



# USER CENTRIC DESIGN



# GROUP 15

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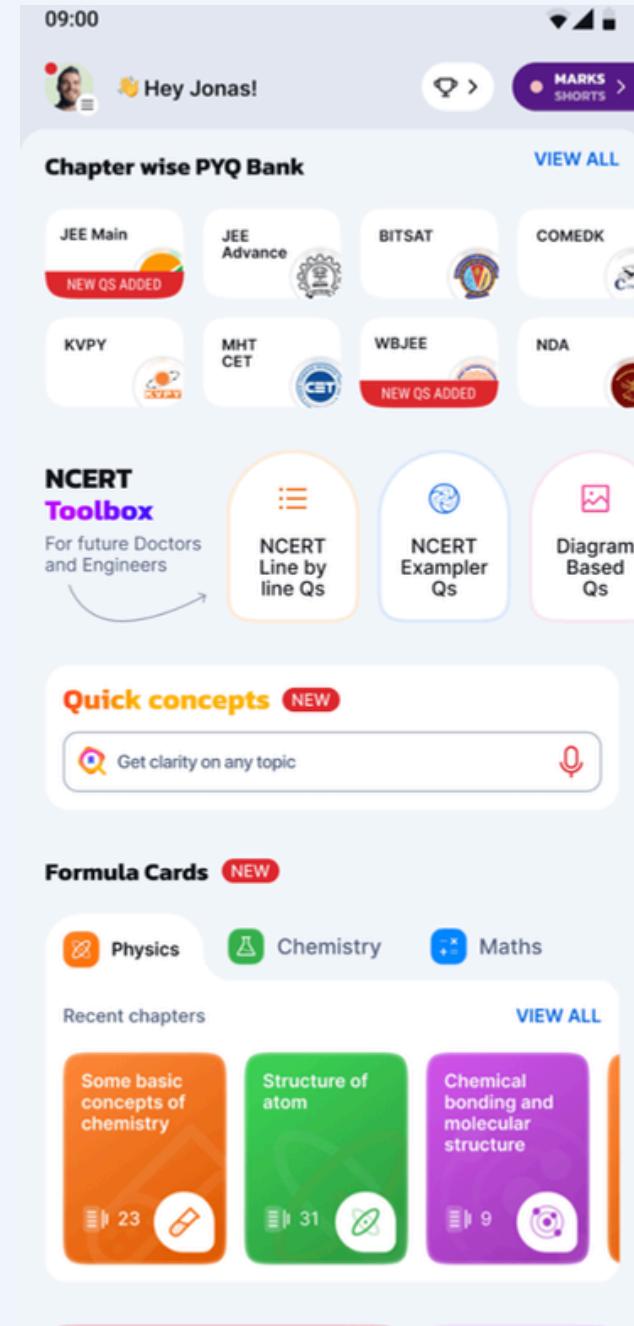
# Project Overview

- Xcelerate is a comprehensive education-based mobile app designed for students preparing for competitive exams like JEE and NEET.
- It offers features such as solving previous year questions (PYQs), taking mock tests, creating individual and group tests, and accessing a vast question bank with text and video solutions (for subscribers).
- Students receive detailed performance analysis, including topic-wise and time-based insights.
- They can discuss doubts in the community but only for questions from the question bank.
- The app also provides formula cards for quick revision and one-on-one doubt-solving sessions with teachers via chat, subscription model includes detail analysis of result, access to video solutions and doubt solving with teacher.

