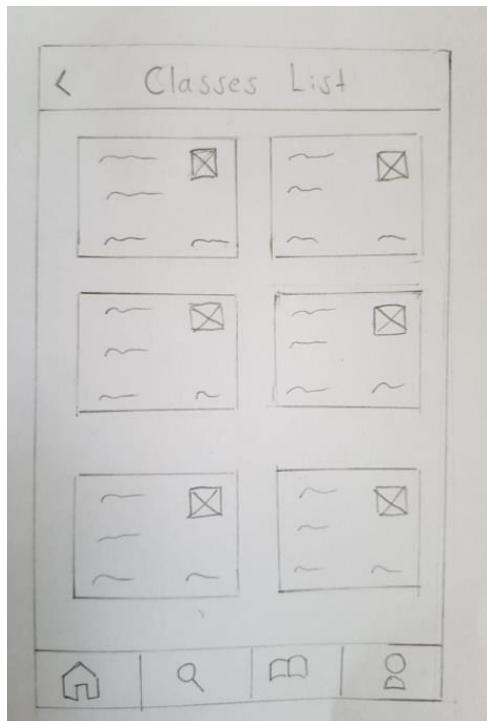
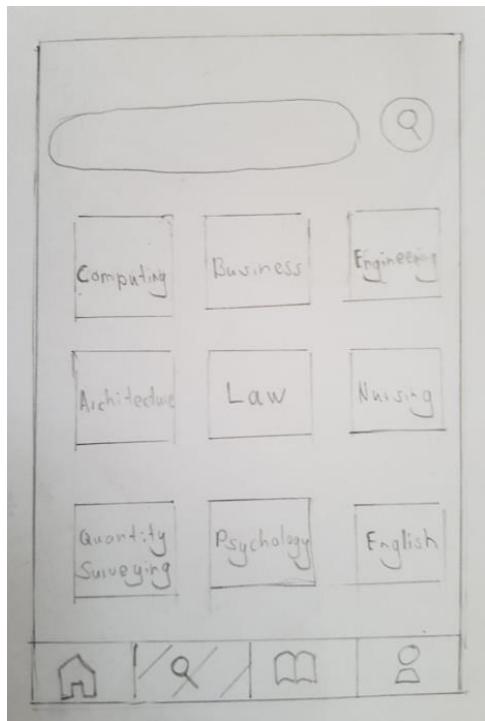
Classes

Completed sessions

Modules names

Popular classes component

8.1.3. IT21267772



Requesting Session screen wireframe for Object Oriented Programming:

Object Oriented Programming
(Price per session: Rs.1000)

Date:

Time slot: v

Reason: v

No. of students: Model: v

Submit

Request Session screen wireframe:

Your tutor will review your request. Please wait for confirmation.

OK

My Sessions screen wireframe:

Pending Accepted Ready

All

pending cancel

accepted Pay

ready View

< Session

Object Oriented Programming

Date: ~

Time slot: ~

Charges: ~

Pay

< Payment

Card number

Expiry

CVC

Pay

< My Wallet

Balance

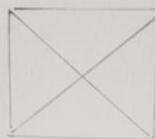
Withdraw

Payment Methods

Transactions

All

< Withdraw



Payment Method

Amount

Withdraw

< Payment Methods



Bank of Ceylon
0002327567



Sampath Bank
003990000011



< Add Payment Method

Bank

Name

Bank name

Account number

Branch name

Branch code

Add

< Payment Method Details



Name: ~

Bank name: ~

Account number: ~

Branch name: ~

Branch code: ~



< Edit Payment Method

Bank

Name

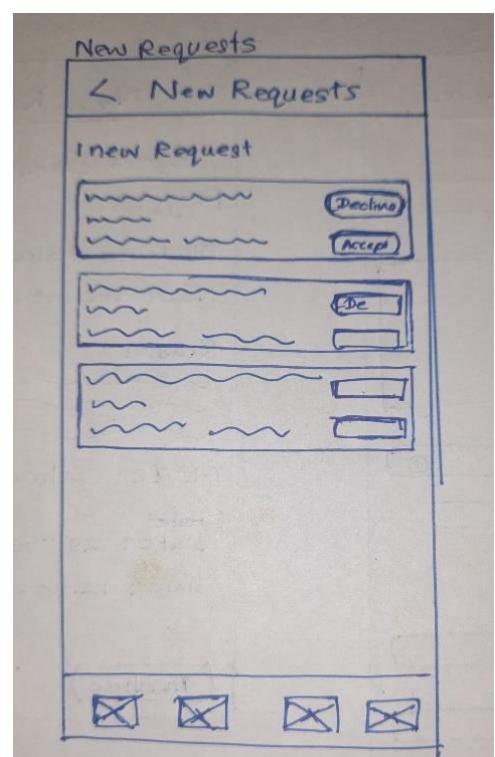
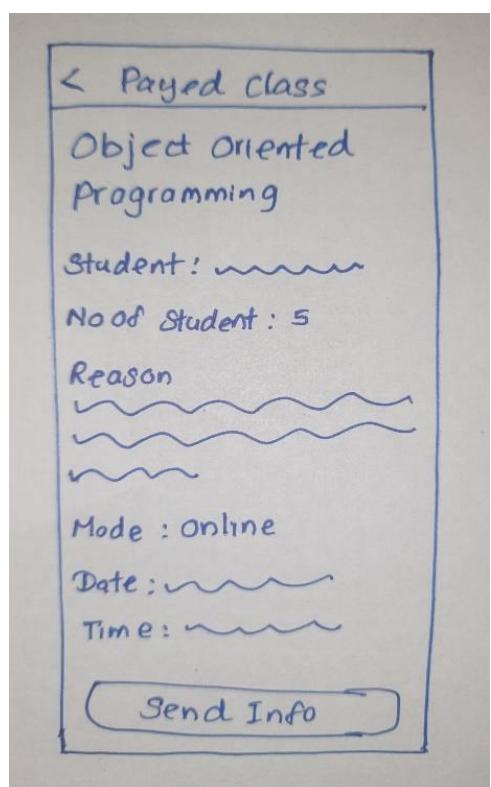
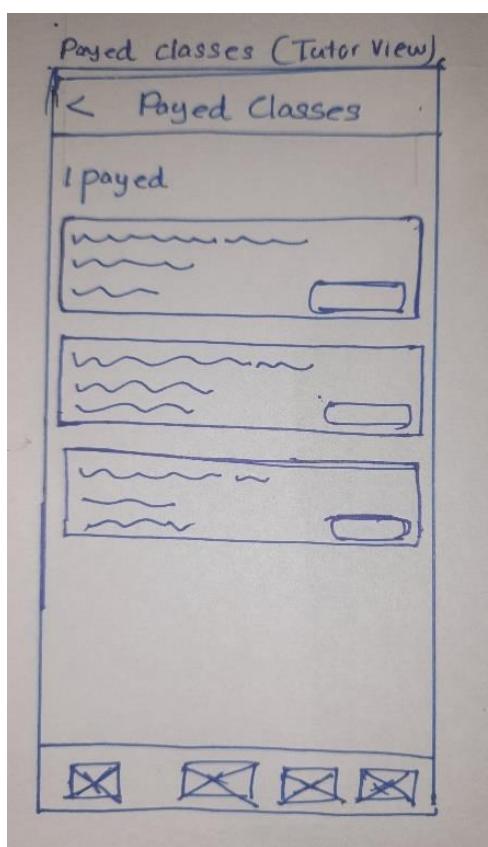
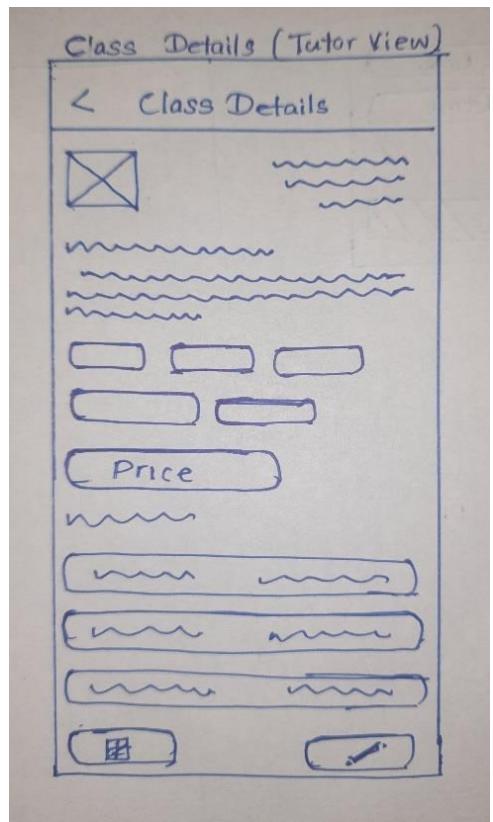
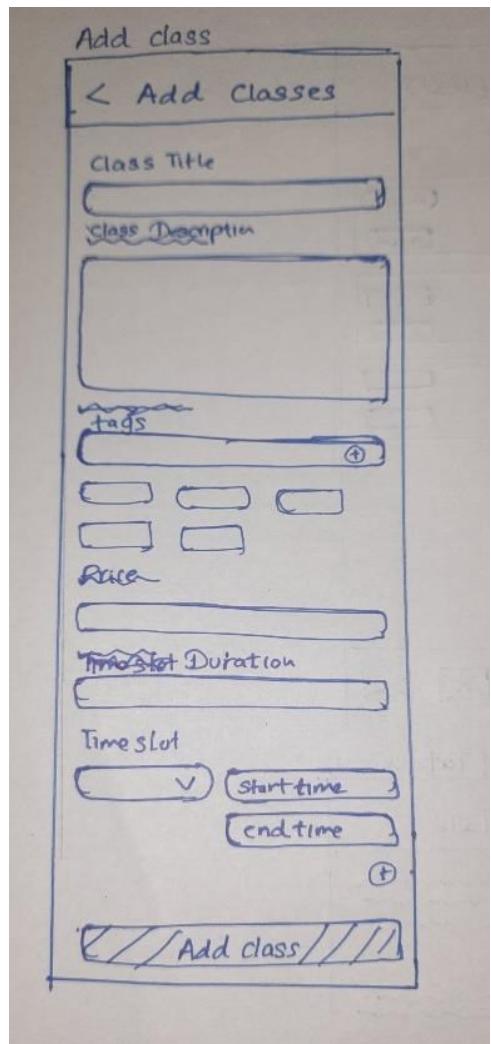
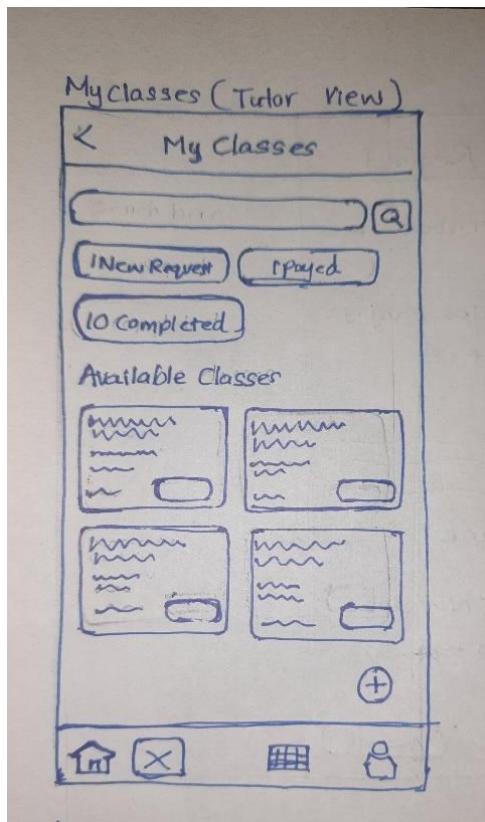
Bank name

Account number

Branch name

Branch code

Update



< New Request

Object Oriented Project

Student : Kalpa Sanjoya

No of student : 5

Reason

Mode : Online

Date : 28th Nov 2023

Time : 12.30 - 14.30

Decline Popup

< New Request

Wavy lines

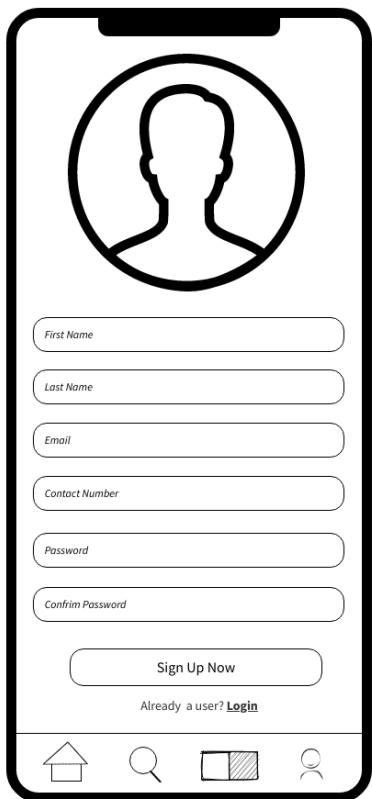
Reason

8.2 Wireframes

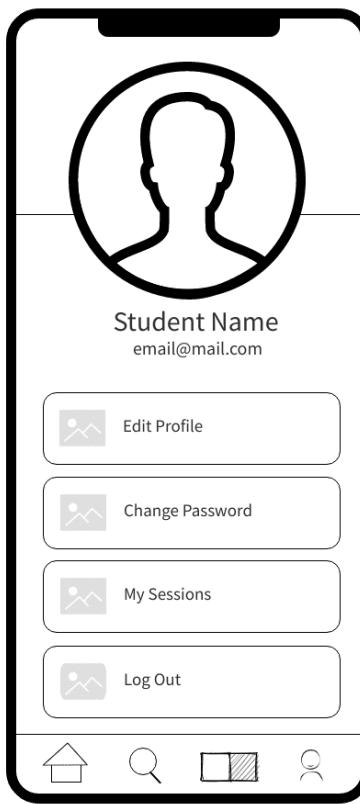
8.2.1. IT21118340

- Student Profile (Register, View profile, Edit profile)

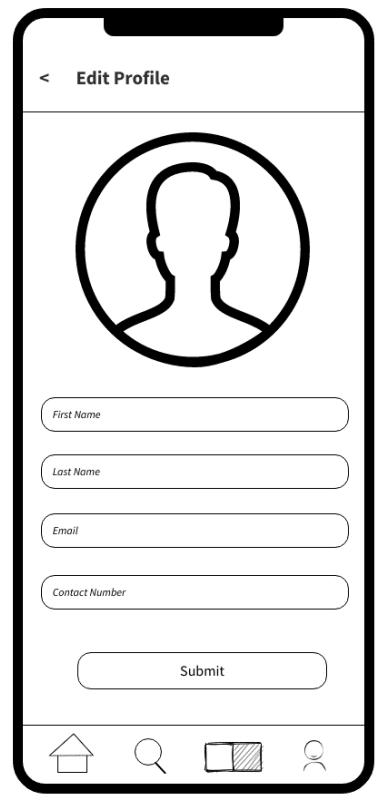
- Register



- View profile

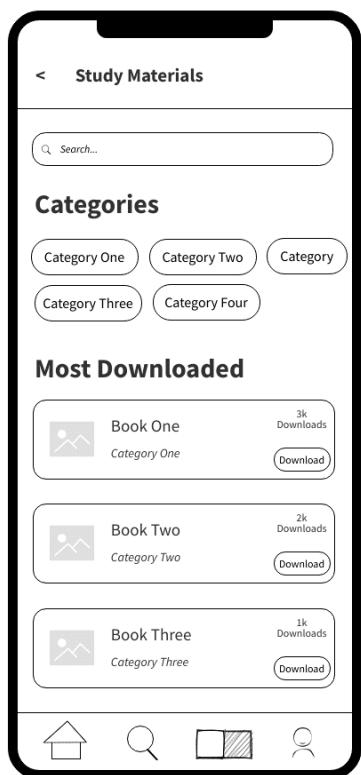


- Edit profile

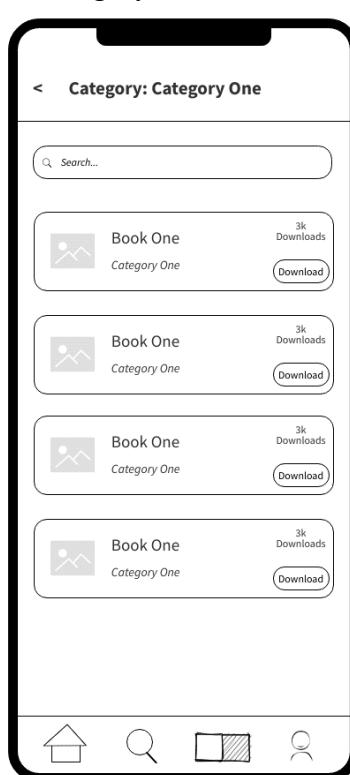


- Student view of study materials

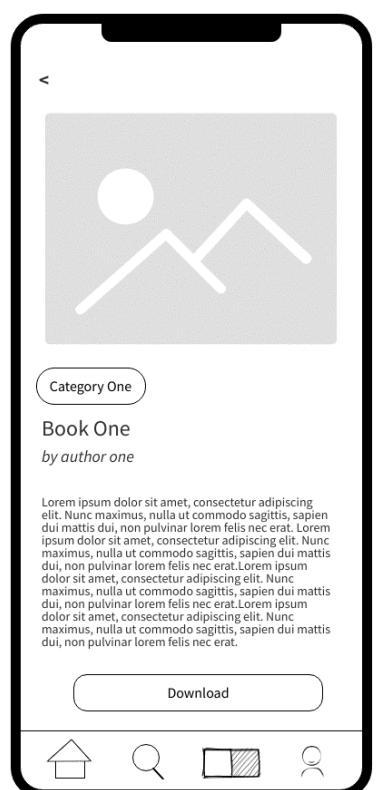
- Search



- Category

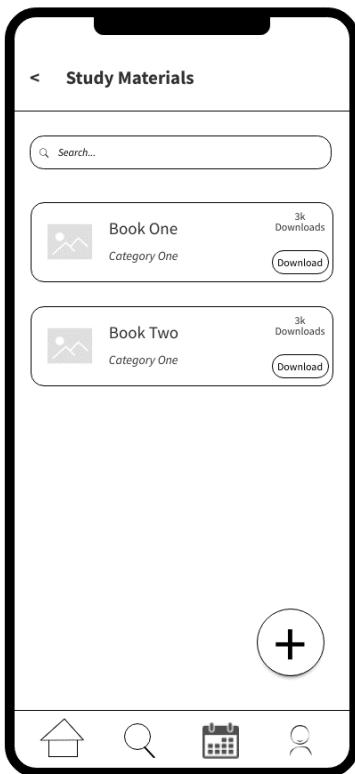


- View & Download

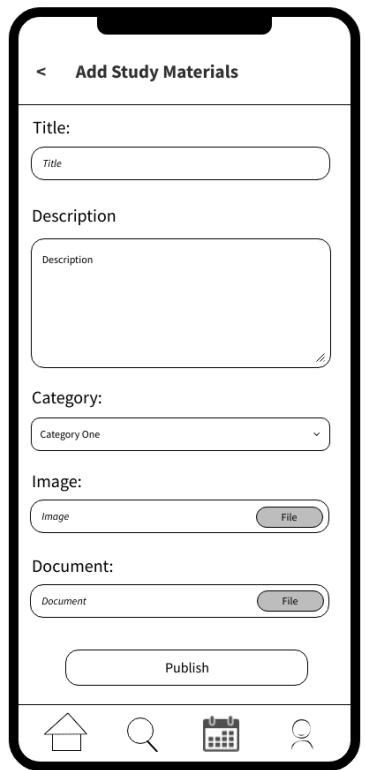


Tutor view of study materials

- View all study materials



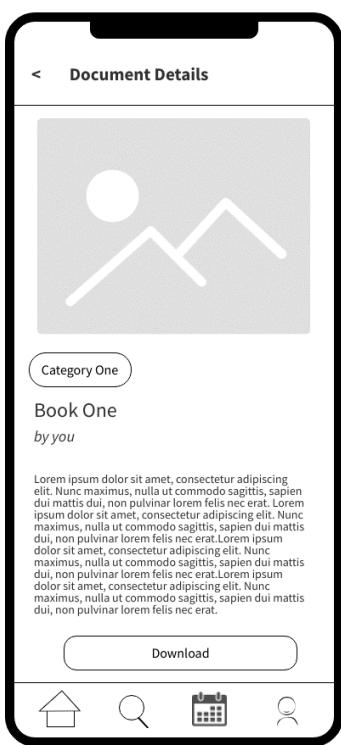
- Add study material



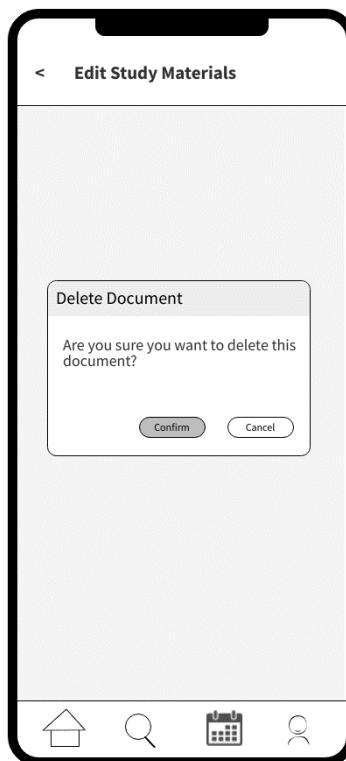
- Edit study material



- View & Download study materials



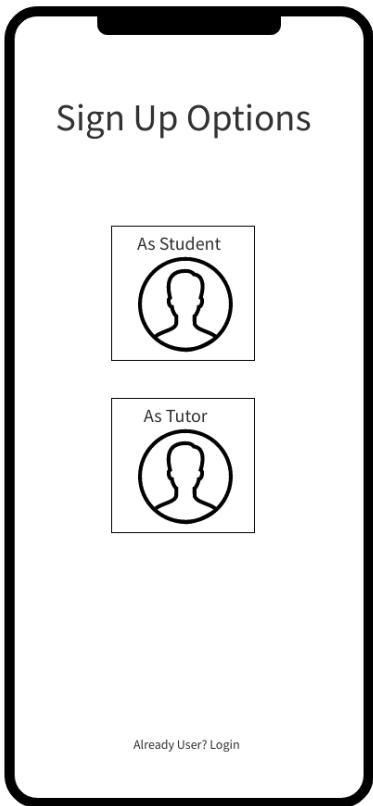
- Delete study material



8.2.2. IT21291364

- Tutor Login, sign up and Forgot password

- Sign Up Options



- Tutor Sign Up

The screen is titled 'Tutor Sign Up'. It features a circular profile icon at the top. Below it are sections for 'Personal Information' and 'Academic Information', each containing several input fields. The 'Personal Information' section includes fields for First Name, Last Name, Email, Contact Number, Gender, Birthday, and Address. The 'Academic Information' section includes fields for Student ID, Academic Year, and Faculty.

- Login

The screen is titled 'Login'. It has fields for 'User name' and 'Password'. Below these is a 'Forgot Password?' link. At the bottom is a 'Login Now' button and a 'New User? Signup' link.

- Forgot Password

The screen features a background image of a sun and mountains. It is titled 'Forgot Password?'. Below the title is a message: 'Don't worry! it happens. Please enter the email address associated with your account'. There is an 'email' input field and a 'Submit' button.

- Enter OTP

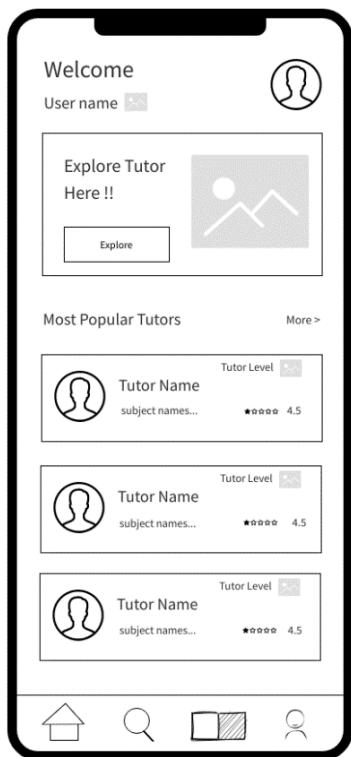
The screen features a background image of a sun and mountains. It is titled 'Enter OTP?'. Below the title is a message: 'As it digit code has been sent to +94 715 632 1257'. There are four empty input fields for the OTP and a 'Resend OTP' button below them.

- Reset Password

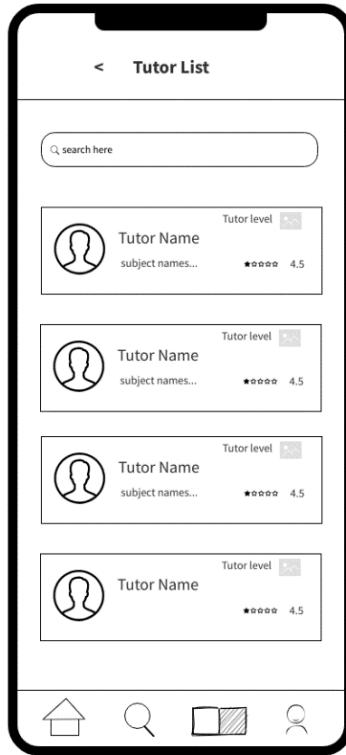
The screen features a background image of a sun and mountains. It is titled 'Reset Password'. It contains fields for 'New password' and 'Confirm password', and a 'Submit' button at the bottom.

- Student view of tutors' list

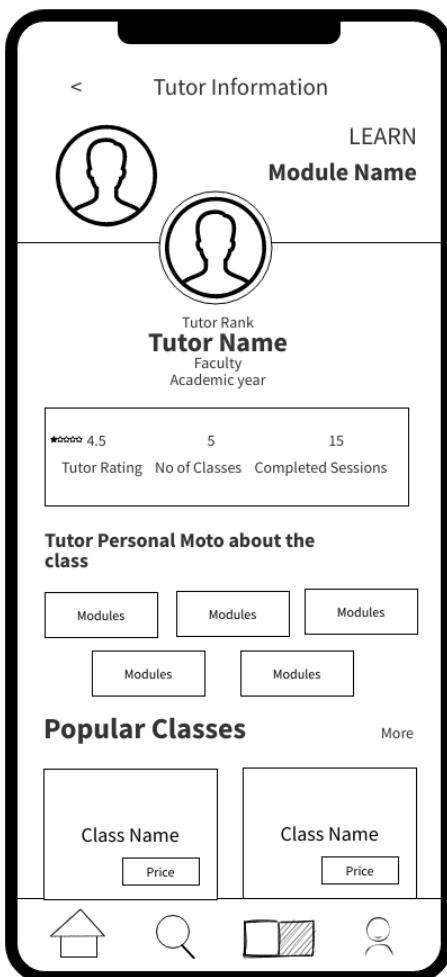
- Home Page



- Tutor List

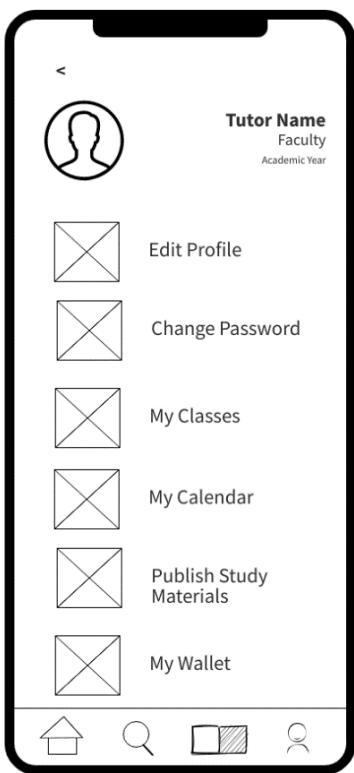


- Tutor view of tutor's profile

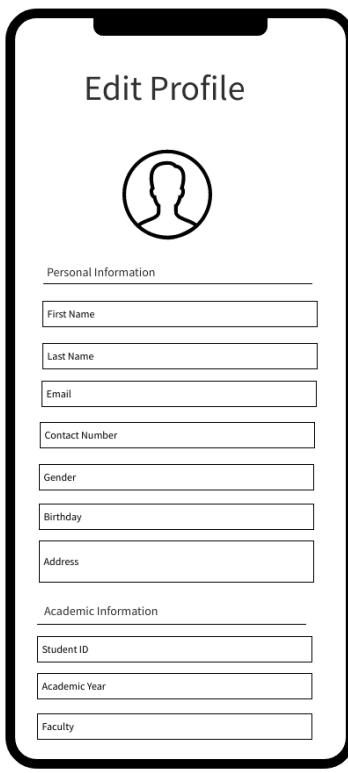


- Tutor edits profile, change password and calendar

- Tutor Profile



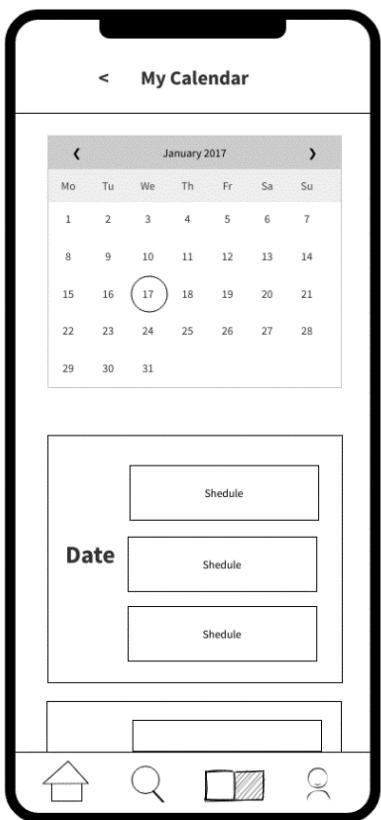
- Edit Profile



- Change Password



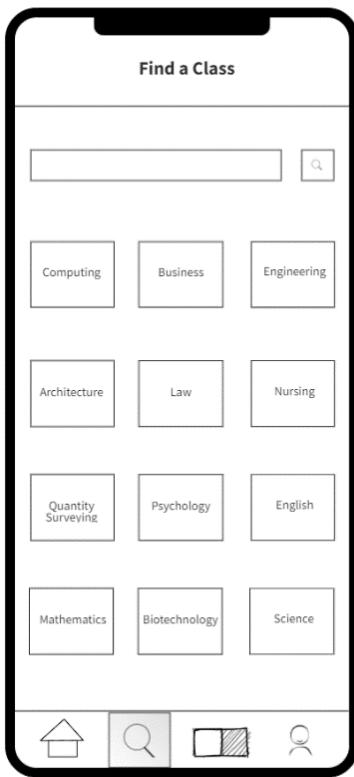
- Tutor Calendar



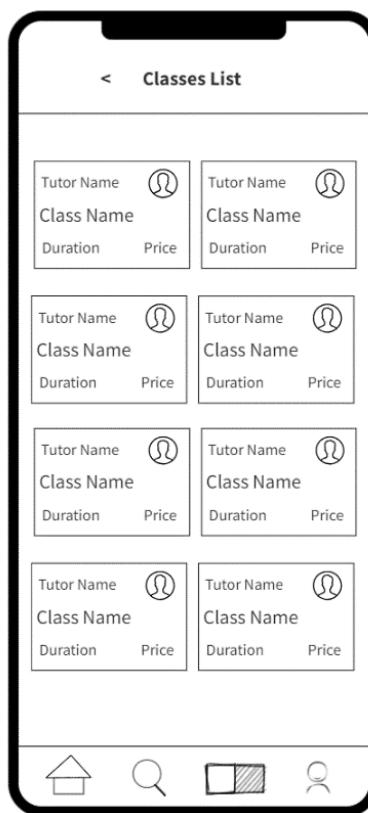
8.2.3. IT2126772

- Student selects subject, find relevant tutor, and book a class

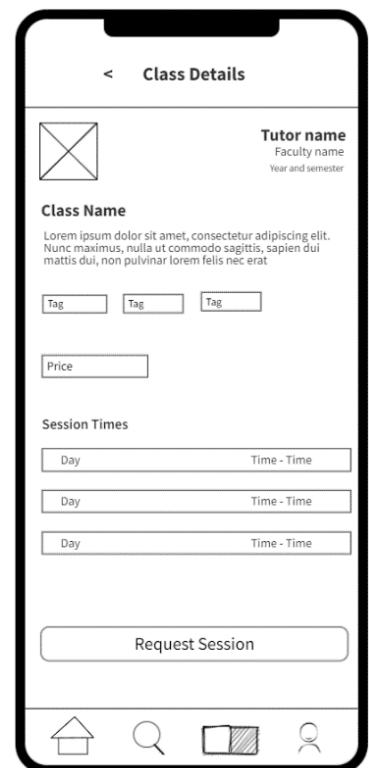
- Categories



- Class List



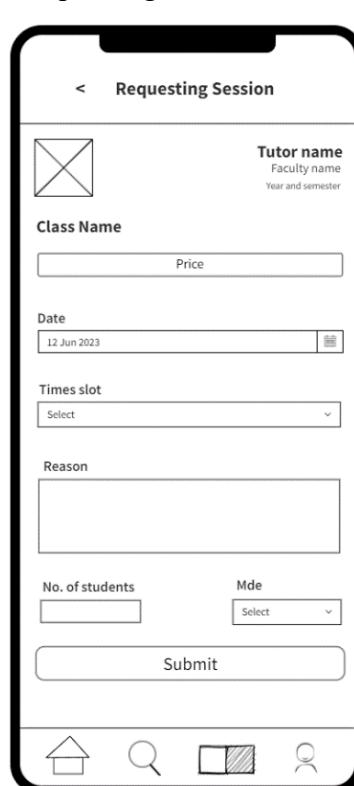
- Class Details



- Sessions List



- Requesting Sessions

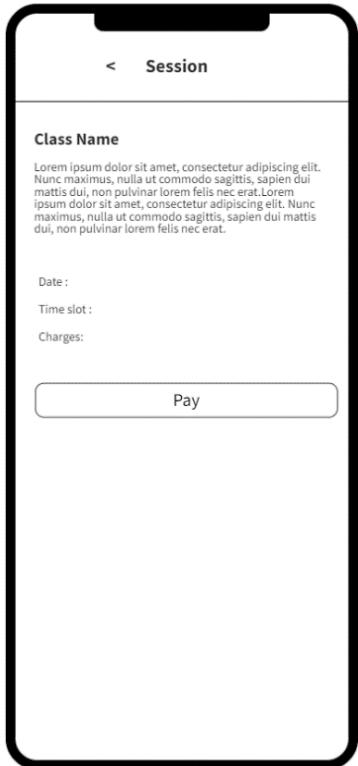


- Session Request



- Student makes payment to a tutor accepted class

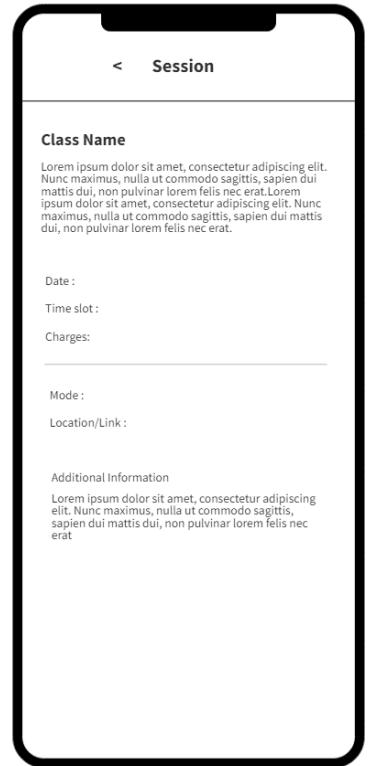
- Session Payment Info



- Payment Page



- Session Location Info

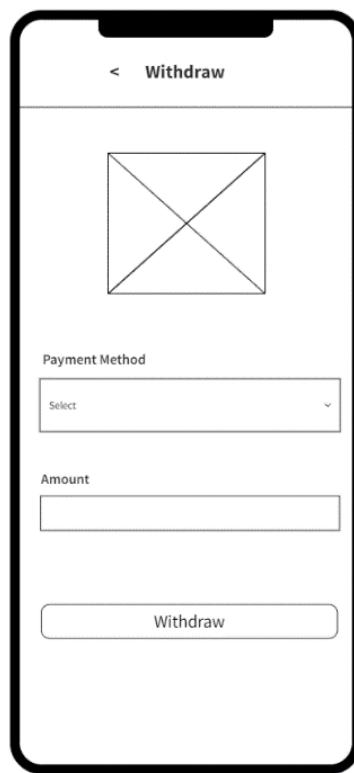


- Tutor withdraws money, add payment method, and edit payment method.

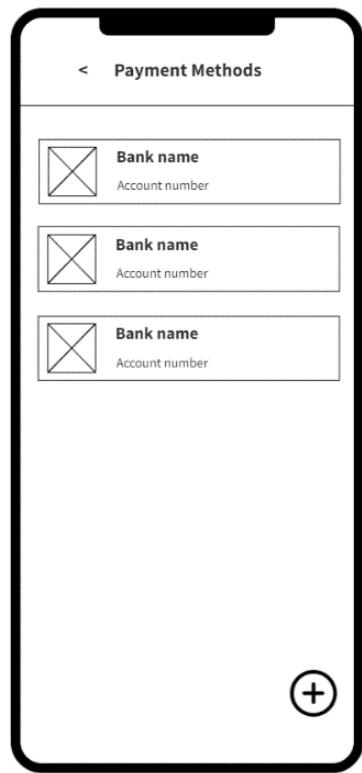
- My Wallet



- Withdraw



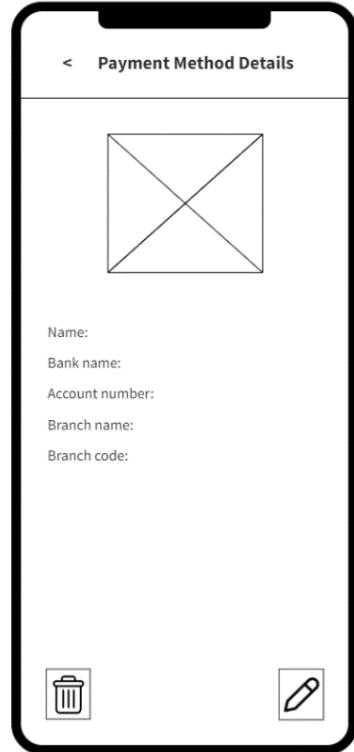
- Manage Payment Methods



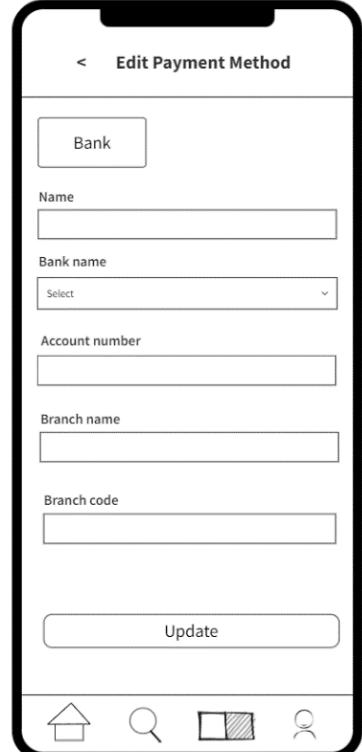
- Add Payment Methods



- View Payment Method Details



- Edit Payment Methods



8.2.4. IT2138934

- Tutor view, add and edit class details

- My Classes



- Add Class

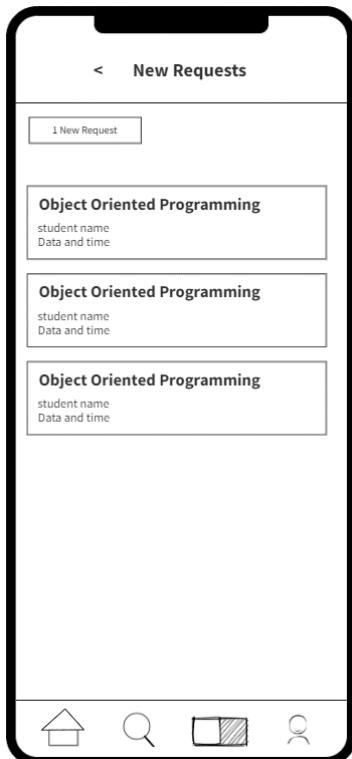


- View Class Details



- Tutor view accept and decline new requests.

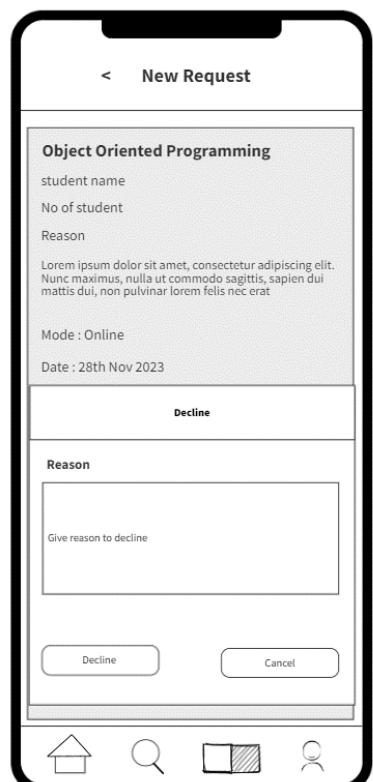
- View All New Request



- New Request



- Accept/Decline Request

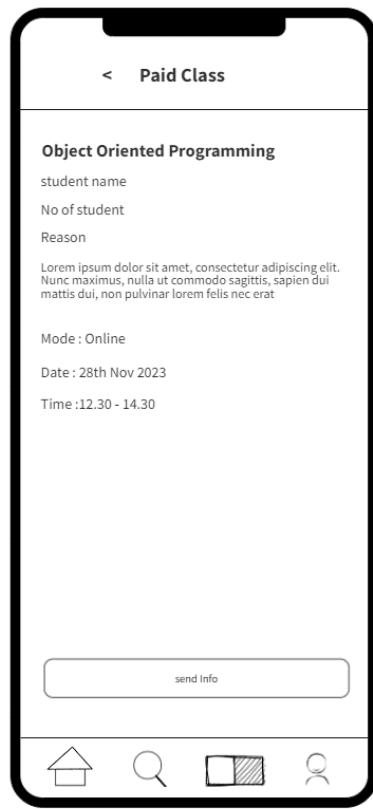


- Tutor view paid classes and send info to student

- View Paid Classes



- Send Info to Paid Class



9 Milestone 5: Figma Prototype

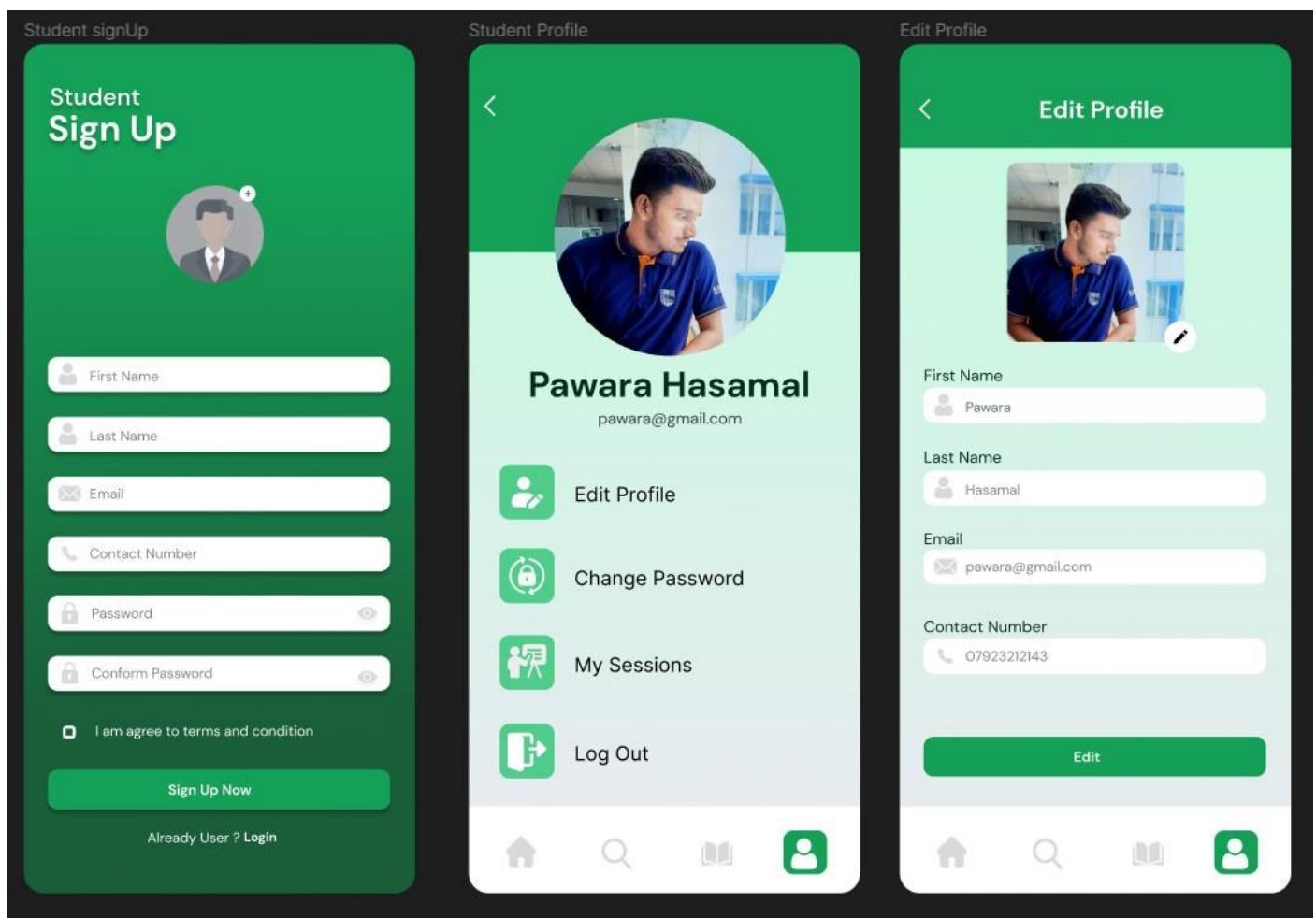
9.1 Design 01

- Figma Prototype Link

- <https://www.figma.com/file/BPs3YBFWPxrInxWtXNTfMH/TutorMe?type=design&node-id=0-1&mode=design&t=K8DLdL03gNRmdlyQ-0>

- 9.1.1. IT21118340

- Student Management - Student Signup, Student Profile, Edit Profile



- Study Materials (User Role: Student) - Search study materials, View study materials by category, View & Download study materials.