# Competitive Analysis



# Competitive Analysis



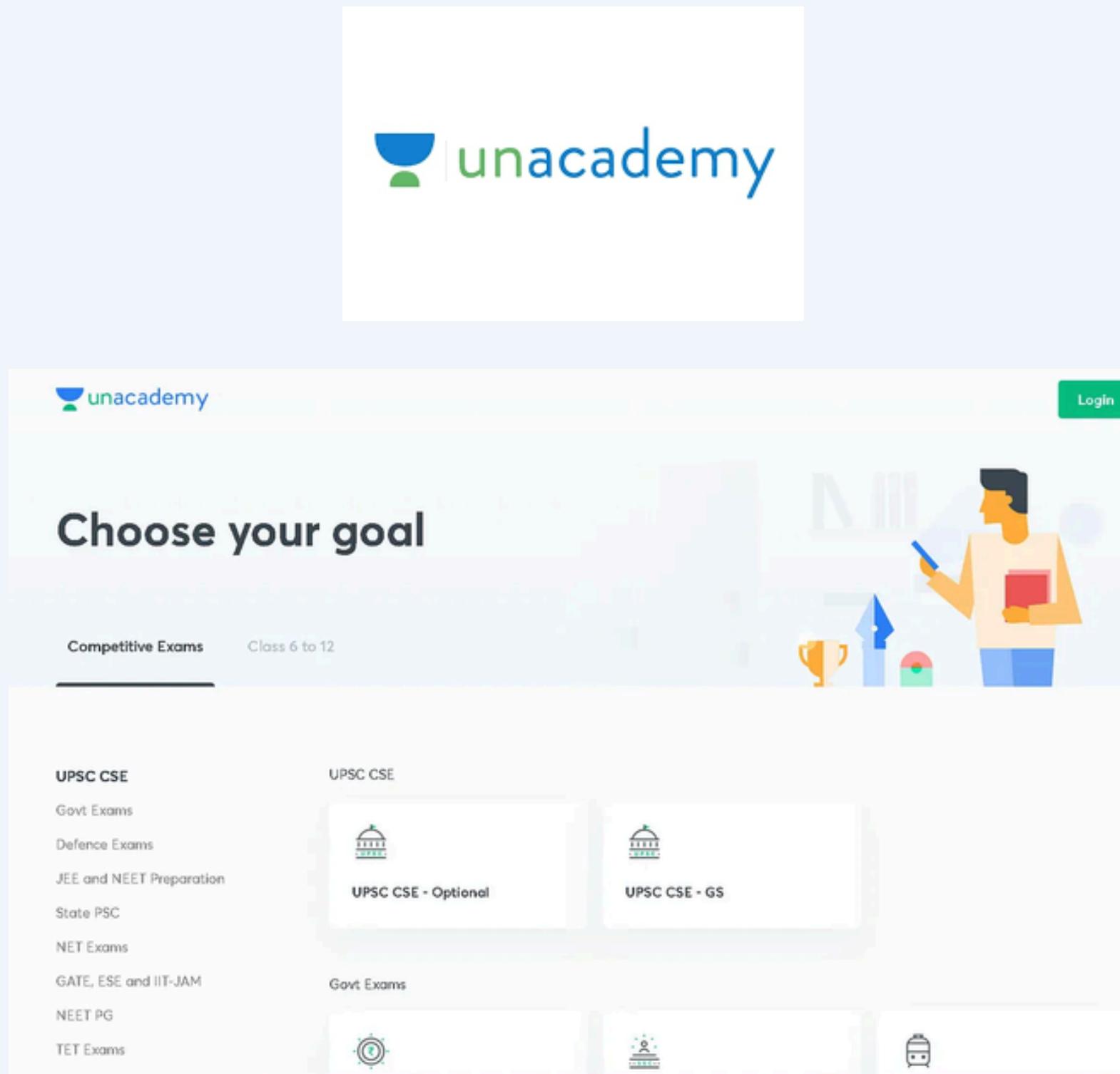
## Strengths :

- Marks app has a lot of features like a large question bank, a large set of tests etc., which can help in the overall preparation of a student for any exam like JEE, NEET.

## Weaknesses :

- Marks app has a very cluttered UI which increases the cognitive load on the user.

# Competitive Analysis



## Strengths :

- Unacademy has a plain and simple UI which improves user navigation and decreases cognitive load

## Weaknesses :

- Unacademy's landing page lacks a search button and search bar and only contains a long list of options.

# Survey



Surveyed 15 students studying in class 11 and 12 preparing for competitive exams.