Study Materials Market Place

Welcome Suresh Sanakalpa

Categories

- All
- Nursing
- Anatomy
- OOP
- Mind Map
- Short Note
- Any Subject
- Probability and Statistics
- Maths

Most Downloaded

Category	Title	Downloads	Action
Anatomy	Anatomy complete ...	2k	Download
Maths	Probability and Stact..	1k	Download
Any Subject	Mind Map Templates	5k	Download
Anatomy	Anatomy complete ...	2k	Download
Maths	Probability and Stact..	1k	Download
Any Subject	Mind Map Templates	5k	Download

Categories

Category: All

Book Details (Student View)

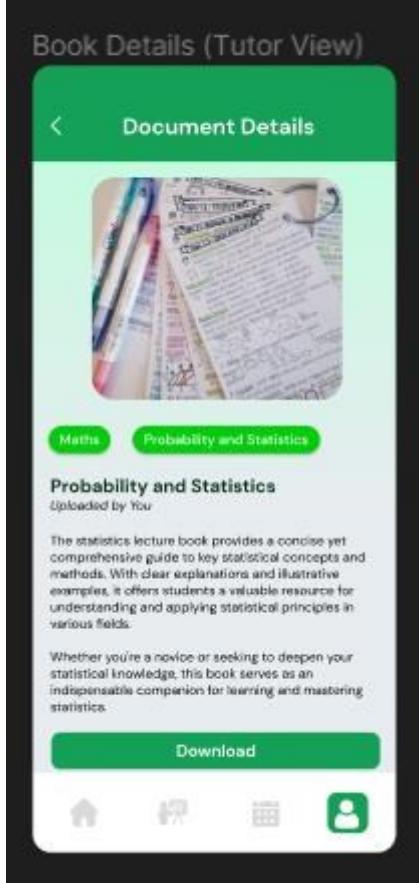
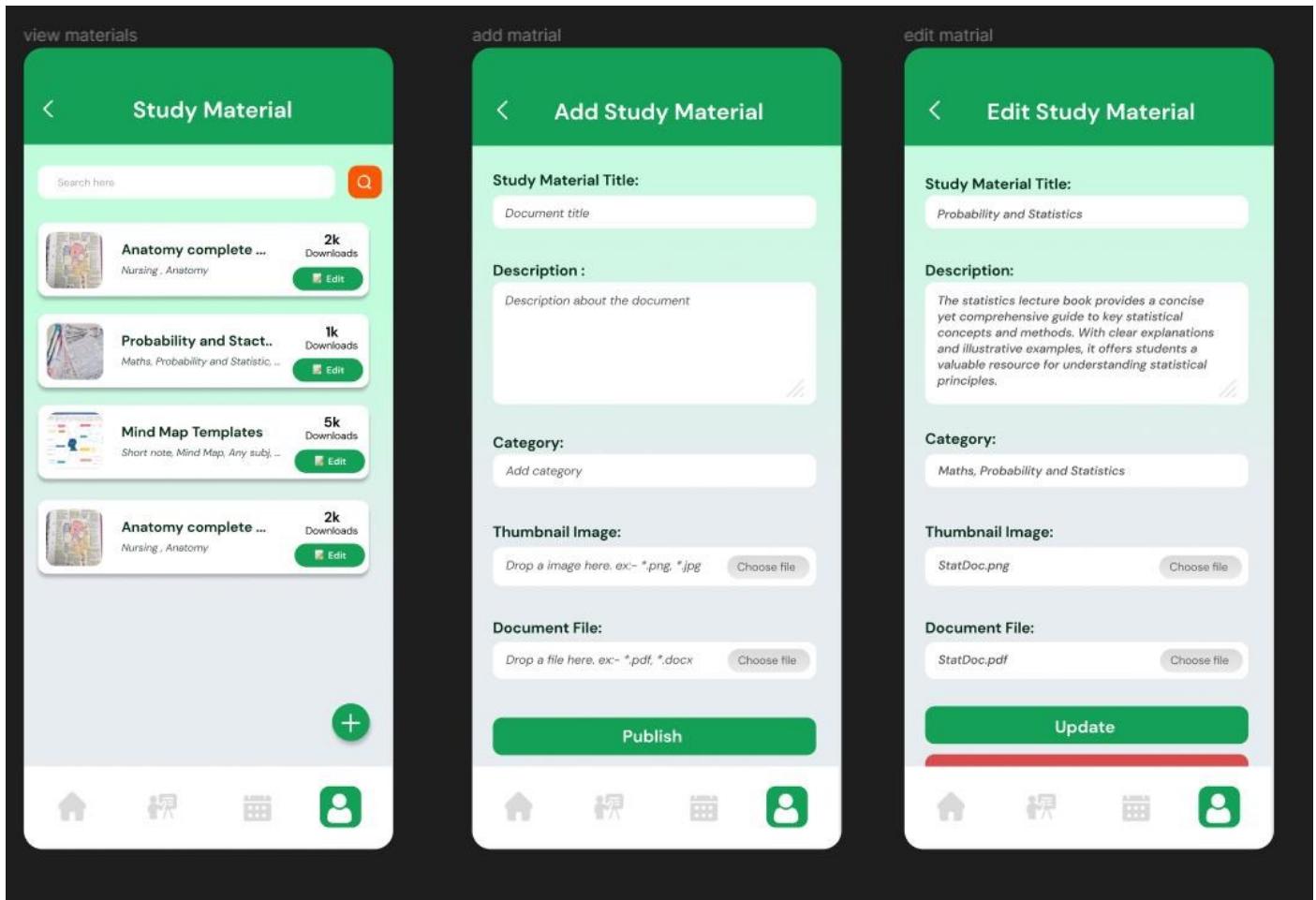
Probability and Statistics
Uploaded by Pawara Hasamal

The statistics lecture book provides a concise yet comprehensive guide to key statistical concepts and methods. With clear explanations and illustrative examples, it offers students a valuable resource for understanding and applying statistical principles in various fields.

Whether you're a novice or seeking to deepen your statistical knowledge, this book serves as an indispensable companion for learning and mastering statistics.

Download

- Study Materials Management (User Role: Tutor) - View all study materials, Add study materials, Edit & Delete study materials



- 9.1.2. IT21291364

- Tutor Management (User role: Tutor) – Tutor sign up, Tutor account, Tutor profile, Edit Tutor profile

Tutor signUp

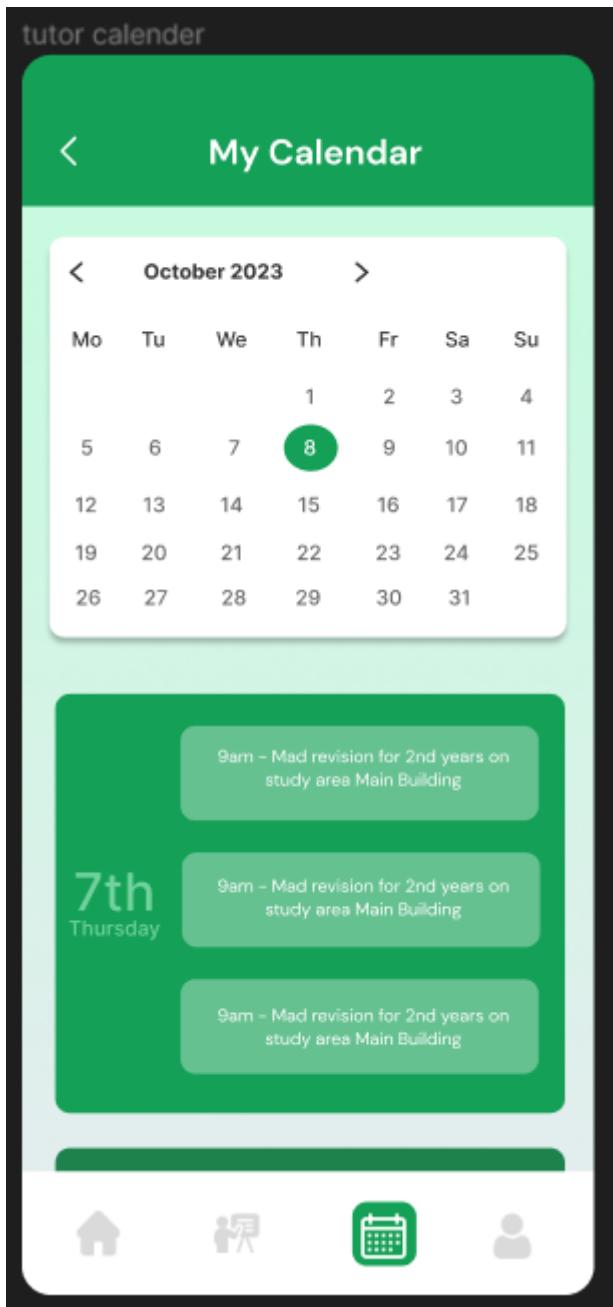
Tutor account

tutor profile (tutor vie...)

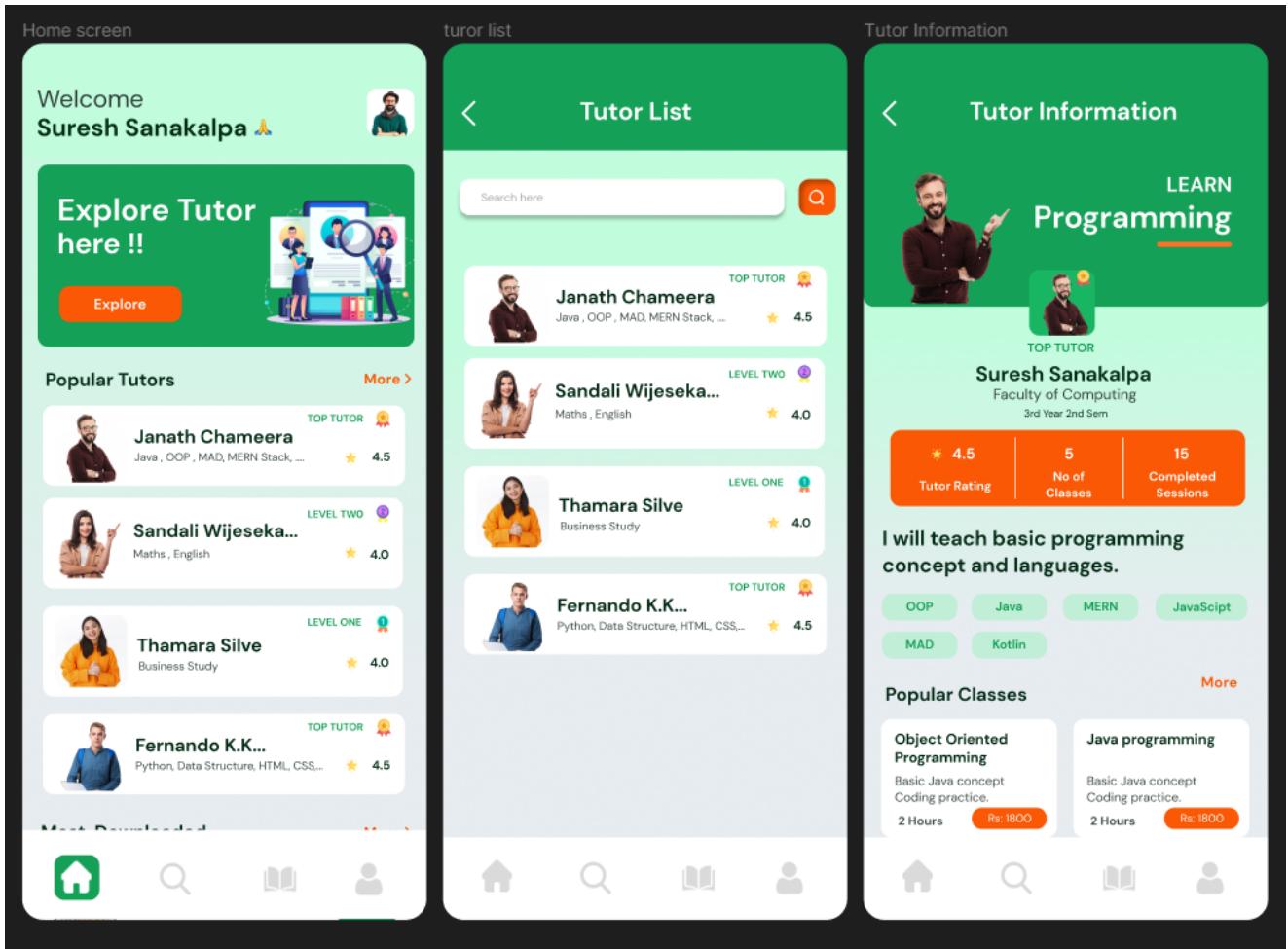
edit tutor profile

Tutor change password

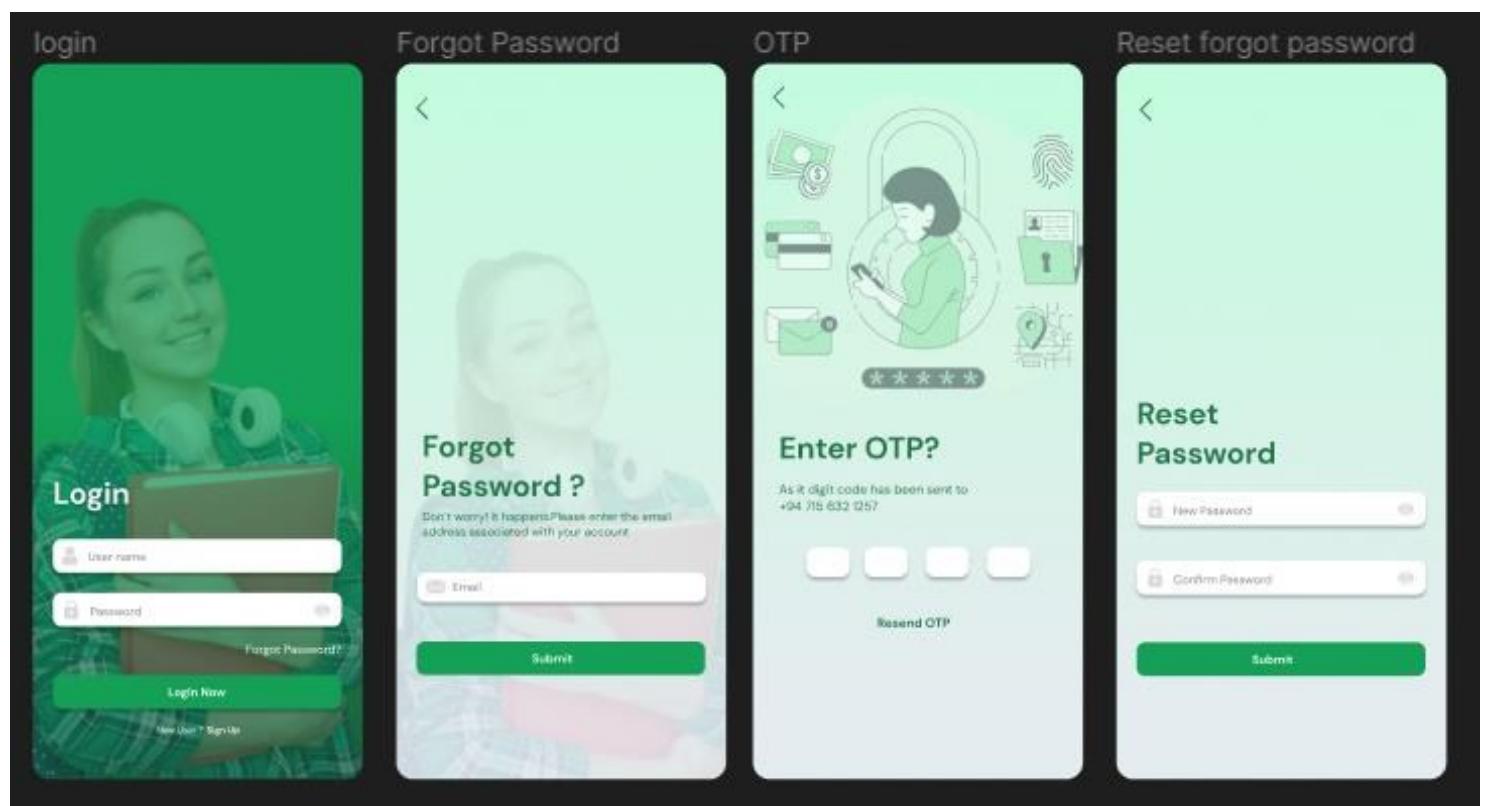
- Calendar – (User role: Tutor)



- Tutor Management (User role: Student) – View and Search Tutor.

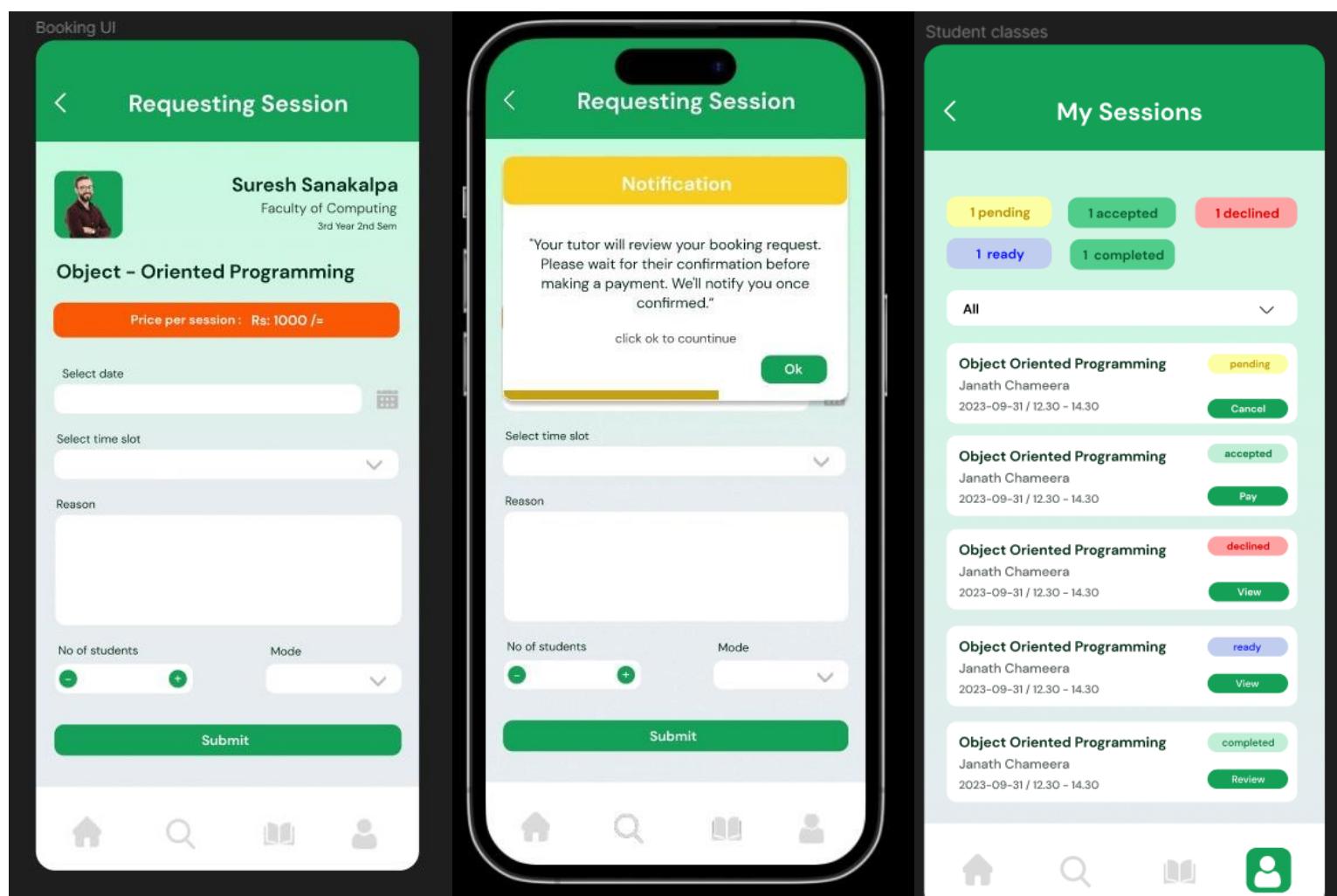
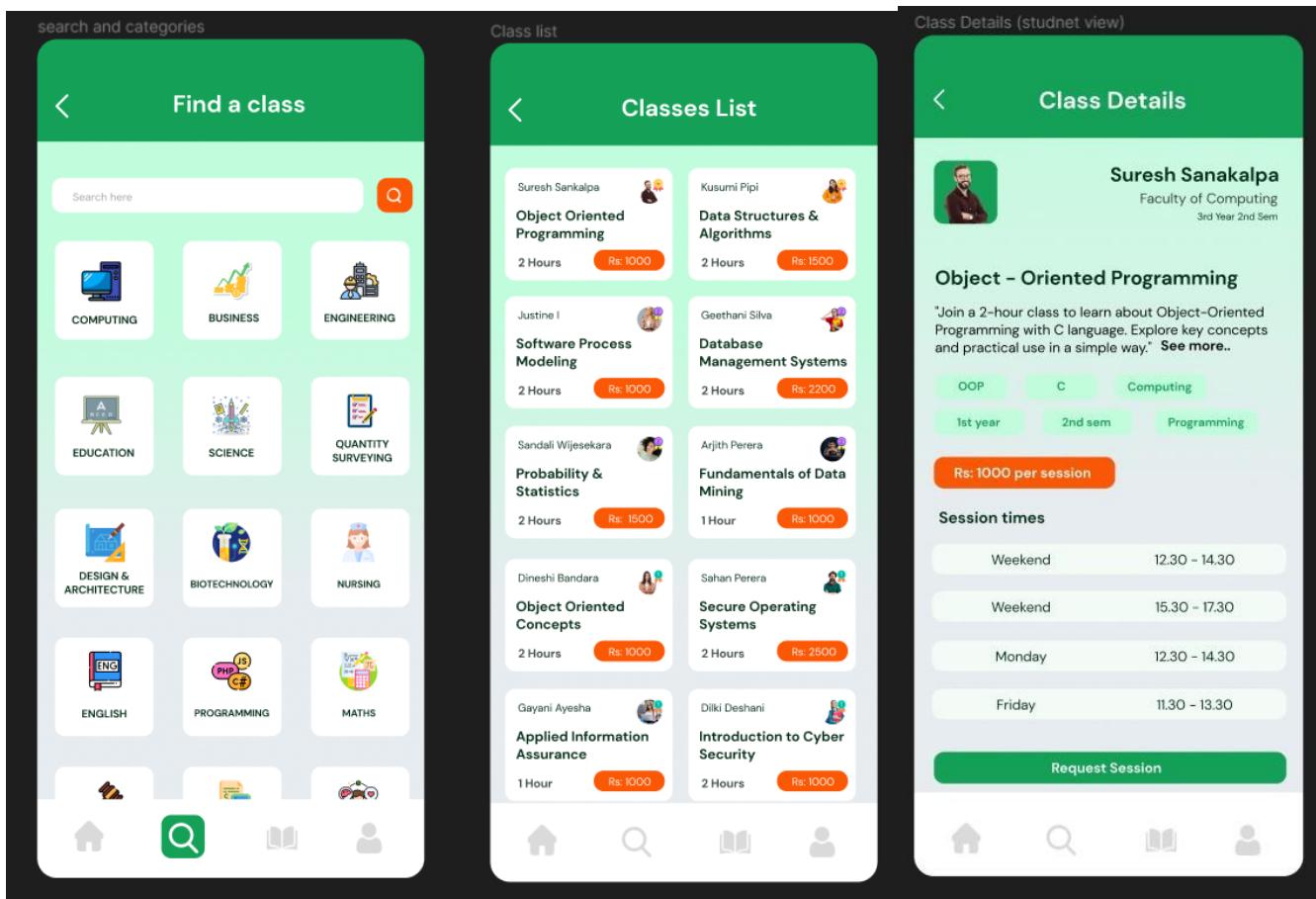


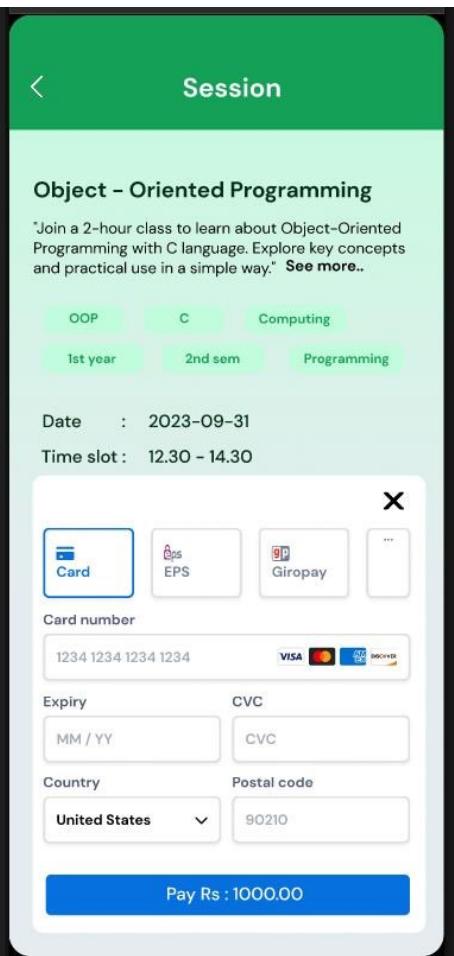
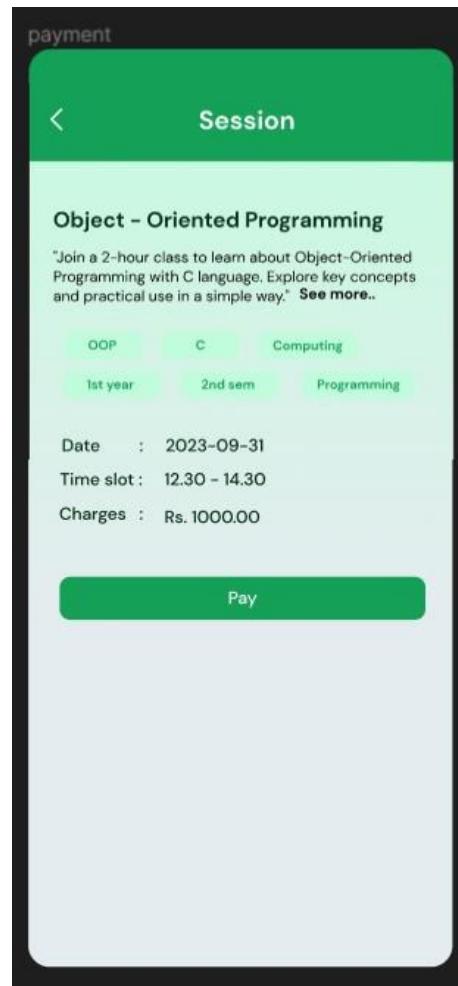
- Login & Forgot password