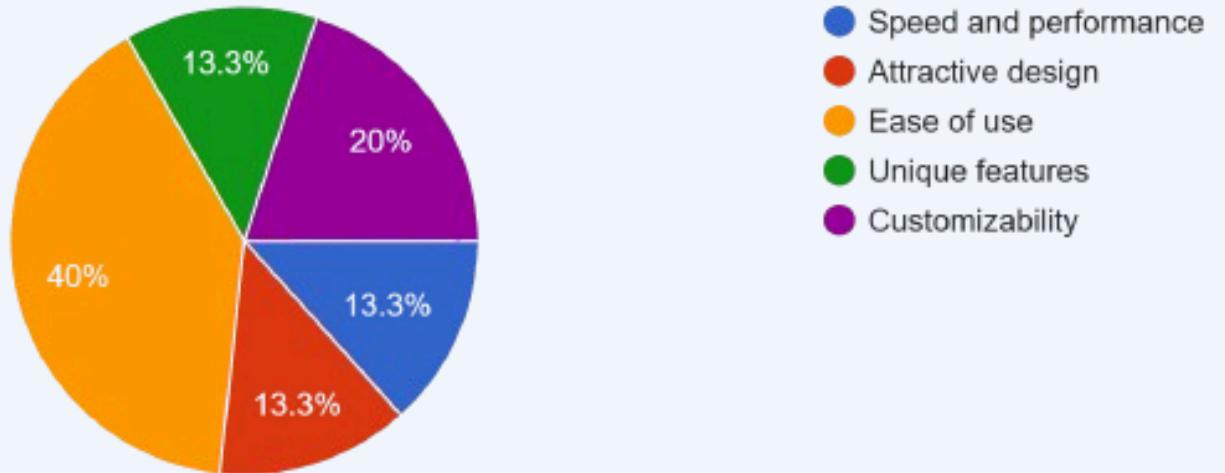
## Questionnaire :

- What things do you think are missing in your offline coaching classes?
- Which feature in the app do you think can help you the most in your exam preparation ?
- How much time do you spend studying online per day?
- What layout style do you prefer in a mobile app?
- What frustrates you most about existing learning apps?
- How do you prefer to understand solutions of difficult questions?
- Would you consider subscribing for personalized doubt-solving, test result analysis, video solutions?
- What type of result analysis would you find most beneficial?
- What is the most important factor in your app experience?
- Which background do you prefer for reading?

# Survey Results

What is the most important factor in your app experience?

15 responses

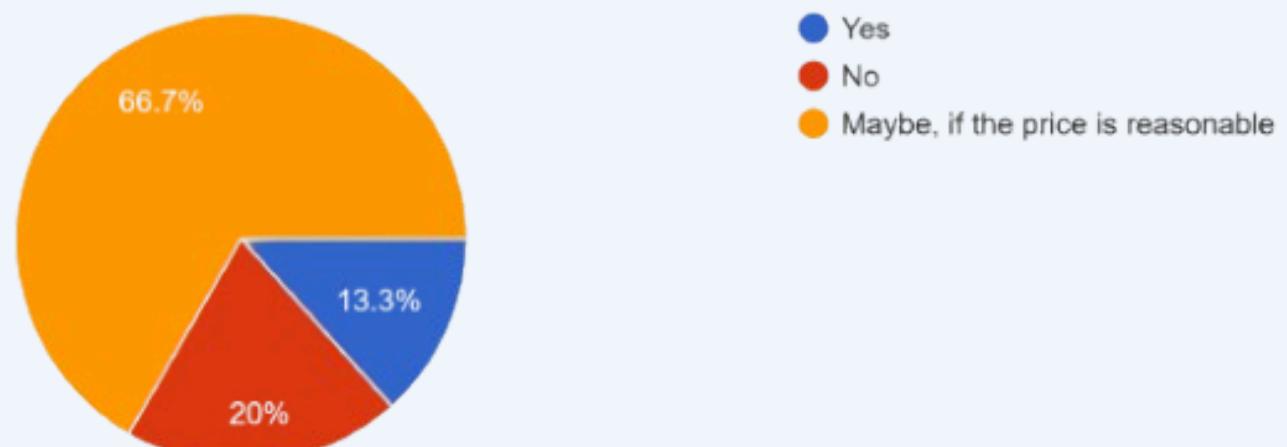


42% of students considers ease of use as a most important factor in app experience

66.7% of students agrees to subscribe if price is resonable

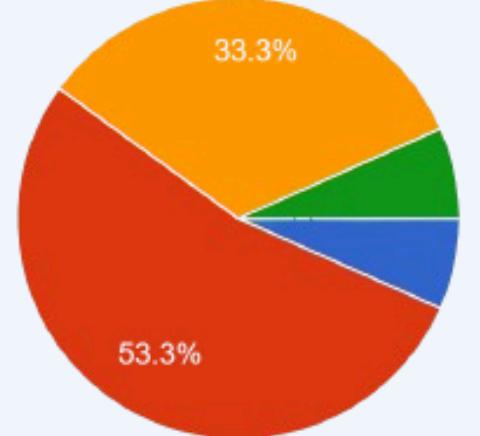
Would you consider subscribing for personalized doubt-solving, test result analysis, video solutions?