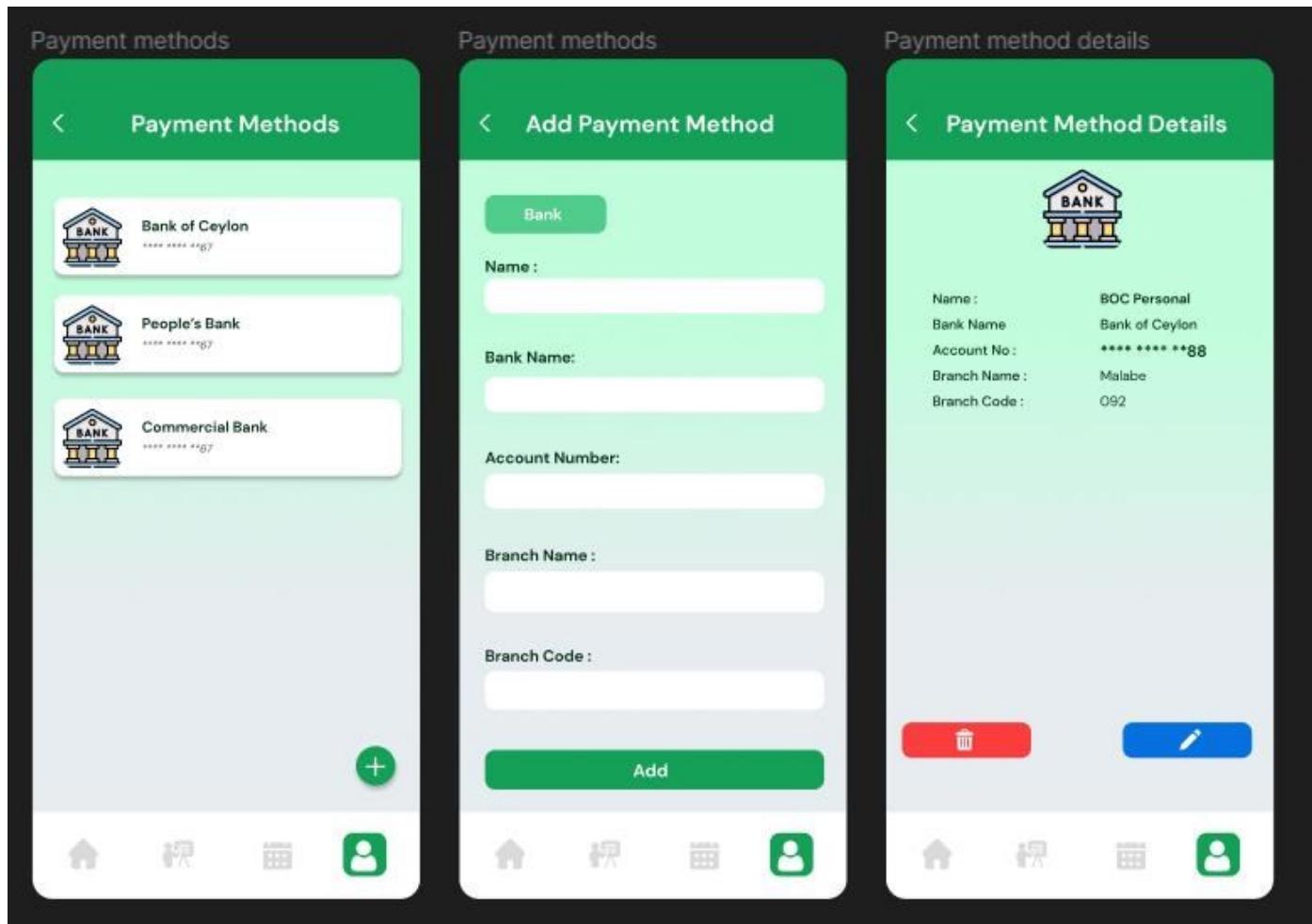
- 9.1.3. IT21267772

- Request and booking (User role: Student) – Search classes, Request class, Book class, View student sessions

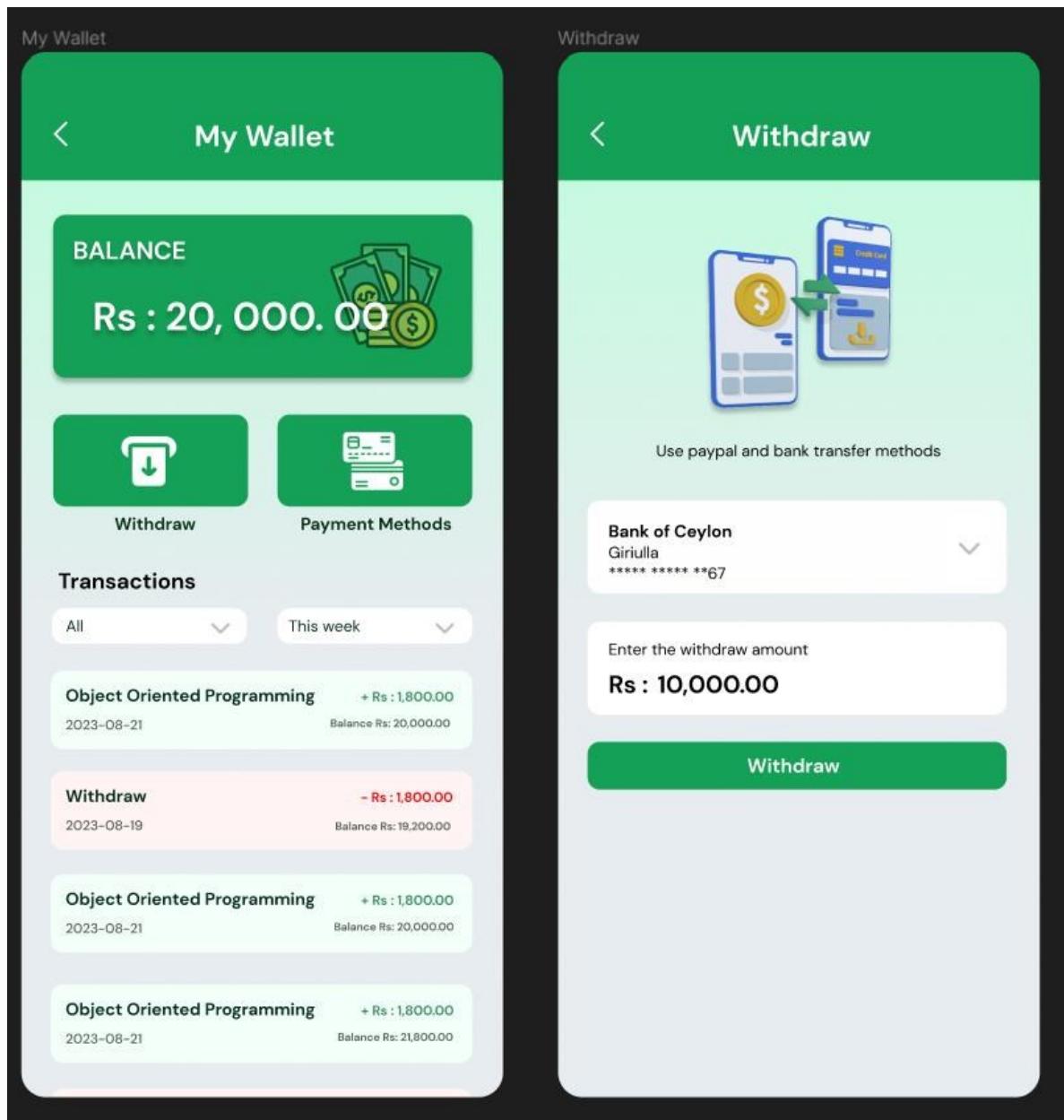




- Payment Options (User role: Tutor) – Add payment option, View payment options

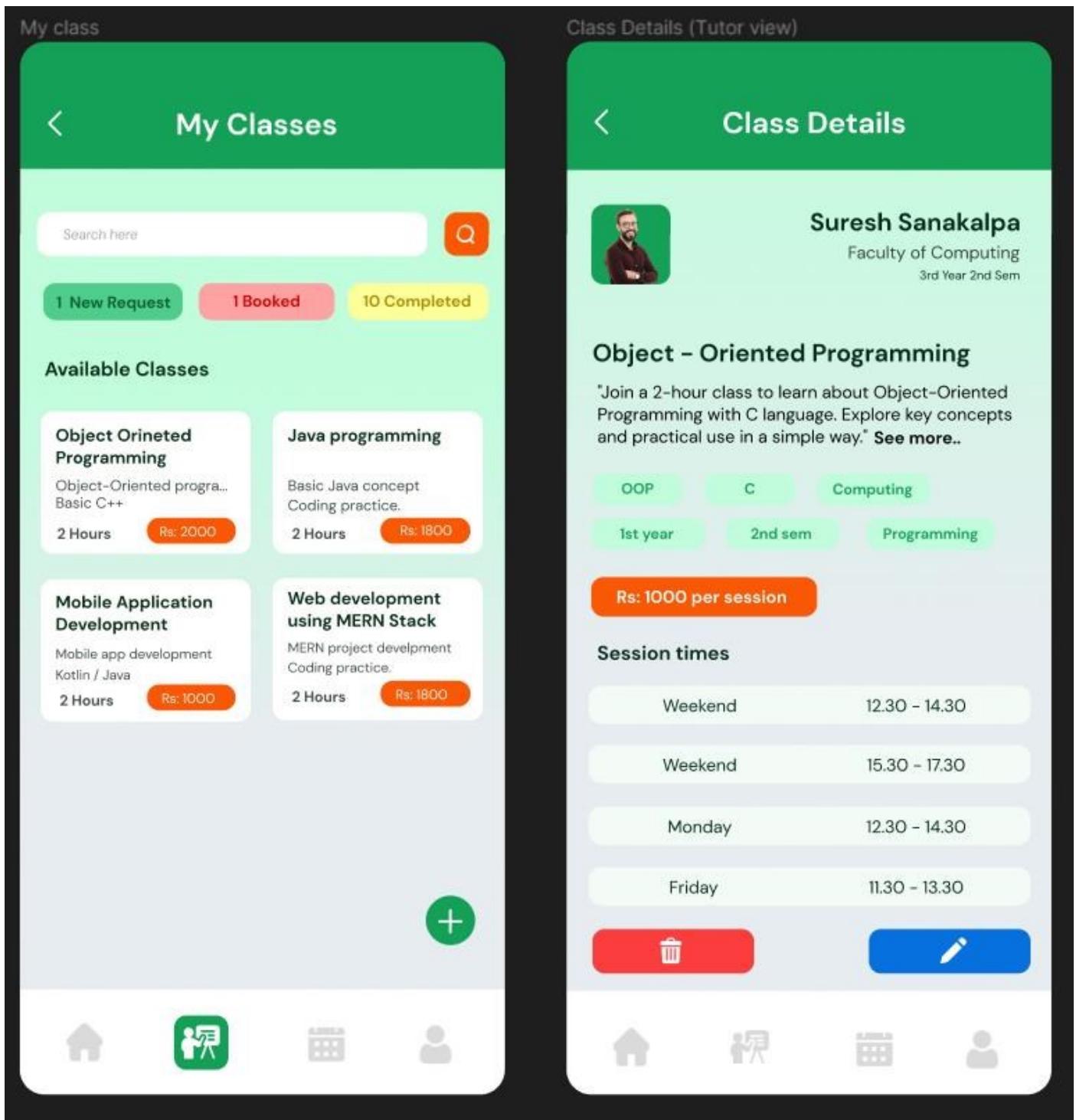


- Withdrawal (User role: Tutor) – Tutor wallet and Withdrawal



- #### • 9.1.4. IT21388934

- Class Management (User role: Tutor) – View classes



- Class Management (User role: Tutor) - Add class, Edit & Delete class

Add Class

Tags

tag here +

OOP C Computing

1st year 2nd sem

Price (Rs pre session)

Duration (hr)

Time slot

Day Start time End time +

Day Start time End time - +

Add Class

Edit Class

Class Title

Object - Oriented Programming

Class Description

"Join a 2-hour class to learn about Object-Oriented Programming with C language. Explore key concepts and practical use in a simple way."

Tags

Enter tag here +

OOP C Computing

1st year 2nd sem

Price (Rs pre session)

2000

Duration (hr)

2

Time slot

Weekend	12.30 - 14.30
Weekend	15.30 - 17.30
Monday	12.30 - 14.30

- Class Management (User role: Tutor) - New Request and Booked Classes view, Decline new request

new Request

New Requests

1 new request

Object Oriented Programming
Janeth Chameera
2023-09-31 / 12.30 - 14.30

Object Oriented Programming
Janeth Chameera
2023-09-31 / 12.30 - 14.30

Object Oriented Programming
Janeth Chameera
2023-09-31 / 12.30 - 14.30

Booked Classes

1 booked

Object Oriented Programming
Janeth Chameera
2023-09-31 / 12.30 - 14.30

Object Oriented Programming
Janeth Chameera
2023-09-31 / 12.30 - 14.30

Anew Request

Object - Oriented Programming

Janeth Chameera
2023-09-31 / 12.30 - 14.30

Reason:
I want to clarify some concept , specially polymorphism, overloading and overriding.

Mode : Online

Number of students : 5

Decline

Decline

Reason:

A Booked class

A Booked Class

Object - Oriented Programming

Janeth Chameera
2023-09-31 / 12.30 - 14.30

Reason:
I want to clarify some concept , specially polymorphism, overloading and overriding.

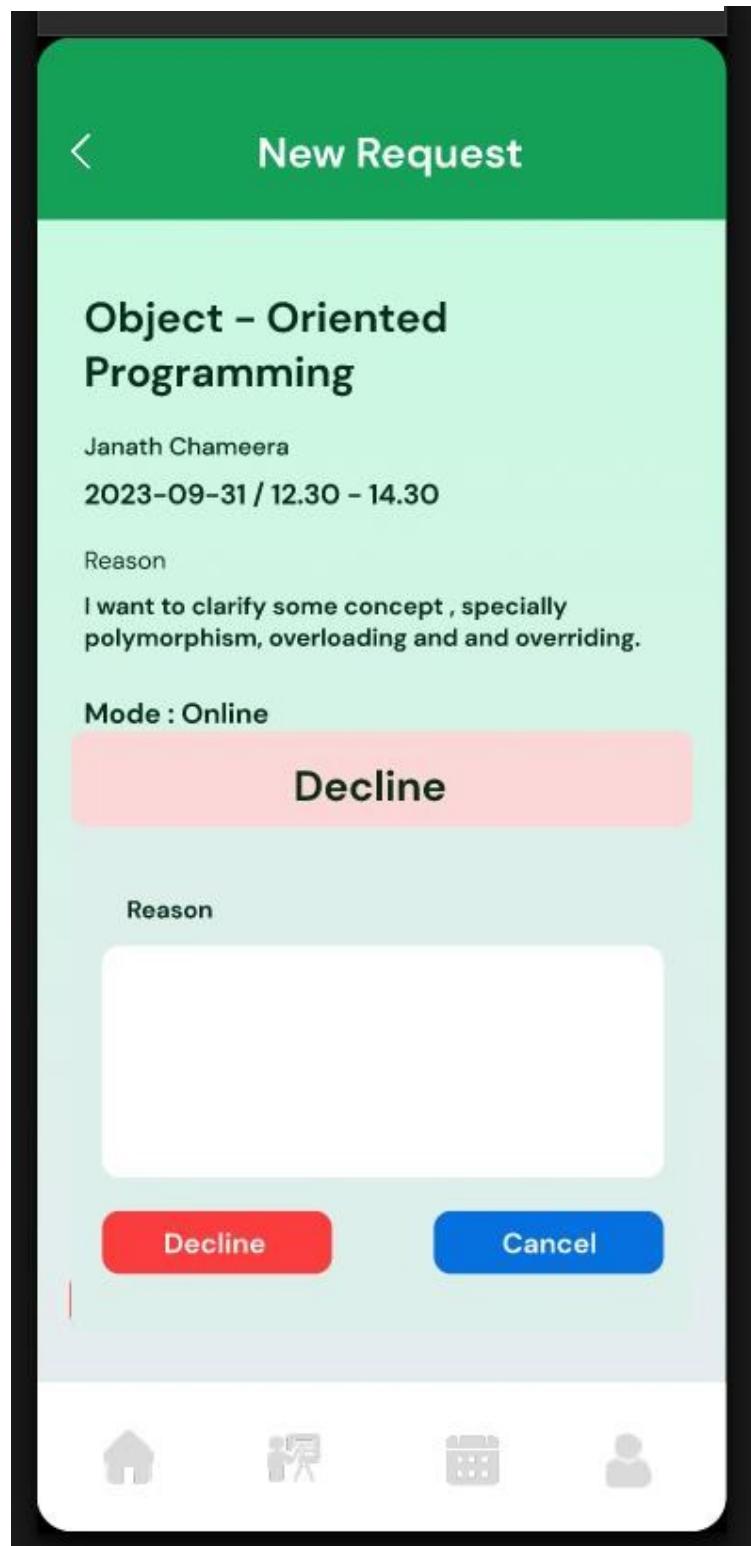
Mode : Online

Number of students : 5

Send info

decline

- Class Management (User role: Tutor) - Decline popup



9.2 Design 02 (Accepted Version)

- Figma Prototype Link

- [https://www.figma.com/file/Usv4uPDQUBHi0N4bQVU3cG/TutorMe-\(Version2\)?type=design&mode=design&t=CKLuP4SFwCJChV6U-1](https://www.figma.com/file/Usv4uPDQUBHi0N4bQVU3cG/TutorMe-(Version2)?type=design&mode=design&t=CKLuP4SFwCJChV6U-1)

10 Milestone 6: User Feedback for your Prototype

10.1 Participant Profiles

The table below provides a breakdown of the participants selected for video interview:

Name	Demography	Date & Time
Sathsarani Wijeratne	<ul style="list-style-type: none">• Undergraduate• Between age under 20 - 25• Student at SLIIT.• Specialization in Information Technology.	2023-09-20 18.30
Sasini Nimesha	<ul style="list-style-type: none">• Undergraduate• Between age under 20 - 25• Student at KDU.• Specialization in Computer Science.	2023-09-22 18.30
Rosara Dayaratne	<ul style="list-style-type: none">• Undergraduate• Between age under 20 - 25• Student at SLIIT.• Specialization in Software Engineering.	2023-09-23 10.30
Dananjaya Siriwardhana	<ul style="list-style-type: none">• Undergraduate• Between age under 20 - 25• Student at SLIIT.• Specialization in Data Science.	2023-09-21 18.30

TABLE 6. Participant Profile

10.2 Interview

All Interviews Link: https://drive.google.com/drive/folders/1It7_XEsuAzOBSU0OnGVB_mGOKA-zAMH2?usp=drive_link

10.2.1 Interview 01

Video Link: <https://drive.google.com/file/d/1wOm5RJo3WOZa0FkfvND0jR4Mp4NLRahe/view>

Participant: Dananjaya Siriwardhana

Description: 4rd year Data Science student

Role: Tutor

Duration: 0.5 hour

Transcript:

Team Member - Dilru: Hey Dananjaya ayye, Thank you for participating in this interview. So as u already know, We're developing an app that will help university students connect with tutors. So in this interview we are going to show u our prototype app and then u have to give us feedback about the app as u use it. U ready?

Interviewee - Dhananjaya: Yes. Let's start.

Team Member - Rumesh: So this is a prototype of our app. As soon as we open the app, we can see the splash screen. After a few seconds, it will redirect to the login page. If you are a new user, you can press the signup link at the bottom of the screen. From that page, you can select the sign-up option. Then you should fill out this form to sign up. After pressing the signup button, you will be directed to the login page. After the login, your home screen will open. On the home screen, you can see a banner slider, the most popular tutor list, and the most popular study materials. The navigation session is visible at the bottom of the screen. First navigation for the search option. From there, you can find a tutor or filter by category. By clicking on a tutor card, you can navigate to the full tutor information page. From here, you can see tutor academic information, ratings, what classes the tutor conducts, tutor expertise, and reviews. By pressing on one class, you can see whole-class information, including price and available session times. By pressing the booking button, you can navigate to the booking page. After filling out the form, you can click on the book button. Then notifications will appear. Second navigator for viewing study materials. From there, you can see search op-

tions, categories, and the most downloaded study materials. By clicking on a category, you can view study materials that are related to that category. You can download the note by pressing the download button. If you want further information, you can click on the material card. last navigator for the user account. You can edit your profile, view your classes, and logout. In My classes, you can see the status of the class. If the class is accepted, you can make the payment. You can open the payment gate by clicking the pay button. Finally, you can logout form the application. By clicking the log-out button, the application requests confirmation. If you do not need to log out, you can cancel. If you want to log out, you can click logout. It will redirect to the login page.

Interviewee - Dhananjaya: So, the app seems to be geared towards both university students. One feature I really like, is how it helps in organizing classes. You can schedule, reschedule, and keep track of your classes easily. This feature alone saves a lot of trouble for me.

Interviewee - Dhananjaya: Another great thing is how students can easily find and contact tutors. The search functionality seems pretty good. You can filter tutors by subject, availability, and even ratings. So, It's a big time-saver for them.

Interviewee - Dhananjaya: And also tutors can get feedback from students. This will help tutors improve their teaching style and It adds a layer of trust and transparency to the whole process.

Interviewee - Dhananjaya: Another feature I really like is the easier payment process. You can handle payments within the app, making it convenient and secure. No need for cash or worrying about payment logistics.

Interviewee - Dhananjaya: Finally, the option to share old notes and lecture slides directly through the app is fantastic. It fosters a sense of community and collaboration among students. I can see it being really helpful when preparing for exams.

Team Member - Manuka: That's great feedback. So, On a scale of 1 to 10, how likely would you be to use this app based on the features you've described?

Interviewee - Dhananjaya: I'd say around 9. It seems like a comprehensive solution that caters to the needs of both students and tutors. The only reason I'm not giving it a 10 is because I haven't seen the actual app in action yet.

Team Member - Rumesh: Thank you for your valuable input. Lastly, is there anything you think could be improved or added to make this app even better?

Interviewee - Dhananjaya: Well, The app looks really great. Although I have a small suggestion, Can u add a feature that will allow users to link our google account with the app? It will make it more easier for user to register for the app.

Team Member - Dilru: Yes. We will definitely consider about it. Thank you so much for taking the time to do this interview. We genuinely appreciate it!

Interviewee - Dhananjaya: Thank you guys for having me. I wish you all the best.

10.2.2 Interview 02

Video Link: <https://drive.google.com/file/d/10Fgh22GtTVcAPZxZuiwaEp0p8YYdCCmq/view>

Participant: Sathsarani Wijeratne

Description: 3rd year Software Engineering student

Role: Tutor

Duration: 0.5 hour

Transcript:

Team Member - Dilru: Hey Sathsarani akke, Thank you for participating in this interview. So as u already know, We're developing a mobile application that will help university students connect with tutors. So in this interview we are going to show u our prototype app and then u have to give us feedback about the app as u use it. And if u have any questions regarding the app, u can ask from Us. So r u ready?

Interviewee - Sathsarani: Yes. Let's start.

Team Member - Rumesh: So this is a prototype of our app. As soon as we open the app, we can see the splash screen. After a few seconds, it will redirect to the login page. If you are a new user, you can press the signup link at the bottom of the screen. From that page, you can select the sign-up option. Then you should fill out this form to sign up. After pressing the signup button, you will be directed to the login page.

Team Member - Rumesh: So that is all about the app. So do u have any questions or anything u want to clarify?

Interviewee - Sathsarani: No, Everything is clear.

Team Member - Dilru: Now, we're going to give you 3 tasks to do, and you just need to finish them and let us know what you think.

Team Member - Dilru: So the first task is to register for the app and create a class. the second task is to upload a study material. and third task is to make a withdrawal. And as u complete the process u can ask us any questions or speak your thoughts.

Interviewee - Sathsarani: << Completes the tasks >>

Interviewee - Sathsarani: Okay. Both tasks are completed.

Team Member - Isuru: Alright, now that you've tried out our prototype and finished some tasks on your own, do you have any thoughts or suggestions for us?

Interviewee - Sathsarani: So, aesthetic wise, App has nice UI. And I also like the color theme. Green is suitable color for educational app. As for app functionality, one thing I really like, is how easy it is to organizing classes. You can schedule, and keep track of your classes easily. Another feature I really like is the easier payment process. You can handle payments within the app, it is really convenient for busy people like me. And I also like that app has a feature to share old lecture notes. I'm sure that will be big help for lot of students.

Team Member - Manuka: That's great feedback. So, On a scale of 1 to 10, how likely would you be to use this app based on the features you've described?

Interviewee - Sathsarani: I'd say around 8. It seems like it is a really good app.

Team Member - Rumesh: Thank you for your valuable input. Lastly, is there anything you think could be improved or added to make this app even better?

Interviewee - Sathsarani: Yes, I have a one suggestion. It would be great if you could simplify the tutor registration process. I understand that you need a lot of information to validate tutors. But, current process might feel a bit overwhelming to first time users, especially if they aren't tech-savvy. Maybe try dividing them into smaller sections, so users don't have to deal with a lot of questions, all at once.

Team Member - Dilru: Yes. We will definitely consider about it. Thank you so much for taking the time to do this interview. We genuinely appreciate it!

Interviewee - Sathsarani: Thank you guys for having me. I wish you all the best.

10.2.3 Interview 03

Video Link: <https://drive.google.com/file/d/1HvstrN0RfK90cpn0Su4S6jmJ5N0kGViB/view>

Participant: Sasini Nimesha

Description: 3rd year Software Engineering student

Role: Student

Duration: 0.5 hour

Transcript:

Team Member - Dilru: Hey Sasi, Thank you again for participating in this interview. So as u know, We're developing an mobile application that will help university students connect with tutors. First, we'll show you our app's early version and how it works. While we explain, please ask any questions or share your thoughts. After that, we'll give you a task and ask questions as you use the app. It's important to know we're testing the app, not you. There are no wrong answers. Feel free to tell us if you like or don't like something, if you're confused, or anything else. Are you ready?. So a r u ready?

Interviewee - Sasini: Okay. Let's start.

Team Member - Rumesh: So this is a prototype of our app. As soon as we open the app, we can see the splash screen. After a few seconds, it will redirect to the login page. If you are a new user, you can press the signup link at the bottom of the screen. From that page, you can select the sign-up option. Then you should fill out this form to sign up. After pressing the signup button, you will be directed to the login page. After the login, your home screen will open. On the home screen, you can see a banner slider, the most popular tutor list, and the most popular study materials. The navigation session is visible at the bottom of the screen. first navigation for the search option. From there, you can find a tutor or filter by category. By clicking on a tutor card, you can navigate to the full tutor information page. From here, you can see tutor academic information, ratings, what classes the tutor conducts, tutor expertise, and reviews. By pressing on one class, you can see whole-class information, including price and available session times. By pressing the booking button, you can navigate to the booking page. After filling out the form, you can click on the book button. Then notifications will appear. Second navigator for viewing study materials. From there, you can see search options, categories, and the most downloaded study materials. By clicking on a category, you can view study materials that are related to that category. You can download the note by pressing the download button. If you want further information, you can click on the material card. last navigator for the user account. You

can edit your profile, view your classes, and logout. In My classes, you can see the status of the class. If the class is accepted, you can make the payment. You can open the payment gate by clicking the pay button. Finally, you can logout from the application. By clicking the log-out button, the application requests confirmation. If you do not need to log out, you can cancel. If you want to log out, you can click logout. It will redirect to the login page.

Team Member - Rumesh: So that is all about the app. So do u have any questions or anything u want to clarify?

Interviewee - Sasini: Yes, I've got a quick question. I noticed that some details from the booking page, like the reason or how many students, are missing on the payment page. Do you think it would be a good idea to include them on the payment page?

Team Member - Dilru: Now, we're going to give you 2 tasks to do, and you just need to finish them and let us know what you think. Is it easy or hard? Is there anything that could be made better? Okay?

Team Member - Dilru: So the first task is to register for the app, then you have to select a tutor and book a session with them. And the second task is to go to study material market place section and download a document. And as u complete the process u can ask us any questions or speak your thoughts.

The first task is to sign up for the app. then you have to login and book a session with a tutor. The second task is to visit the study material section and download a document. As you finish these task, you can ask us any questions. Okay?

Interviewee - Sasini: << Completes the tasks >>

Interviewee - Sasini: Okay. Both tasks are completed.

Team Member - Isuru: Alright, now that you've tried out our prototype and finished some tasks on your own, do you have any thoughts or suggestions for us?

Interviewee - Sasini: Yes, one thing I really appreciate is that we can quickly get in touch with tutors. We can also check their ratings and what other students say about them. Plus, I can see how much a session costs upfront, so I know what to expect. Also, being able to find and download old study notes and lecture slides on the app is great for studying. But I didn't see a way to write reviews. If you guys can add that, it would be awesome!"

Team Member - Manuka: That's great feedback. We'll work on adding a way for students to write reviews. So, On a scale of 1 to 10, how likely would you be to use this app based on the features you've described?

Interviewee - Sasini: I'd say around 9. It seems like a good app.

Team Member - Dilru: Thank you for your valuable input. And We genuinely appreciate u taking the time to do this interview.

Interviewee - Sasini: Thank you guys for having me. I wish you all the best.

10.2.4 Interview 04

Video Link: <https://drive.google.com/file/d/1ITJ53-ILUVK3R4zZT6rnV2klSJpfAux/view>

Participant: Rosara Dayaratne

Description: 2nd year Software Engineering student

Role: Tutor

Duration: 0.5 hour

Transcript:

Team Member - Dilru: Hello Rosara, Thank you again for participating in this interview. So as u know, We're developing an mobile application that will help university students connect with tutors. First, we'll show you our app's early version and how it works. While we explain, please ask any questions or share your thoughts. After that, we'll give you a task and ask questions as you use the app. It's important to know we're testing the app, not you. There are no wrong answers. Feel free to tell us if you like or don't like something, if you're confused, or anything else. Are you ready?. So a r u ready?

Interviewee - Rosara: Yes. Let's start.

Team Member - Rumesh: So this is a prototype of our app. As soon as we open the app, we can see the splash screen. After a few seconds, it will redirect to the login page. If you are a new user, you can press the signup link at the bottom of the screen. From that page, you can select the sign-up option. Then you should fill out this form to sign up. After pressing the signup button, you will be directed to the login page. After the login, your home screen will open. On the home screen, you can see a banner slider, the most popular tutor list, and the most popular study materials. The navigation session is visible at the bottom of the screen. first navigation for the search option. From there, you can find a tutor or filter by category. By clicking on a tutor card, you can navigate to the full tutor information page. From here, you can see tutor academic information, ratings, what classes the tutor conducts, tutor expertise, and reviews. By pressing on one class, you can see whole-class information, including price and available session times. By pressing the booking button, you can navigate to the booking page. After filling out the form, you can click on the book button. Then notifications will appear. Second navigator for viewing study materials. From there, you can see search options, categories, and the most downloaded study materials. By clicking on a category, you can view study materials that are related to that category. You can download the note by pressing the download button. If you want further information, you can click on the material card. last navigator for the user account. You

can edit your profile, view your classes, and logout. In My classes, you can see the status of the class. If the class is accepted, you can make the payment. You can open the payment gate by clicking the pay button. Finally, you can logout from the application. By clicking the log-out button, the application requests confirmation. If you do not need to log out, you can cancel. If you want to log out, you can click logout. It will redirect to the login page.

Team Member - Rumesh: So that is all about the app. So do u have any questions or anything u want to clarify?

Interviewee - Rosara: No, Everything is clear.

Team Member - Dilru: Now, we're going to give you 3 tasks to do, and you just need to finish them and let us know what you think. And as u complete the process u can ask us any questions or speak your thoughts.

Team Member - Dilru: So the first task is to register for the app and create a class. Please let us know once u complete the task. Can u share ur screen?

Interviewee - Rosara: first task is completed.

Interviewee - Rosara: << Completes the task the task >>

Team Member - Dilru: Okay, The second task is to upload a study material.

Interviewee - Rosara: << Completes the task >>

Interviewee - Rosara: second task is completed.

Team Member - Dilru: third task is to make a withdrawal.

Interviewee - Rosara: << Does the task >>

Interviewee - Rosara: third task is completed.

Team Member - Isuru: Alright, now that you've tried out our prototype and finished some tasks on your own, do you have any thoughts or suggestions for us?

Interviewee - Rosara: So, design wise, App has a nice UI. and As for app functionality, one thing I really like, is how easy it is to organizing classes. Another feature I really like is the easier payment process. You can handle payments within the app, it is really convenient. And I also like that app has a feature to share old lecture notes. It will be big help for lot of students.

Team Member - Manuka: That's great feedback. So, On a scale of 1 to 10, how likely would you be to use this app based on the features you've described?

Interviewee - Rosara: I'd say around 9. It seems like it is a really good app.

Team Member - Rumesh: Thank you for your valuable input. Lastly, is there anything you think could be improved or added to make this app even better?

Interviewee - Rosara: Yes, I have some suggestions. If you can consider adding a single main category for documents instead of using tags, that might be better. If you could modify the color of the price tag on the Classes page, it would improve clarity of the UI.

Team Member - Dilru: Yes. We will definitely consider about it. Thank you so much for taking the time to do this interview. We genuinely appreciate it!

Interviewee - Rosara: Thank you guys for having me. I wish you all the best.

10.3 Questionnaire

For Tutors

Tutor - Prototype Quiz

Research for 3rd Year project - UEE Module

இலக்கி பூர்வீக மூடியில் Google எவ்வ முறை, கவி திட்ட நோக்கம்

* இவ்வு மூடியை முறைப்படி

What was your initial impression of the app's design and layout? *

1 2 3 4 5 6 7 8 9 10

Great Not Great

On a scale of 1 to 10, how comfortable did you feel with the tutor registration process? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, how comfortable did you feel with the app navigation process? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, How would you rate the clarity and completeness of tutor profiles? *

1 2 3 4 5 6 7 8 9 10

Very clear Not

On a scale of 1 to 10, how comfortable did you feel when managing classes through the app? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, how comfortable did you feel with the payment process? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, how comfortable did you feel when process of sharing lecture notes through the app? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

Overall, how satisfied are you with the user-friendliness of the app? *

1 2 3 4 5 6 7 8 9 10

Very Dissatisfied Very Satisfied

கவி திட்ட நோக்கம்

1 முதல் கோடு போர்டு கல்லூர்கள் போன்ற கல்லூர்கள்

Google Forms

For Students

Student - Prototype Quiz

Research for 3rd Year project - UEE Module

මෙම ප්‍රතිඵලය සූචීතව Google නේතුව යුතු කළ ඇති නොවා.

* අවශ්‍ය ප්‍රතිඵලය දක්වනු ලබයි

What was your initial impression of the app's design and layout? *

1 2 3 4 5 6 7 8 9 10

Great Not Great

On a scale of 1 to 10, how comfortable did you feel with the student registration process? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, how comfortable did you feel with the app navigation process? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, How would you rate the clarity and completeness of student profiles? *

1 2 3 4 5 6 7 8 9 10

Very clear Not clear

On a scale of 1 to 10, How would you rate the clarity and completeness of tutor profiles? *

1 2 3 4 5 6 7 8 9 10

Very clear Not clear

On a scale of 1 to 10, how comfortable did you feel when booking classes through the app? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, how comfortable did you feel with the payment process? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

On a scale of 1 to 10, how comfortable did you feel when process of downloading lecture notes through the app? *

1 2 3 4 5 6 7 8 9 10

Easy Hard

Overall, how satisfied are you with the user-friendliness of the app? *

1 2 3 4 5 6 7 8 9 10

Very Dissatisfied Very Satisfied

සක්‍රීටි කරන්න

1 න් 1 වා මට්ට පෝරුග එස් කරන්න

10.4 Plan for Data Analysis

10.4.1 Questionnaire results

For Tutors



For Students



10.5 User Requests

1. Simplify the tutor registration process
2. One category for study materials instead of using tags
3. Improve the functionality to calendar component.
4. Added extra Information is to the payment page
5. Remove decline, accept and send info button, to reduce the complexity and prevent accidental touch.

10.6 Modifications Based on User Feedback

10.6.1. IT21118340

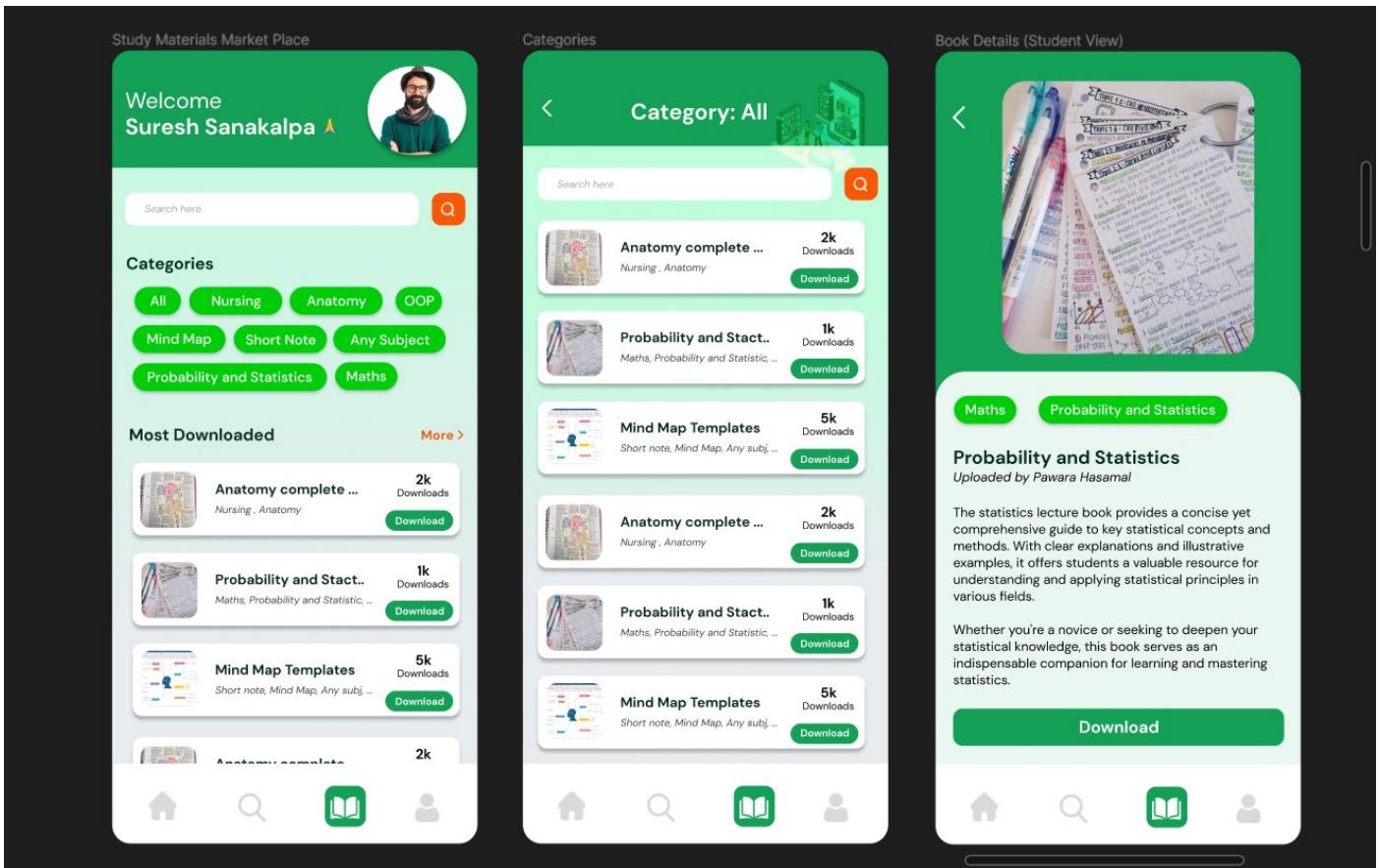
Modification 01

- Included a main category for book for study materials instead of tags, based on the suggestion of interviewed user.

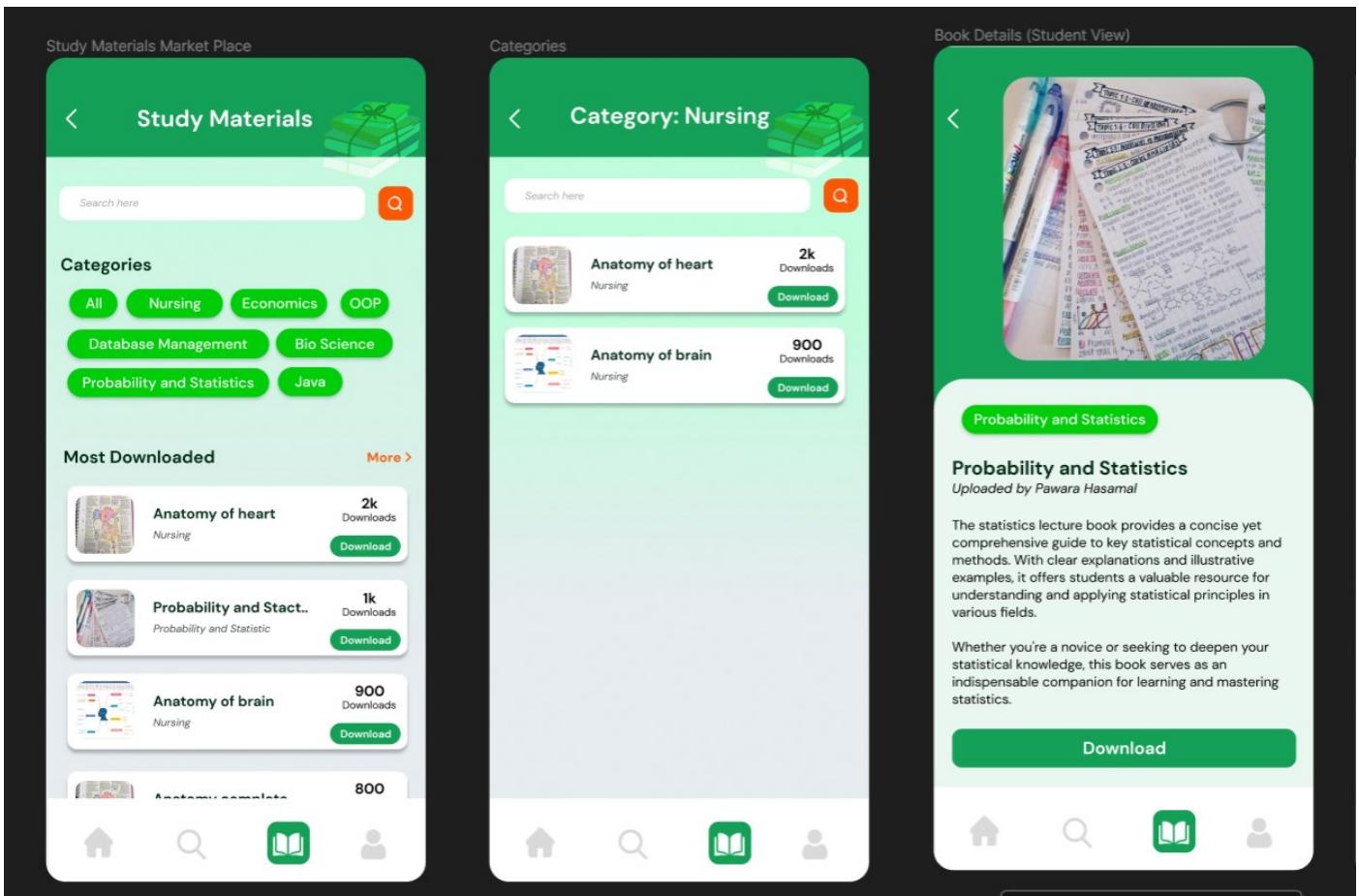
Modification 02

- Changed style of the header for all the pages related to Study materials. For consistency.