15 responses



How much time do you spend studying online per day?

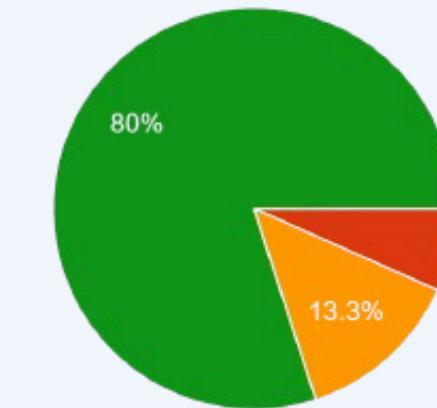
15 responses



- Less than 1 hour
- 1-3 hours
- 3-5 hours
- More than 5 hours

Which feature in the app do you think can help you the most in your exam preparation ?

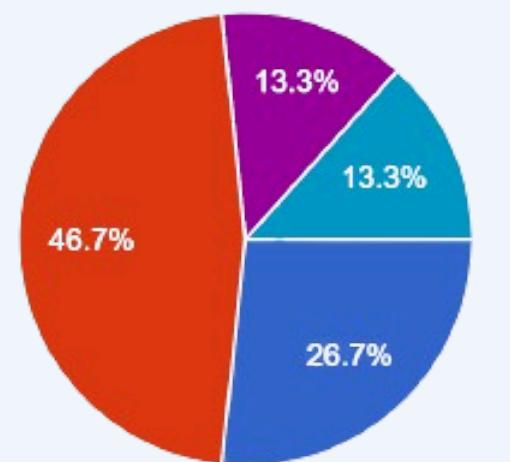
15 responses



- Question bank containing pyqs of JEE and NEET
- Personalised doubt resolution by expert
- Mock tests with in depth performance analysis report
- All of the above

What things do you think are missing in your offline coaching classes?

15 responses



- Lack of student-teacher interaction
- Lack of doubt solving sessions by teachers
- Study material not upto the mark
- Not a strong student community
- None of the above
- Set a strong student community

53% of students spent 3-5 hours studying online.

80% of student thinks all the features mentioned in options are important.

46.7% of students thinks lack of doubt solving by teachers is missing in offline classes

# Design Statement

- Xcelerate will feature an intuitive, structured, and visually engaging mobile interface for competitive exam preparation. The design will prioritize ease of navigation, readability, and accessibility, ensuring seamless interaction with features like mock tests, question banks, result analysis, and doubt-solving.
- A cohesive color palette, responsive layouts, and dynamic UI elements will enhance user engagement, while premium subscribers get an enriched experience with detailed test analysis , video solutions and one-on-one teacher interactions.

# User Persona

**SHREYA**  
**NEET ASPIRANT**  
**AGE: 18**  
**CLASS: HIGHER  
SECONDARY**



## Goals

- Secure a top rank in NEET to gain admission to a prestigious medical college.
- Develop a deep understanding of Biology concepts and improve speed in Physics and Chemistry problem-solving.
- Build exam confidence by practicing PYQs and taking mock tests.



## Motivation

- Needs detailed result analysis to identify strengths and weaknesses by topic.
- Prefers video solutions to clarify tough concepts and learn problem-solving techniques.
- Values a structured and streamlined approach to manage her preparation alongside school.

## Wants



- simple and minimalistic app layout
- Interactive video solutions
- A customizable study plan



## Behavior



## Pains

- Finds existing apps lacking in essential features like effective doubt resolution and meaningful performance analysis.
- Gets frustrated with cluttered apps that are difficult to navigate and slow to load.