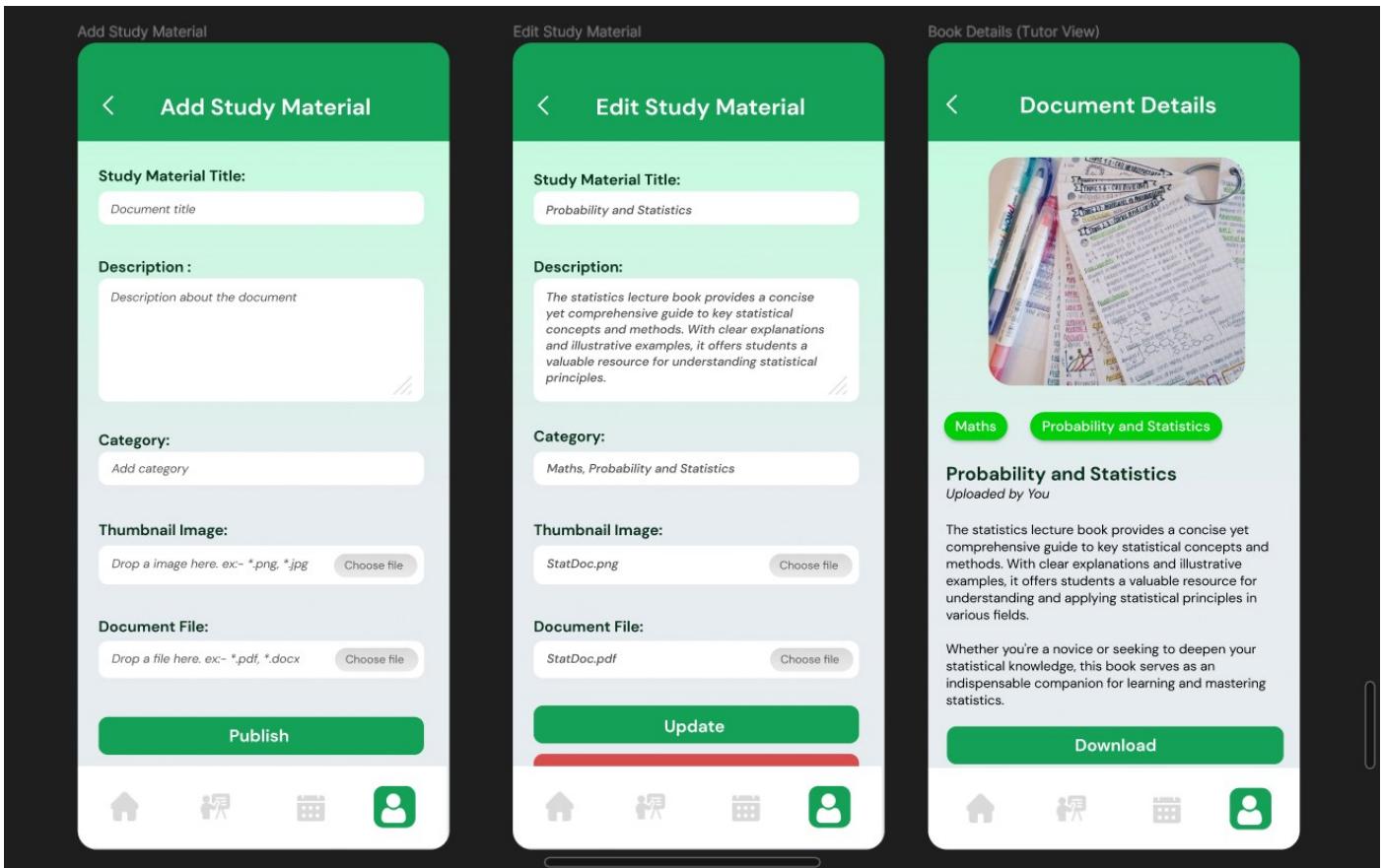
Version 01



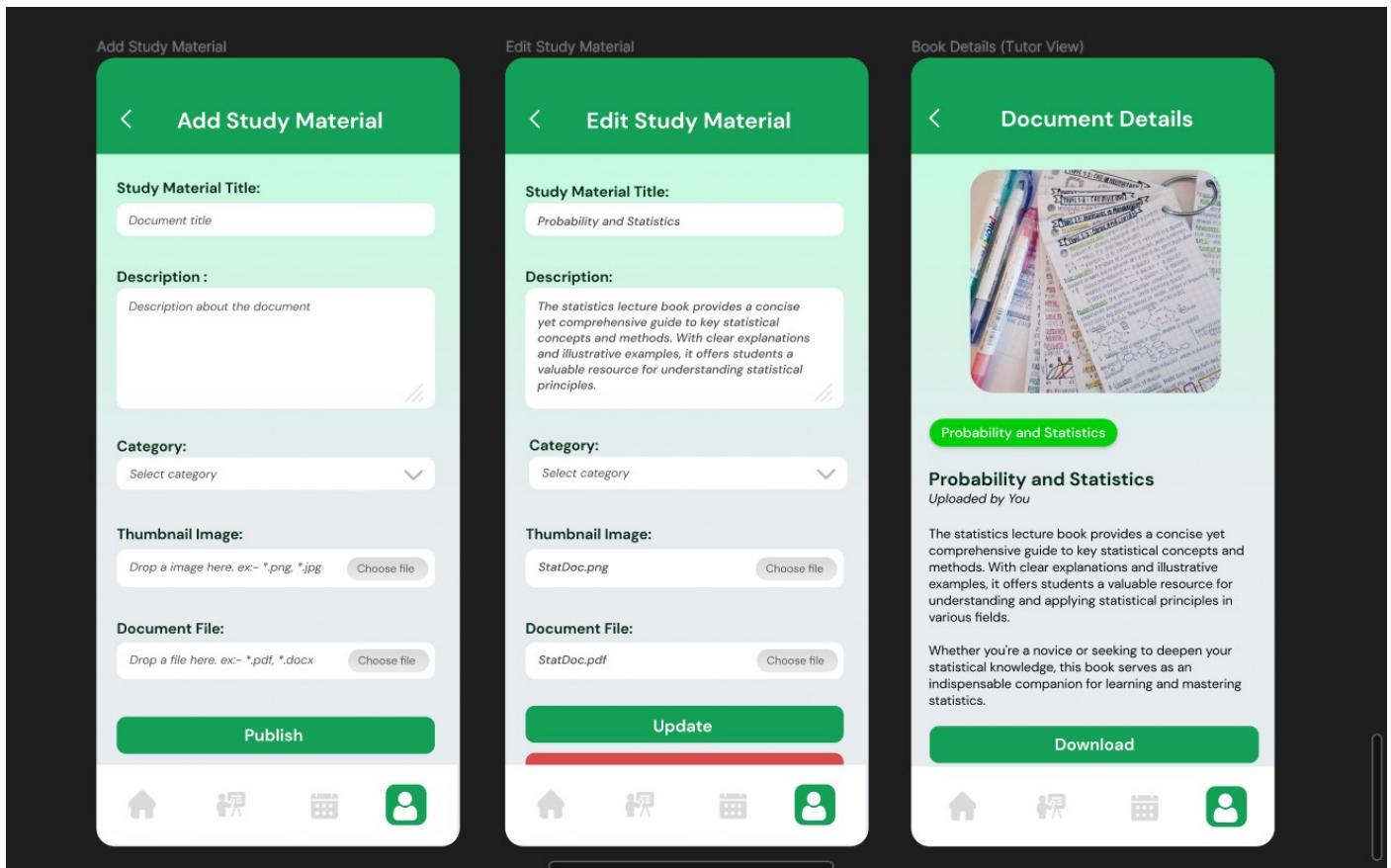
Version 02 (Modified Version)



Version 01



Version 02 (Modified Version)



Modification 01

- Divided registration into several processes, based on the suggestion of interviewed user.

Version 01

Tutor signUp

Tutor Sign Up



Personal Information

+

Academic Information

+

+

+

I am agree to terms and condition

Sign Up Now

Already User ? [Login](#)

Version 02 (Modified Version)

Tutor signUp

Tutor Sign Up



Personal Information

Academic Information

+

+

+

I am agree to terms and condition

Sign Up Now

Already User ? [Login](#)

Version 02 (Modified Version)

Incomplete tutor profile

Cover Page

Suresh Sanakalpa

Tutor Rating No of Classes Completed Sessions

Complete Your Profile To Get Full Access

Complete Profile Skip

My Classes

Hours # Hours

Save

Logout

Home

Profile

Calendar

Messages

Tutor complete profile

Complete Profile

Upload Cover page

Personal Information

Gender

Birthday

Address

Academic Information

Student ID

Academic Year

Faculty

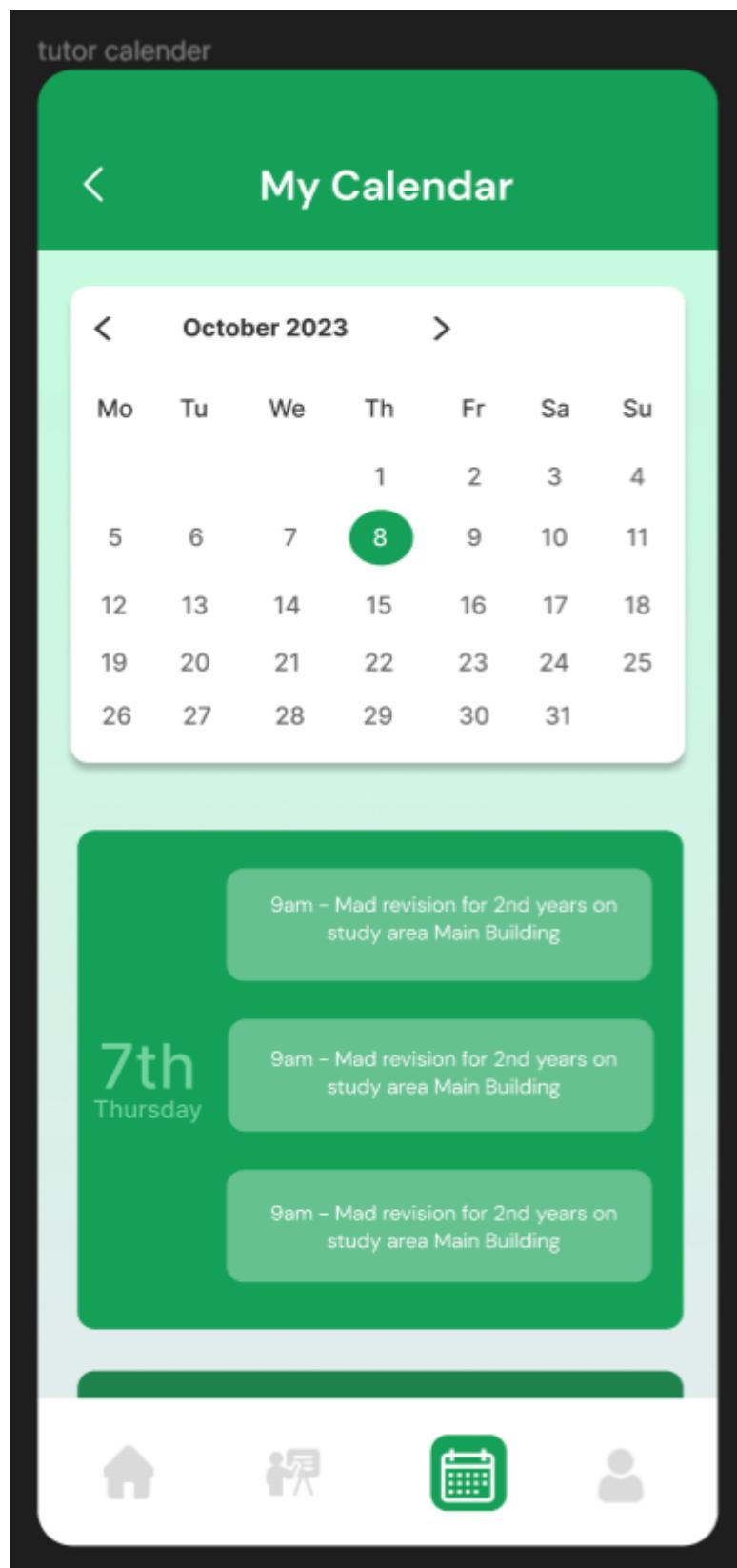
Specialization

Save

Modification 02

- Improve the functionality to calendar component. Included the feature to change schedule.

Version 01



Version 02 (Modified Version)

edit class

Edit Class

Class Title: Object - Oriented Programming

Class Description: "Join a 2-hour class to learn about Object-Oriented Programming with C language. Explore key concepts and practical use in a simple way."

Tags: Enter tag here (OOP, C, Computing, 1st year, 2nd sem)

Price (Rs pre-session): 2000

Duration (hr): 2

Time slot:

- Weekend: 12:30 - 14:30
- Weekend: 15:30 - 17:30
- Monday: 12:30 - 14:30

tutor calender

My Calendar

October 2023

Mo	Tu	We	Th	Fr	Sa	Su
				1	2	3
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	

8th Oct 2023

Title: Mad revision for 2nd years on Main Building

Start: 10:05 **End:** 12:00

View&edit&delete schedule

8th Oct 2023

Title: Mad revision for 2nd years on Main Building

Start: 10:05 **End:** 12:00

Edit **Delete**

schedule update

Schedule updated successfully

schedule update2

Schedule updated successfully

schedule update

Schedule deleted successfully

schedule update2

Schedule deleted successfully

tutor main calender

My Calendar

October 2023

Mo	Tu	We	Th	Fr	Sa	Su
				1	2	3
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	

Add Shdedule

8th Oct 2023

Title:

Start: 00:00 **End:** 00:00

Save **Cancel**

class addes msg

Schedule added successfully

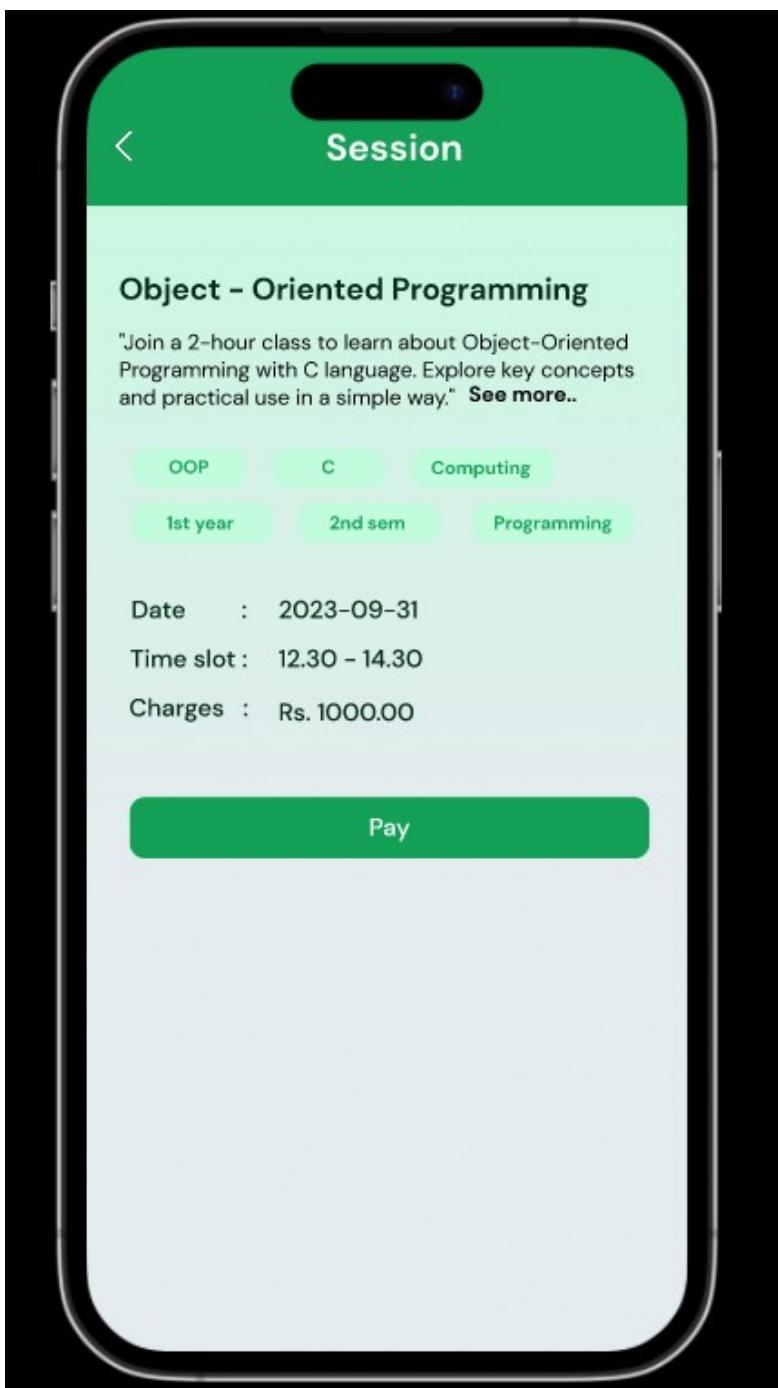
class addes msg 8

Schedule added successfully

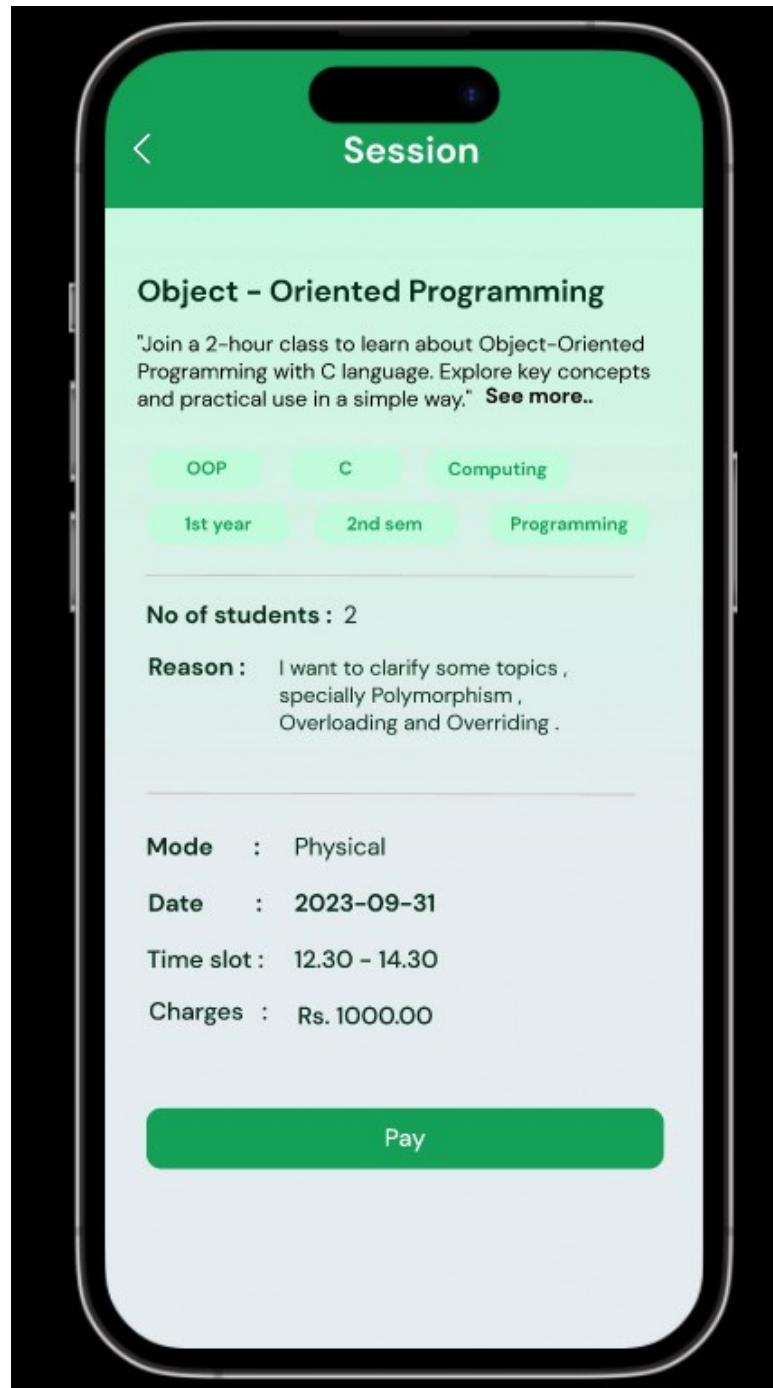
Modification 01

- Added extra Information is to the payment page, based on the suggestion of interviewed user.

Version 01



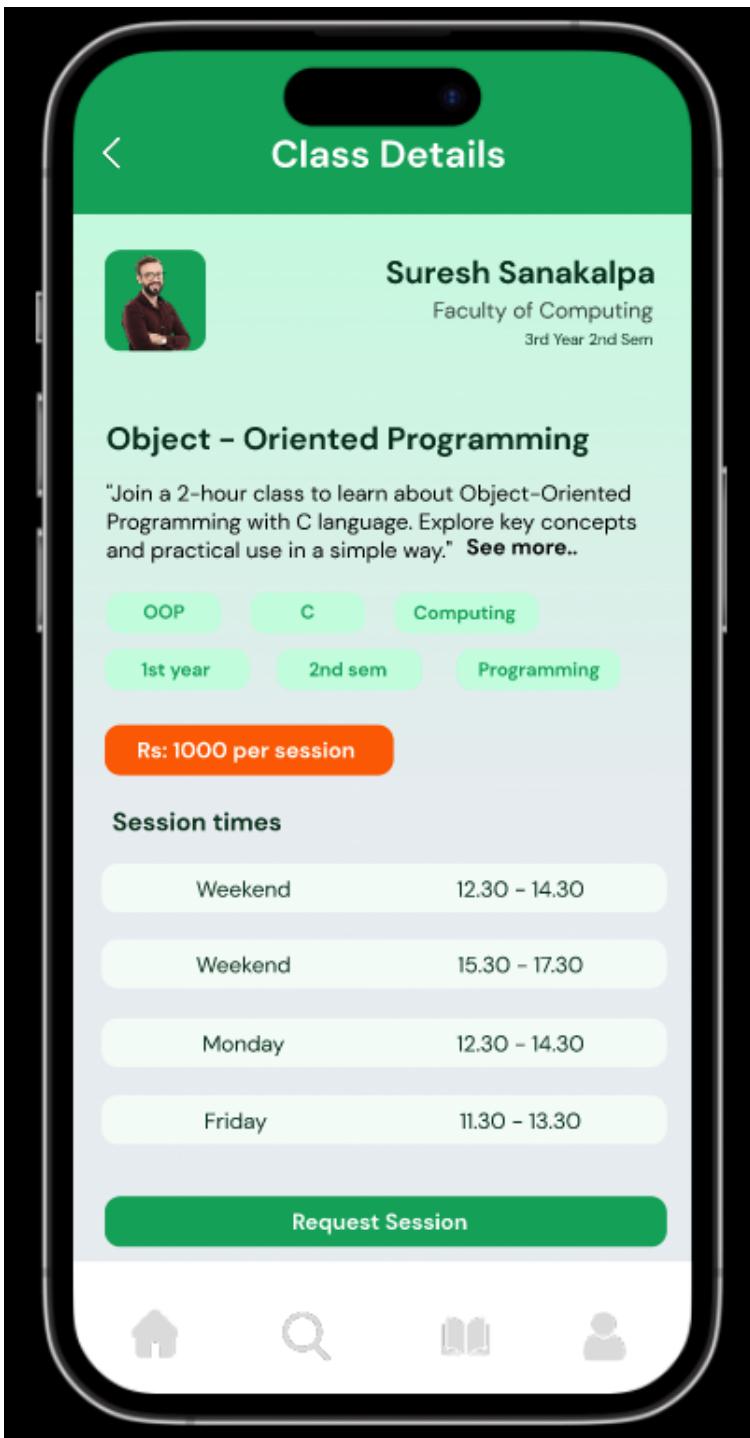
Version 02 (Modified Version)



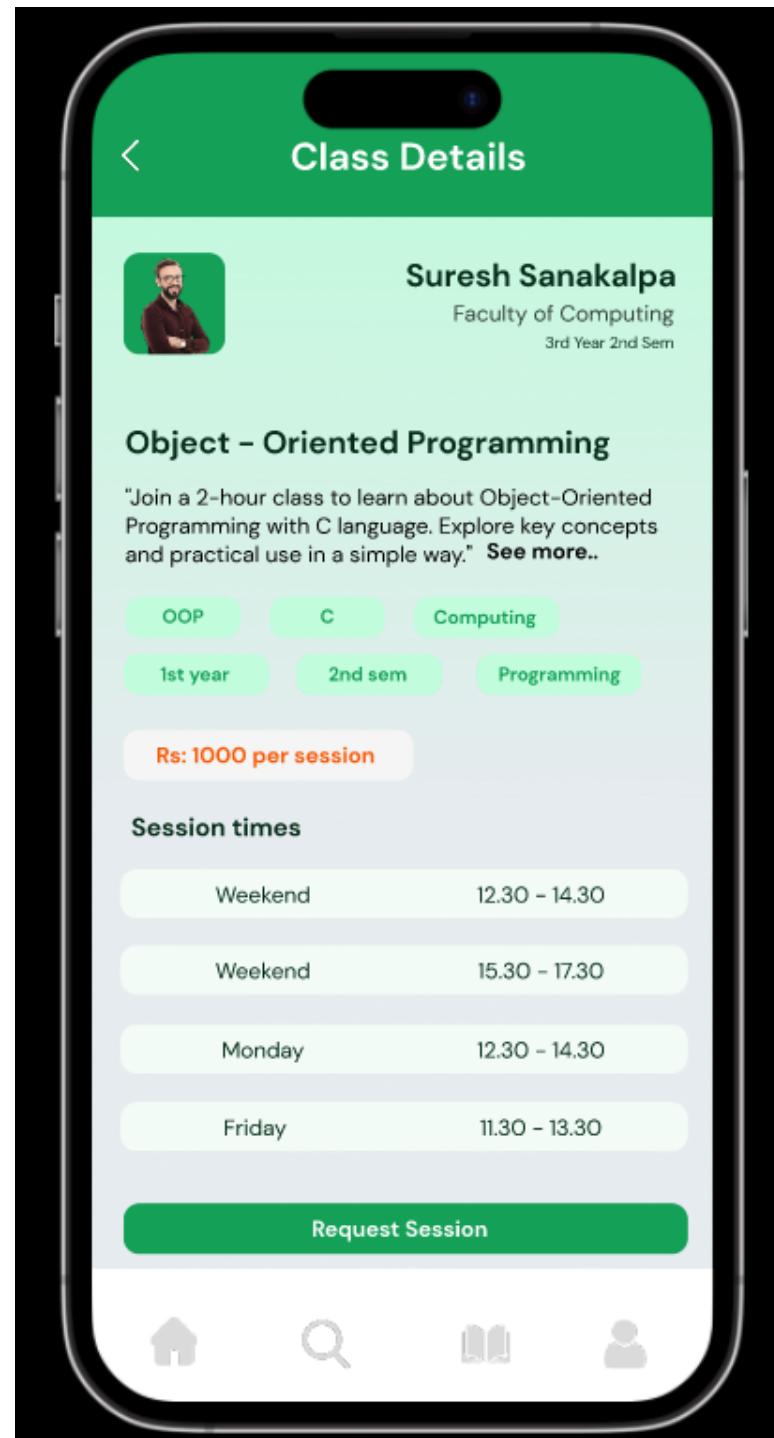
Modification 02

- Changed color of the price tag for more clarity, based on the suggestion of interviewed user.

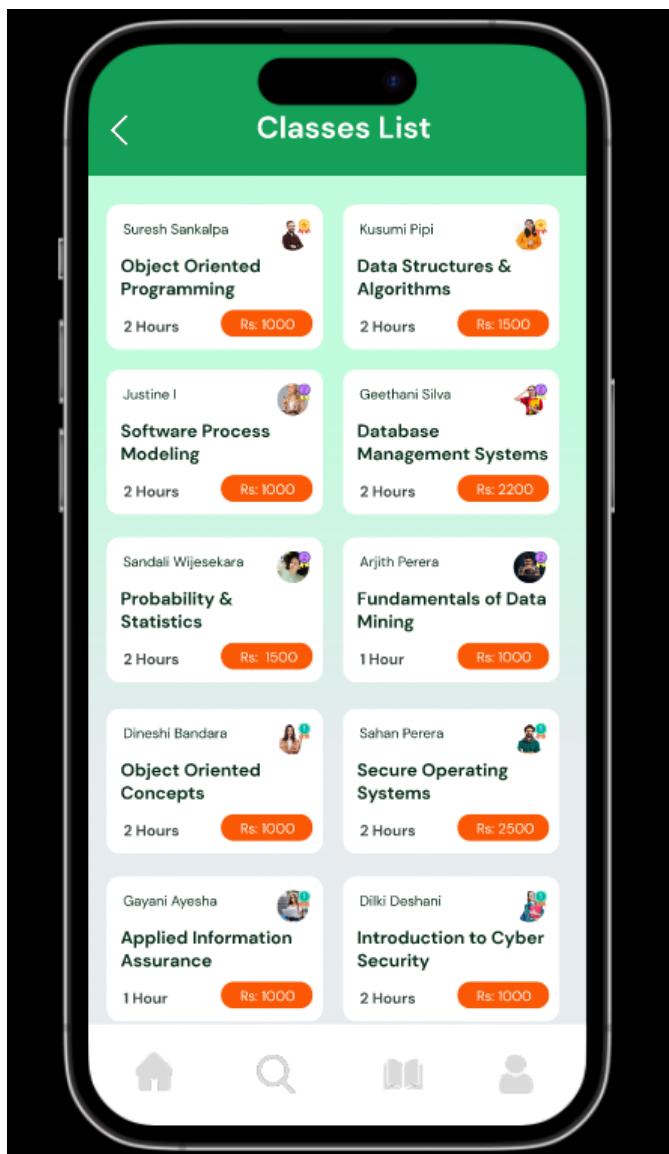
Version 01



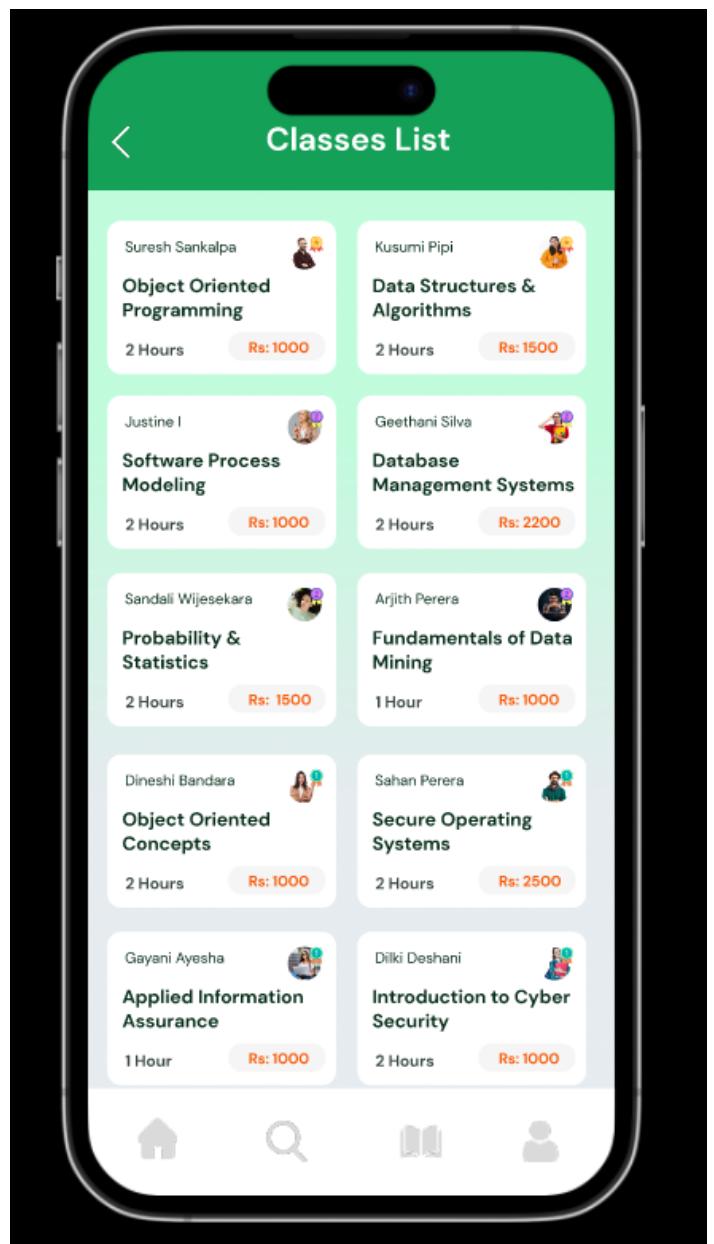
Version 02 (Modified Version)



Version 01



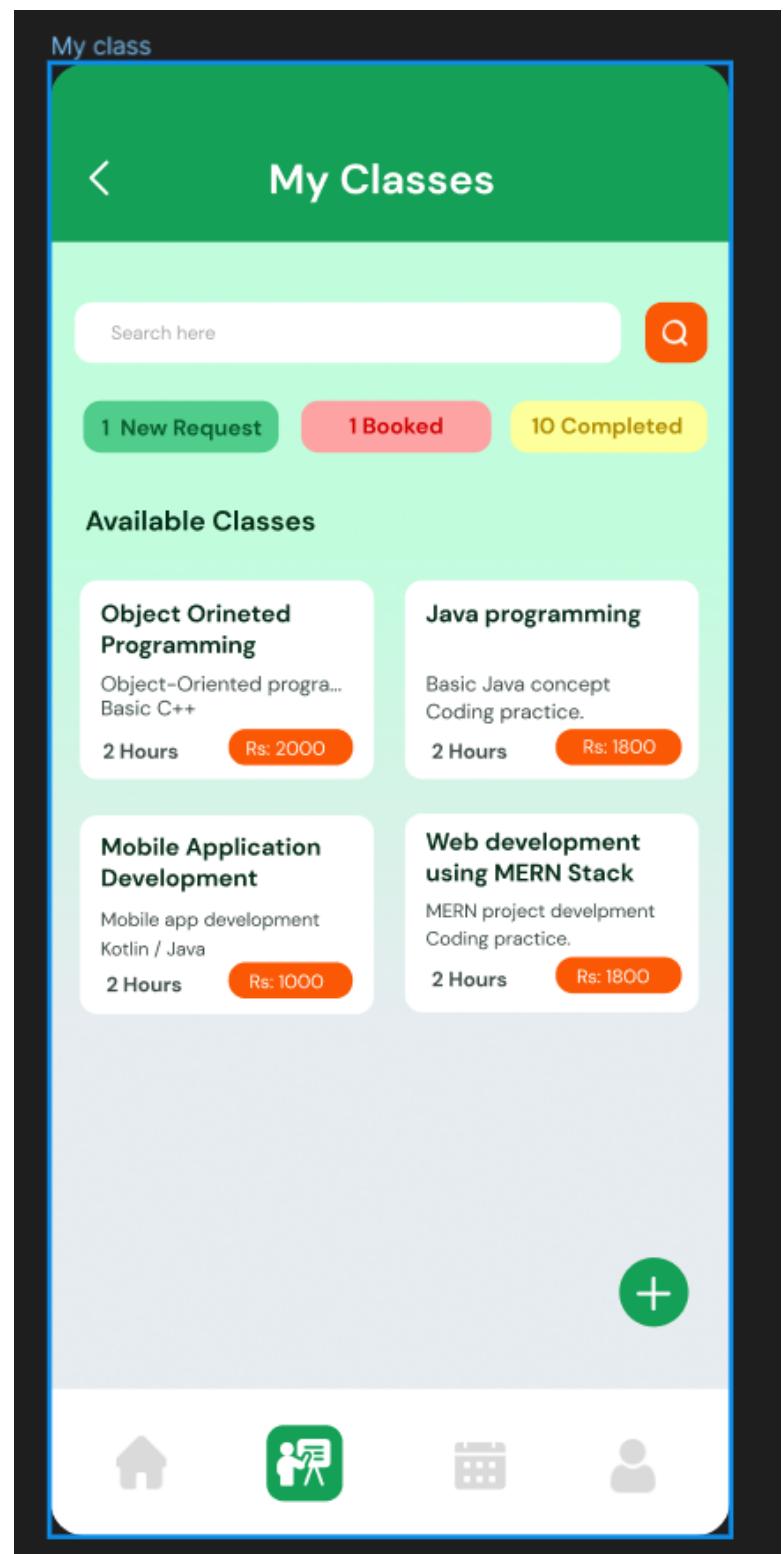
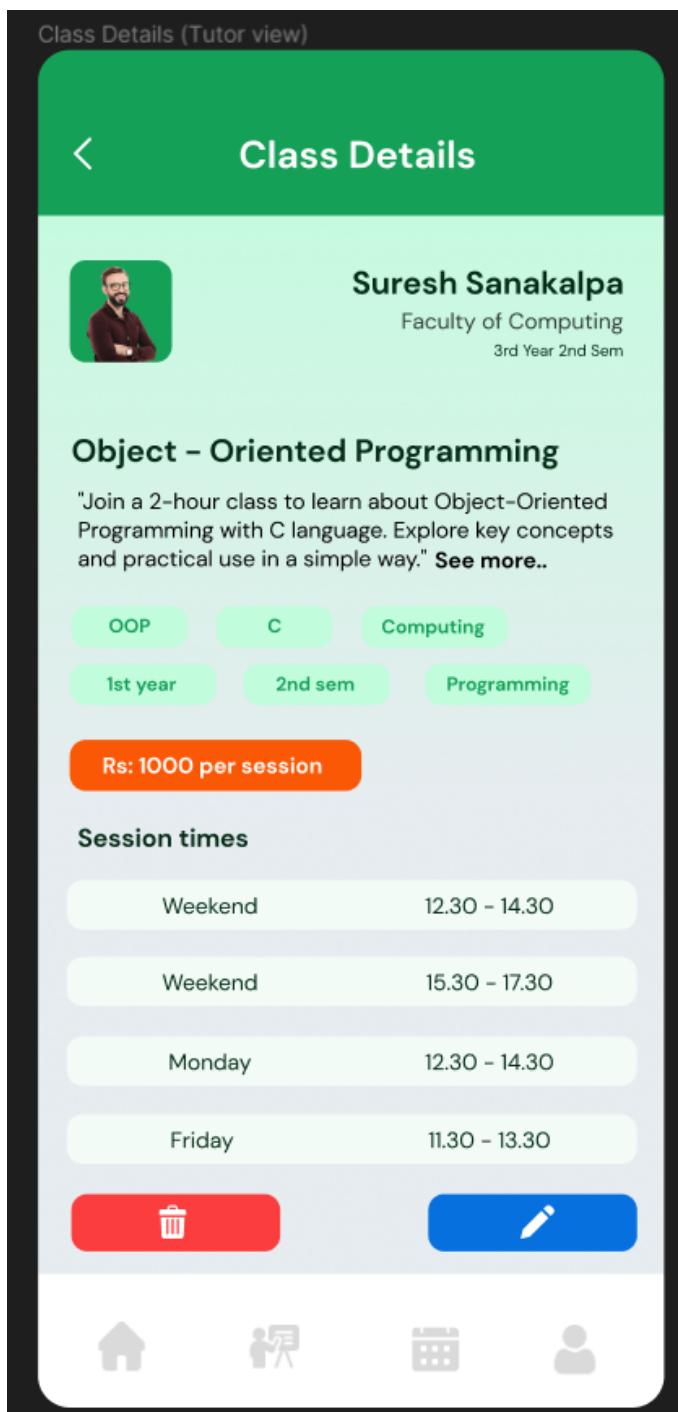
Version 02 (Modified Version)



Modification 01

- Changed color of the price tag for more clarity, based on the suggestion of interviewed user.

Version 01



Version 02 (Modified Version)

The image displays two screenshots of a mobile application interface, likely for a tutoring or class booking platform.

Screenshot 1: Class Details (Tutor view)

This screen shows the details of a specific class offered by a tutor named Suresh Sanakalpa. The tutor's profile picture is shown, along with their name and faculty information: Faculty of Computing, 3rd Year 2nd Sem. The class title is "Object - Oriented Programming". A brief description states: "Join a 2-hour class to learn about Object-Oriented Programming with C language. Explore key concepts and practical use in a simple way." A link to "See more.." is provided. Below the description, the class subject ("Object Oriented Programming"), programming language ("C"), and category ("Computing") are listed. The session timing is indicated as "1st year" and "2nd sem". The price is listed as "Rs: 1000 per session". Session times are listed as:

- Weekend: 12.30 – 14.30
- Weekend: 15.30 – 17.30
- Monday: 12.30 – 14.30
- Friday: 11.30 – 13.30

At the bottom, there are red and blue action buttons, and a navigation bar with icons for home, classes, calendar, and user profile.

Screenshot 2: My Classes

This screen shows a list of available classes. At the top, there is a search bar with a magnifying glass icon and three status indicators: "1 New Request" (green), "1 Booked" (red), and "10 Completed" (yellow). The section title is "Available Classes". Four class offerings are listed in a grid:

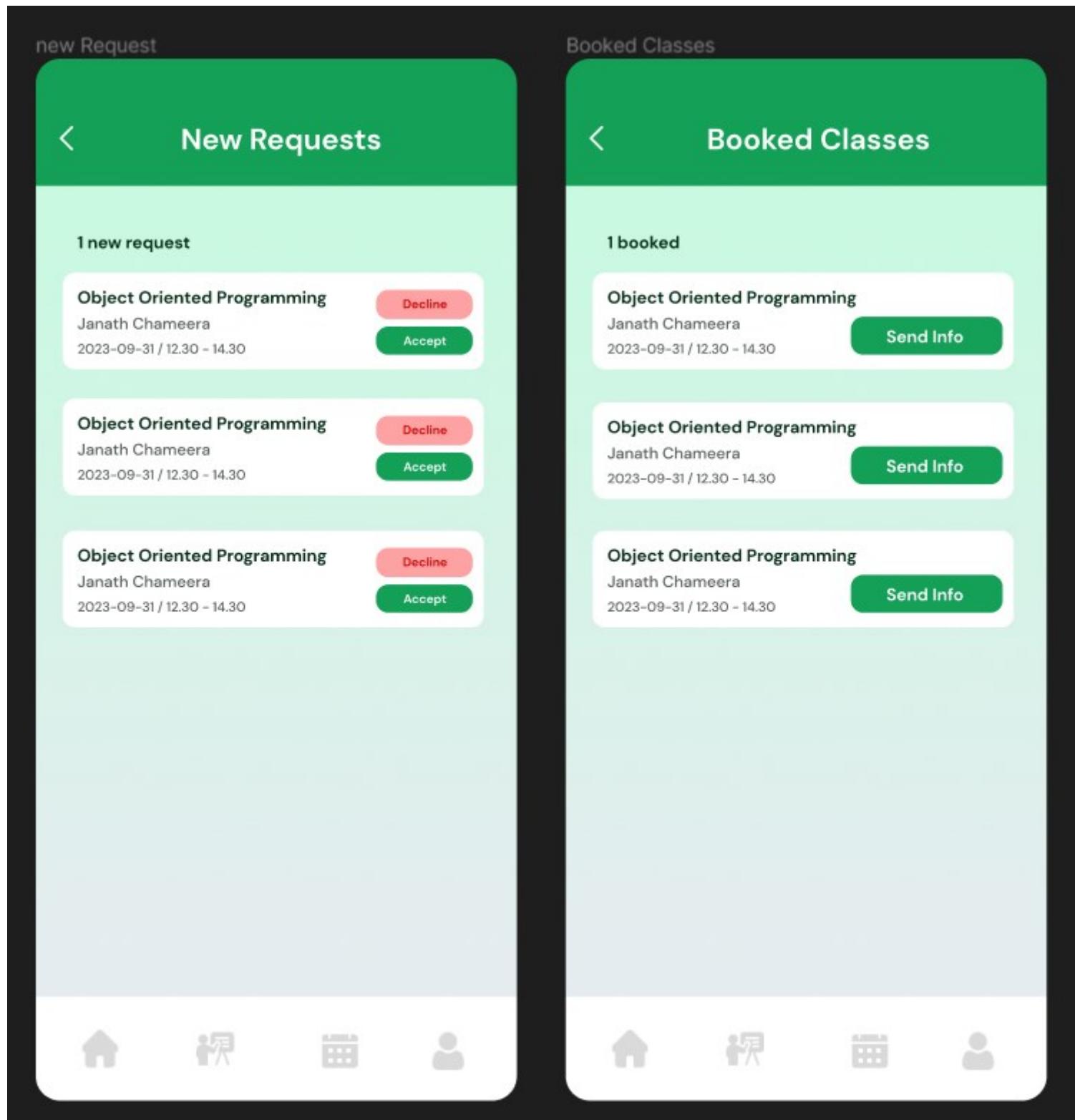
- Object Oriented Programming**: Basic C++ concepts, 2 Hours, Rs: 2000.
- Java programming**: Basic Java concepts, Coding practice, 2 Hours, Rs: 1800.
- Mobile Application Development**: Mobile app development, Kotlin / Java, 2 Hours, Rs: 1000.
- Web development using MERN Stack**: MERN project development, Coding practice, 2 Hours, Rs: 1800.

At the bottom, there is a large orange circular button with a plus sign (+) and a navigation bar with icons for home, classes, calendar, and user profile.

Modification 02:

- Remove decline, accept and send info button, to reduce the complexity and prevent accidental touch.

Version 01



Version 02 (Modified Version)

new Request

< New Request

1 new request

Object Oriented Programming
Janath Chameera
2023-09-31 / 12.30 - 14.30

Object Oriented Programming
Janath Chameera
2023-09-31 / 12.30 - 14.30

Object Oriented Programming
Janath Chameera
2023-09-31 / 12.30 - 14.30

new Request

< Booked Classes

1 booked

Object Oriented Programming
Janath Chameera
2023-09-31 / 12.30 - 14.30

11 Milestone 7: Implementation

11.1 Github Implementation Link

<https://github.com/IT21388934/TutorMe>

11.2 Prototype Version 02 Link

[https://www.figma.com/file/Usv4uPDQUBHi0N4bQVU3cG/TutorMe-\(Version2\)?type=design&mode=design&t=CKLuP4SFwCJChV6U-1](https://www.figma.com/file/Usv4uPDQUBHi0N4bQVU3cG/TutorMe-(Version2)?type=design&mode=design&t=CKLuP4SFwCJChV6U-1)

11.3 Prototype Version 02 – User Feedback

Tutor Questionnaire

Tutor - Prototype V2 - Quiz
User feedback for the second prototype.

* Indicates required question

In contrast to the initial prototype, how comfortable did you feel with the tutor registration process in the second prototype?

1	2	3	4	5		
Hard	<input type="radio"/>	Easy				

In contrast to the initial prototype, how comfortable did you feel with the navigation process in the second prototype? *

1	2	3	4	5		
Hard	<input type="radio"/>	Easy				

Pre-fill responses, then click "Get link"

In contrast to the initial prototype, how would you rate the clarity and completeness of tutor profiles in the second prototype? *

1	2	3	4	5		
Very Bad	<input type="radio"/>	Very Good				

In contrast to the initial prototype, how comfortable did you feel when managing classes in the second prototype? *

1	2	3	4	5		
Hard	<input type="radio"/>	Easy				

In contrast to the initial prototype, how comfortable did you feel with the payment process in the second prototype? *

1	2	3	4	5		
Hard	<input type="radio"/>	Easy				

In contrast to the initial prototype, how comfortable did you feel with the process of sharing lecture notes in the second prototype? *

1	2	3	4	5		
Hard	<input type="radio"/>	Easy				

Overall, how satisfied are you with the user-friendliness of the second prototype? *

1	2	3	4	5		
Very Bad	<input type="radio"/>	Very Good				

[Get link](#) Page 1 of 1

Student Questionnaire

Student - Prototype V2 - Quiz
User feedback for the second prototype.

* Indicates required question

In contrast to the initial prototype, how comfortable did you feel with the student registration process in the second prototype?