# ARYAN JEE ASPIRANT

AGE: 18

CLASS: HIGHER SECONDARY



## Goals

- Crack JEE with a top rank to secure admission to an IIT.
- Master difficult subjects like Physics, Chemistry, and Mathematics through targeted practice.
- Build confidence by solving PYQs and taking mock tests under exam conditions.



## Motivation

- Needs mock tests with detailed performance analysis to assess her preparation.
- Prefers personalized video solutions for understanding difficult questions.
- Values one-on-one doubt resolution with expert teachers for tackling tough topics.

## Wants



## Pains

- Likely to subscribe for personalized doubt-solving and access to expert teachers if the subscription is reasonably priced and includes additional benefits like video solutions and mock tests.
- Actively uses question banks and mock tests for daily preparation.

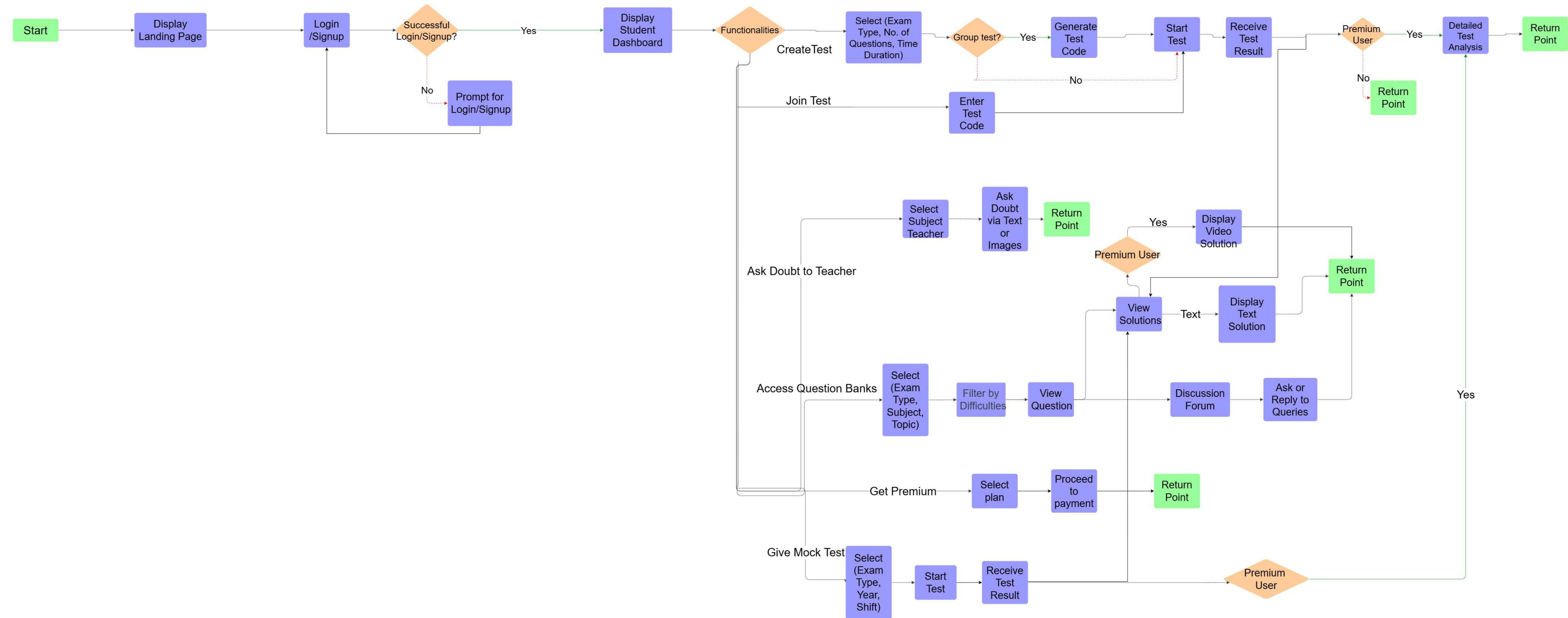


## Behavior

- Likely to subscribe for personalized doubt-solving and access to expert teachers if the subscription is reasonably .
- Actively uses question banks and mock tests for daily preparation.