1 2 3 4 5
Hard Easy

In contrast to the initial prototype, how comfortable did you feel with the navigation process in the second prototype? *

1 2 3 4 5
Hard Easy

In contrast to the initial prototype, how would you rate the clarity and completeness of student profiles in the second prototype? *

Very Bad 1 2 3 4 5 Very Good
Hard Easy

In contrast to the initial prototype, how would you rate the clarity and completeness of tutor profiles in the second prototype? *

1 2 3 4 5
Hard Easy

In contrast to the initial prototype, how comfortable did you feel with the payment process in the second prototype? *

1 2 3 4 5
Hard Easy

In contrast to the initial prototype, how comfortable did you feel when booking classes through the app? *

1 2 3 4 5
Hard Easy

In contrast to the initial prototype, how comfortable did you feel with the process of searching and downloading lecture notes in the second prototype? *

1 2 3 4 5
Hard Easy

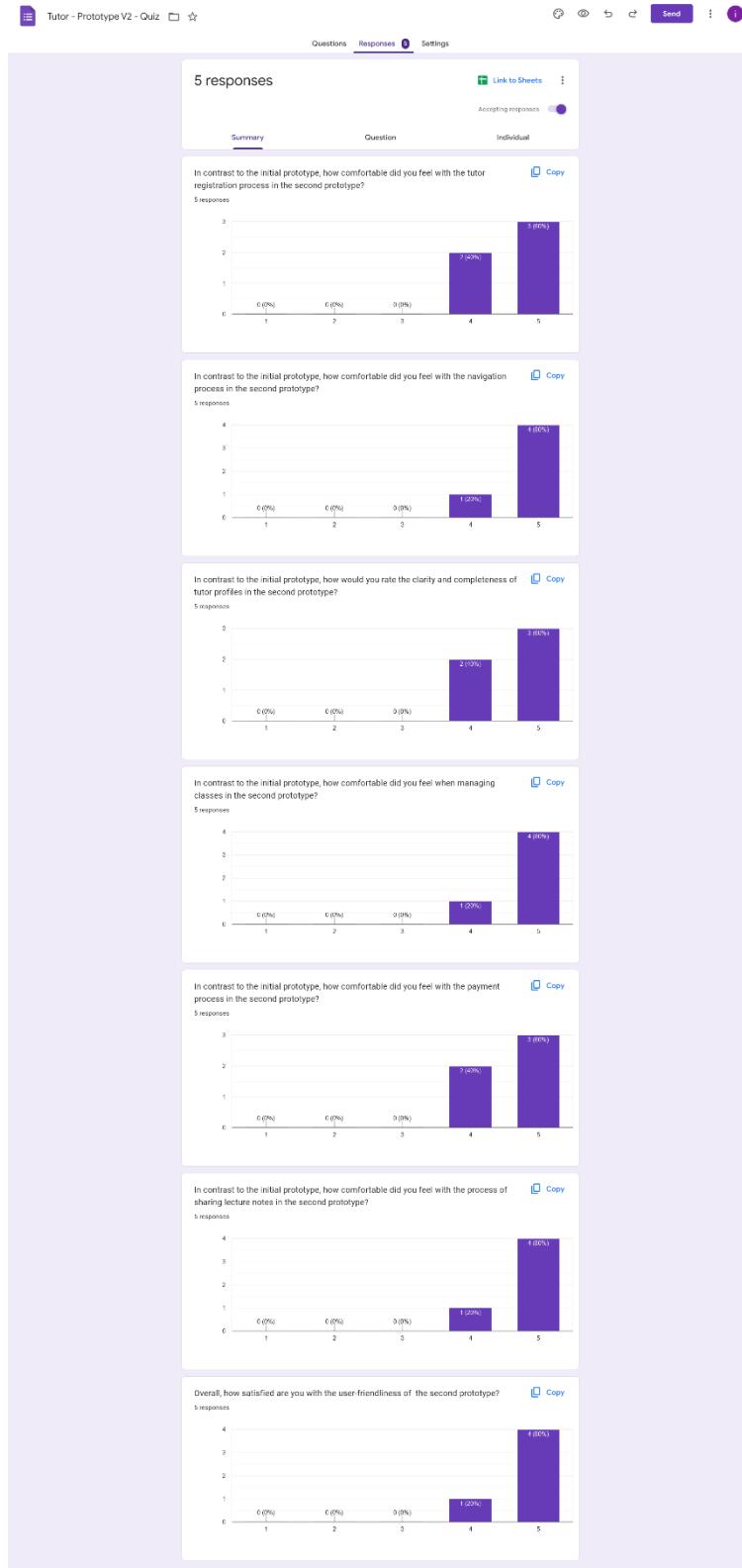
Overall, how satisfied are you with the user-friendliness of the second prototype? *

Very Bad 1 2 3 4 5 Very Good
Very Bad Very Good

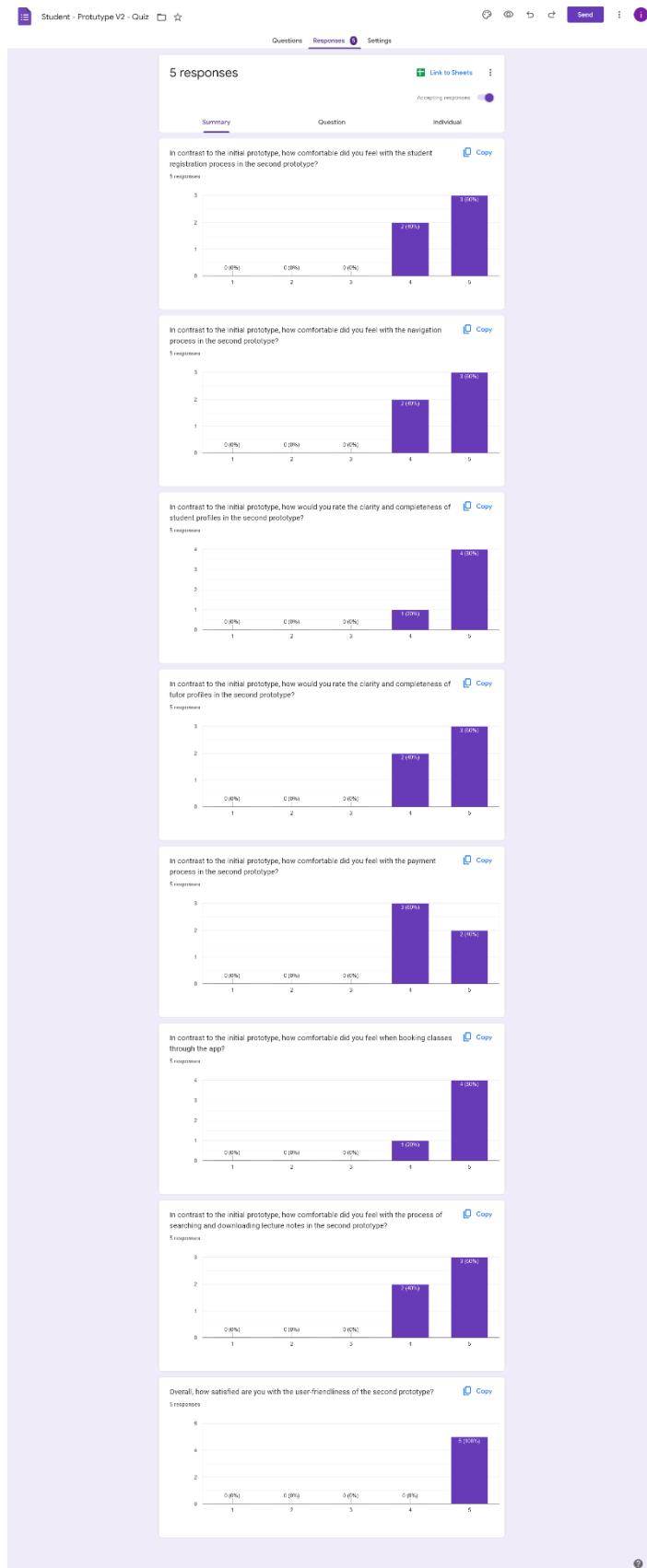
[Get link](#) Page 1 of 1

Plan for Data Analysis

Tutor Questionnaire - Results



Student Questionnaire - Results



11.4 Test Plan

1. Introduction

- **Purpose:** To ensure the reliability, functionality, and performance of the application.
- **Scope:** This test plan covers functional, usability, security, and performance testing.

2. Test Objectives

- Verify that the app functions as intended.
- Identify and rectify any usability issues.
- Ensure the app is secure and data is protected.
- Assess the app's performance under various conditions.

3. Test Environments

- Devices: Android and iOS smartphones
- Operating Systems: iOS 14 and later, Android 10 and later
- Network: Different network conditions (Wi-Fi, 4G, 3G)
- Various screen sizes and resolutions

4. Test Cases

4.1. Functional Testing

Function	Task
Login and Registration	<ul style="list-style-type: none"> Verify that users can register with valid credentials. Ensure users can log in using registered credentials. Test for password reset functionality.
Profile Management	<ul style="list-style-type: none"> Check if users can update their profiles (name, profile picture, etc.). Verify that profile information is displayed correctly.
Class Management	<ul style="list-style-type: none"> Verify that tutors can create new classes, specifying details such as subject, date, time, and duration. Verify that tutors can update class details or cancel classes if necessary.
Class Search and Selection	<ul style="list-style-type: none"> Test search functionality based on subjects and categories. Ensure tutors' profiles display accurate information (experience, reviews).
Session Booking and Management	<ul style="list-style-type: none"> Confirm that users can schedule and manage sessions with tutors. Verify that sessions are added to both user's and tutor's calendars.
Payment Integration	<ul style="list-style-type: none"> Test payment process for session booking, including adding/removing payment methods. Verify that tutors can initiate withdrawal requests for their earnings. Ensure that tutors can view their withdrawal history, including approved, pending, and declined withdrawals. Verify that payments are processed securely, and receipts are generated.
Feedback and Rating System	<ul style="list-style-type: none"> Test the ability to provide feedback and ratings after sessions. Verify that feedback and ratings are displayed on tutors' profiles.
Study Materials Management	<ul style="list-style-type: none"> Verify that tutors can upload study materials (PDFs, documents) to the app. Confirm that students can access study materials shared by tutors. Test downloading and viewing of study materials to ensure compatibility.
Study Material Search	<ul style="list-style-type: none"> Test the search functionality to find study materials by subject, topic, or tutor. Verify that search results are accurate and relevant.

4.2. Usability Testing

- Assess the user interface for intuitiveness and ease of use.
- Verify accessibility and compatibility with various devices.
- Evaluate the app's response time for different actions.
- Check if the app provides clear instructions and feedback to users.

4.3. Security Testing:

- Verify data encryption during transmission.
- Ensure secure storage of user data.
- Evaluate user authentication and authorization mechanisms.

4.4. Performance Testing:

- Measure app performance under normal network conditions.
- Test app responsiveness and loading times.
- Evaluate app behavior under heavy loads and concurrent users.
- Assess battery and memory usage during prolonged use.

5. Test Execution

Test case ID: 001	Test designed by: Rashen W.G.M
Test title: Testing the Tutor Registration functionality	Test designed day: 25/10/2023
Test priority (High/Medium/Low): High	Test executed by: Rashen W.G.M
Module name: Login and Registration	Test executed day: 27/10/2023
Description: Tutor details are saved only if they pass all validations	
Preconditions (if there are any): None	
Dependencies (if there are any): None	
Test steps: Splash screen -> New user? Sign up -> As Tutor -> Enter details -> Sign up	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
1.1	First name: Dulaj Last name: Rathnayake Email: dulaj.r@gmail.com Contact number: 0781231235 Password: dulaj123 Confirm password: dulaj12345	Display an error message “Passwords do not match”	Display an error message “Passwords do not match”	Pass	All the fields are required, and passwords should match
1.2	First name: Dulaj Last name: Rathnayake Email: dulaj.r@gmail.com Contact number: 0781231235 Password: dulaj123 Confirm password: dulaj123	Registration successful and navigate to the tutor home	Registration successful and navigate to the tutor home	Pass	All the fields are required, and passwords should match

Test case ID: 002	Test designed by: Rashen W.G.M
Test title: Testing the Tutor Update Profile functionality	Test designed day: 25/10/2023
Test priority (High/Medium/Low): High	Test executed by: Rashen W.G.M
Module name: Profile Management	Test executed day: 27/10/2023
Description: Tutor details are saved only if they pass all validations	
Preconditions (if there are any): Tutor should be logged into the app with valid credentials	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Profile -> Edit Profile -> Enter details -> Update Profile	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
2.1	First name: Dulaj Last name: Rathnayake Email: dulaj.r@gmail.com Contact number: 0781231235 Gender: male DOB: 12/12/2000 Address: 12/A, Galle Student Id: BM13232243 Year: 3 Semester: 2 Faculty: Computing Specialization: Data Science	Display an error message “Please enter a valid student ID number”	Display an error message “Please enter a valid student ID number”	Pass	All the fields are required
2.2	First name: Dulaj Last name: Rathnayake Email: dulaj.r@gmail.com Contact number: 0781231235 Gender: male DOB: 12/12/2000 Address: 12/A, Galle Student Id:	Display a successful toast message “Profile updated”	Display a successful toast message “Profile updated”	Pass	All the fields are required

IT21246692 Year: 3 Semester: 2 Faculty: Computing Specialization: Data Science				
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Test case ID: 003	Test designed by: Siriwardhana S.M.R.R.
Test title: Testing the Add Class functionality	Test designed day: 26/10/2023
Test priority (High/Medium/Low): High	Test executed by: Siriwardhana S.M.R.R.
Module name: Class Management	Test executed day: 28/10/2023
Description: Class details are saved only if they pass all validations	
Preconditions (if there are any): Tutor should be logged into the app with valid credentials	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Home -> My Classes -> Add Class -> Enter details -> Submit	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
3.1	Title: Object Oriented Programming Description: Category: Computing Tags: oop, ooc Price: 3000 Duration: 2 Time slots: Monday(12.30 – 2.30)	Display an error message “Class description is required”	Display an error message “Class description is required”	Pass	All the fields are required
3.2	Programming Description: Unleash the power of OOP and take your coding skills to the next level with our new OOP class. Category: Computing Tags: oop, ooc Price: 3000 Duration: 2 Time slots: Monday(12.30 – 2.30)	Display a successful toast message “Class added”	Display a successful toast message “Class added”	Pass	All the fields are required

Test case ID: 004	Test designed by: Siriwardhana S.M.R.R.
Test title: Testing the Update Class functionality	Test designed day: 26/10/2023
Test priority (High/Medium/Low): Medium	Test executed by: Siriwardhana S.M.R.R.
Module name: Class Management	Test executed day: 28/10/2023
Description: Class details are saved during the update process only if they pass all validations	
Preconditions (if there are any): Tutor should be logged into the app with valid credentials	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Home -> My Classes -> Select Class -> Edit -> Enter details -> Update	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
4.1	Title: Object Oriented Programming Description: OOP for beginners. Category: Computing Tags: oop, ooc Price: 3000 Duration: 2 Time slots:	Display an error message “One or more time slot is required”	Display an error message “One or more time slot is required”	Pass	All the fields are required
4.2	Programming Description: OOP for beginners. Category: Computing Tags: oop, ooc Price: 3000 Duration: 2 Time slots: Tuesday(14.30 – 16.30), Friday (13.30 – 15.30)	Display a successful toast message “Class updated”	Display a successful toast message “Class updated”	Pass	All the fields are required

Test case ID: 005	Test designed by: Kumanayake I. A.
Test title: Testing the Request Session functionality	Test designed day: 26/10/2023
Test priority (High/Medium/Low): High	Test executed by: Kumanayake I. A.
Module name: Session Booking and Management	Test executed day: 28/10/2023
Description: A session request can be made only if the user provides correct details	
Preconditions (if there are any): Student should be logged into the app with valid credentials	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Home -> Search -> Select class -> Request Session -> Enter details -> Submit	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
5.1	Date: 31/10/2023 Time slot: 12.30 – 14.30 Reason: Number of students: 2 Mode: Online	Display a red color asterisk in front of reason label to indicate it is required	Display a red color asterisk in front of reason label to indicate it is required	Pass	All the fields are required
5.2	Date: 31/10/2023 Time slot: 12.30 – 14.30 Reason: Need assistance with OOP concepts for the upcoming exam Number of students: 2 Mode: Online	Display a successful toast message “Session request made”	Display a successful toast message “Session request made”	Pass	All the fields are required

Test case ID: 006	Test designed by: Kumanayake I. A.
Test title: Testing the Make Payment functionality	Test designed day: 26/10/2023
Test priority (High/Medium/Low): High	Test executed by: Kumanayake I. A.
Module name: Session Booking and Management	Test executed day: 28/10/2023
Description: A payment can be made only if the user provides valid card details	
Preconditions (if there are any): Student should be logged into the app with valid credentials. A previous session requested by the student should be accepted by the tutor.	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Profile -> My Sessions -> Filter by “accepted” status -> Select class -> Pay	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
6.1	Card number: 42424242424242 Expiration: 6/22 CVC: 333	Display an error message “Your card’s expiration year is invalid”	Display an error message “Your card’s expiration year is invalid”	Pass	All the fields should be valid
6.2	Card number: 42424242424242 Expiration: 8/24 CVC: 333	Display a successful toast message “Payment successful”	Display a successful toast message “Payment successful”	Pass	All the fields should be valid

Test case ID: 007	Test designed by: Kumarathunga S. A. D. S.
Test title: Testing the Add Study Material functionality	Test designed day: 26/10/2023
Test priority (High/Medium/Low): High	Test executed by: Kumarathunga S. A. D. S.
Module name: Study Materials Management	Test executed day: 28/10/2023
Description: Study material can be added only if all the details are provided	
Preconditions (if there are any): Tutor should be logged into the app with valid credentials	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Profile -> Study Materials -> Add Study Material -> Enter details -> Submit	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
7.1	Title: English Grammar Description: Category: English Document: Eng- lishShortNote.pdf	Display an error message “Descrip- tion is required”	Display an error message “Descrip- tion is required”	Pass	All the fields are required
7.2	Title: English Grammar Description: English grammar notes Category: English Document: Eng- lishShortNote.pdf	Display a success- ful toast message “Study Material added”	Display a success- ful toast message “Study Material added”	Pass	All the fields are required

Test case ID: 008	Test designed by: Kumarathunga S. A. D. S.
Test title: Testing the Download Study Material functionality	Test designed day: 26/10/2023
Test priority (High/Medium/Low): High	Test executed by: Kumarathunga S. A. D. S.
Module name: Study Materials Management	Test executed day: 28/10/2023
Description: Study material can be downloaded only if the download location is selected.	
Preconditions (if there are any): Student should be logged into the app with valid credentials	
Dependencies (if there are any): None	
Test steps: Splash screen -> Login -> Home -> Study Materials -> Select Study Material -> Download	

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)	Comments
8.1	-	Display an error message “Please select a download location”	Display an error message “Please select a download location”	Pass	Download location should be selected
8.2	Select a download location	Display a successful toast message “Study Material downloaded”	Display a successful toast message “Study Material downloaded”	Pass	Download location should be selected

6. Test Results

User	Test case	Result
Student	Registration	✓
	Login	✓
	Search class	✓
	View class details	✓
	Request Session	✓
	View my sessions	✓
	Filter sessions based on status	✓
	View session details	✓
	Edit session (only for pending sessions)	✓
	Cancel session (only for pending sessions)	✓
	Pay for accepted session	✓
	Rate session (only for completed sessions)	✓
	Search study materials	✓
	Preview study material	✓
	Download study material	✓
	Edit profile	✓
	Logout	✓
Tutor	Registration	✓
	Login	✓
	View my classes	✓
	Add class	✓
	Edit class	✓
	Delete class	✓
	Filter session requests	✓
	View session request	✓
	Accept session request (only for pending sessions)	✓
	Reject session request (only for pending sessions)	✓
	Send session information (location/link) (only for booked sessions)	✓
	View personal calendar	✓
	Add calendar event	✓

Edit calendar event	✓
Delete calendar event	✓
View my study materials	✓
Search study material	✓
Add study material	✓
View study material	✓
Edit study material	✓
Delete study material	✓
View wallet	✓
View payment methods	✓
Add payment method	✓
Edit payment method	✓
Delete payment method	✓
Make a withdrawal	✓
View past transactions	✓
Edit profile	✓
Logout	✓

- The user interface of the app was intuitive and easy to use. Test users navigated through the app without significant issues, finding features and functions effortlessly.
- The app was accessible and compatible with a wide range of devices (iOS and Android smartphones). No major compatibility issues were identified.
- The app demonstrated satisfactory response times, with an average of 2 seconds, for various actions, such as loading pages, sending messages, and accessing study materials. Users did not experience excessive delays.
- The app provided clear and user-friendly instructions and feedback to users. Users received informative messages and prompts, enhancing their understanding of app features and actions.
- User data was securely stored, and no vulnerabilities related to data storage were identified. Data was protected against unauthorized access.
- User authentication and authorization mechanisms were effective and well-implemented. Users could access their accounts securely and only perform authorized actions.
- The app's performance under normal network conditions was satisfactory. Users experienced minimal issues related to network performance.
- The app performed well even under heavy loads and concurrent users. It showed scalability and maintained reasonable response times.
- The app's battery and memory usage during prolonged use were within acceptable limits. Users did not report excessive battery drain or memory-related issues.

7. Conclusion

Although the initial testing has yielded positive results in terms of functionality, usability, security, and performance, it's important to note that software testing is an ongoing process. Further testing can be performed to continually enhance and validate the app's functionality to ensure it meets the intended standards and requirements.

12 Requirement Specification

12.1 Usability Goals

- Offers a user-friendly mobile application for the users.
- Develop a seamless, and comprehensive solution.

12.2 User Experience Goals

- Eliminating the complexities and limitations found in existing solutions.
- Intuitive and Easy to navigate platform.

12.3 Functional Requirements

- Provide intuitive searching functionalities.
- Easy to use booking and payment process.
- Attractive and functional user interface design

12.4 Non-Functional Requirements

- Robust security protocols to protect user data.
- Quick response time

13 Design Principles

- **Hierarchy:** Hierarchy was employed to establish a clear visual order in the app's interface.
- **Consistency:** Consistency was maintained in the app's layout, color scheme, and typography. This uniformity enhances user familiarity and eases navigation across different sections of the app.
- **Progressive Disclosure:** Information and features were revealed gradually as users engaged with the app, preventing overwhelming users with too much information at once.
- **Contrast:** Contrasting colors and text styles were employed to make critical information and interactive elements stand out. This helps users quickly identify and interact with important features.
- **Proximity:** Related elements, like tutor profiles and their ratings, were placed near each other, facilitating intuitive association and a seamless user experience.

14 Project Management

14.1 Meetings

Meetings were held regularly, typically on a weekly basis, to ensure consistent progress and effective coordination. Deadlines were established and adhered to for specific project milestones. Communication primarily occurred via Google Meet platform and was facilitated through comprehensive documentation and regular status updates.

14.2 Risk Management

Throughout the project, various risks were contemplated. Potential scope changes that had the potential to disrupt project timelines were identified and prepared for. Technical challenges that required addressing were also recognized and proactively managed to prevent any setbacks.

14.3 Milestones

[Green color is used to denote the time taken to complete the milestone]

Milestones	Week 02	Week 03	Week 04	Week 05	Week 06	Week 07	Week 08	Week 09	Week 10	Week 11	Week 12
Milestone 01											
Milestone 02											
Milestone 03											
Milestone 04											
Milestone 05											
Milestone 06											
Milestone 07											
Milestone 08											

TABLE 7. Milestone Timeline

14.4 Problems Encountered

During the project, several unforeseen obstacles were encountered., requiring quick and strategic handling. Delays emerged due to unforeseen technical complexities, which were addressed through a collective effort, with the team collaborating to identify suitable solutions. Additionally, unforeseen scope changes threatened the project's timeline. These were managed by conducting through impact assessments and making necessary adjustments to the project plan, resulting in successful resolution of these unanticipated challenges, and ultimately ensuring project completion within stipulated timelines.

15 Conclusion

The results of this project are marked by the successful development of a functional pilot version of the app. Notably, user satisfaction levels were quite high, underscoring the app's usability and relevance. Key lessons were learned, emphasizing the vital role of organic user involvement during the requirements gathering phase. This user-driven approach was pivotal in shaping the app's features and functionalities. The significance of effective UI design in creating an intuitive interface became evident, ensuring a seamless user experience. Moreover, the value of incorporating user feedback before reaching the implementation stage was reinforced, fine-tuning the app according to user preferences. Lastly, collaborative issue management emerged as a critical skill, facilitating timely solutions to unforeseen challenges, and ensuring the project's overall success.

References

- [1] “MyTutor.” MyTutor.lk. <https://mytutor.lk/> (Accessed July 25, 2023).
- [2] “Siplo” Siplo.lk. <https://siplo.lk/> (Accessed July 25, 2023).
- [3] “OnlineTuition.” OnlineTuition.lk. <https://www.onlinetuition.lk/> (Accessed July 25, 2023).

Glossary

- User Personas - Detailed, semi-fictional profiles representing the ideal characteristics and behaviours of target users for a product or service.
- Empathy Maps - Visual tools that help understand and summarize the feelings, needs, and experiences of users or customers.
- User Stories - Concise, user-focused descriptions of desired software functionality, vital for agile development and effective communication in projects.
- User Flows - Predefined sequences of interactions and actions that guide users through a digital product to achieve specific goals.
- Service Blueprint - Visual diagrams that outline the steps and interactions in a service process, emphasizing user experiences and processes.

Appendix

Initial User Survey Responses

- Student Questionnaire - <https://forms.gle/mZuQMuo2u5ubrh9W6>
- Tutor Questionnaire - <https://forms.gle/nbdI6e8nHxQsfgbk8>
- Student Prototype Quiz - <https://forms.gle/GppuyqhUtvgmAkBK6>
- Tutor Prototype Quiz - <https://forms.gle/nfRnDQ1sUG3Jskut7>
- Student Prototype V2 Quiz – <https://forms.gle/2YaV9vEnaEBmdFfG6>
- Tutor Prototype V2 Quiz - <https://forms.gle/Swaoa6U1LggdKVc28>

Contribution Table

Member ID	Name	Function
IT21118340	Kumarathunga S. A. D. S.	<ul style="list-style-type: none"> • Introduction • Background • Milestone 02 • Milestone 06 • Requirement Specification
IT21291364	Rashen W.G.M	<ul style="list-style-type: none"> • Background • Design Process • Milestone 04 • Project Management,
IT21267772	Kumanayake I. A.	<ul style="list-style-type: none"> • Milestone 02 • Milestone 03 • Design Principles
IT21388934	Siriwardhana S.M.R.R.	<ul style="list-style-type: none"> • Milestone 01 • Milestone 05 • References • Glossary • Appendix