# Information Architecture







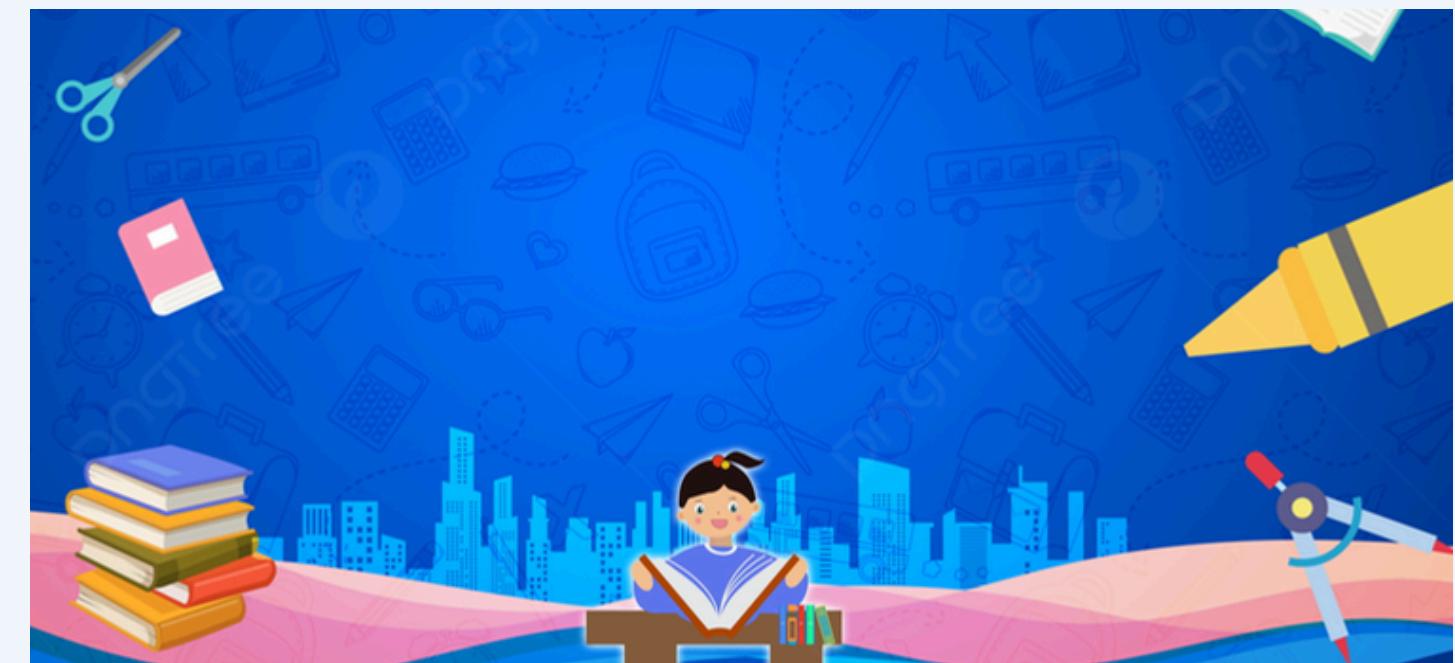
Moodboard, color-  
pallete, typography

# About Theme - Blue

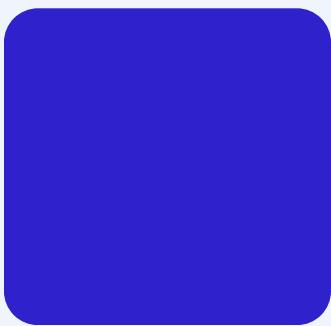
- Shades of blue inspire trust, focus, and intelligence, creating a calm and engaging learning environment.
- Lighter blues enhance clarity, while deeper blues add confidence and professionalism, making the app feel reliable



# Mood Board



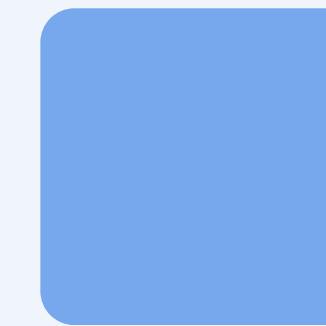
# Color Palette



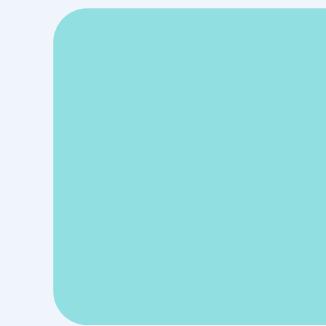
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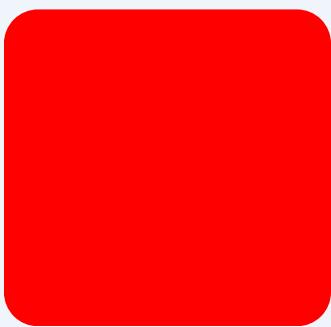
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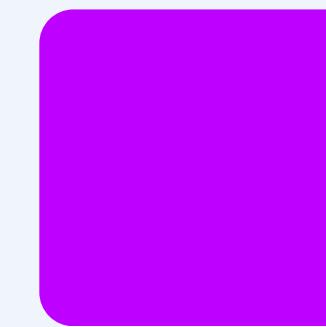
#ff0000



#ffb000



#14ff00



#bd00ff

# Typography

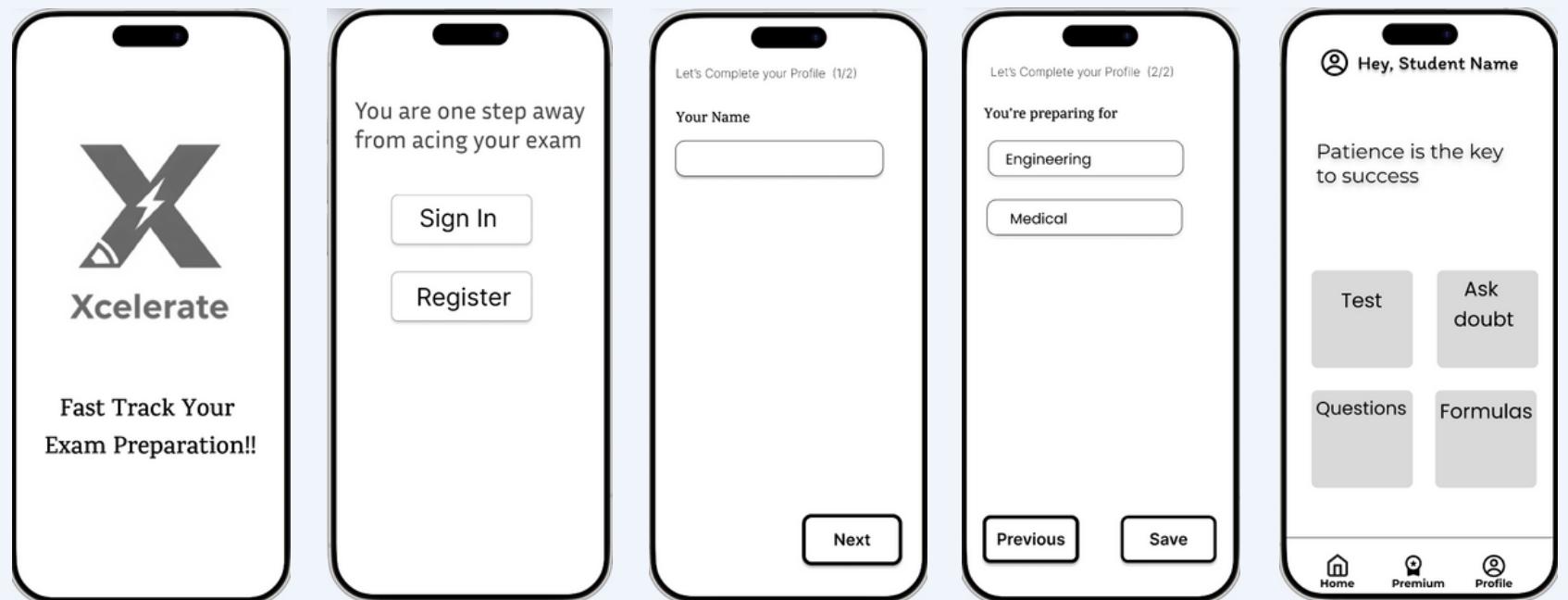
Karma

Montserrat

Poppins

# Medium Fidelity Wireframe

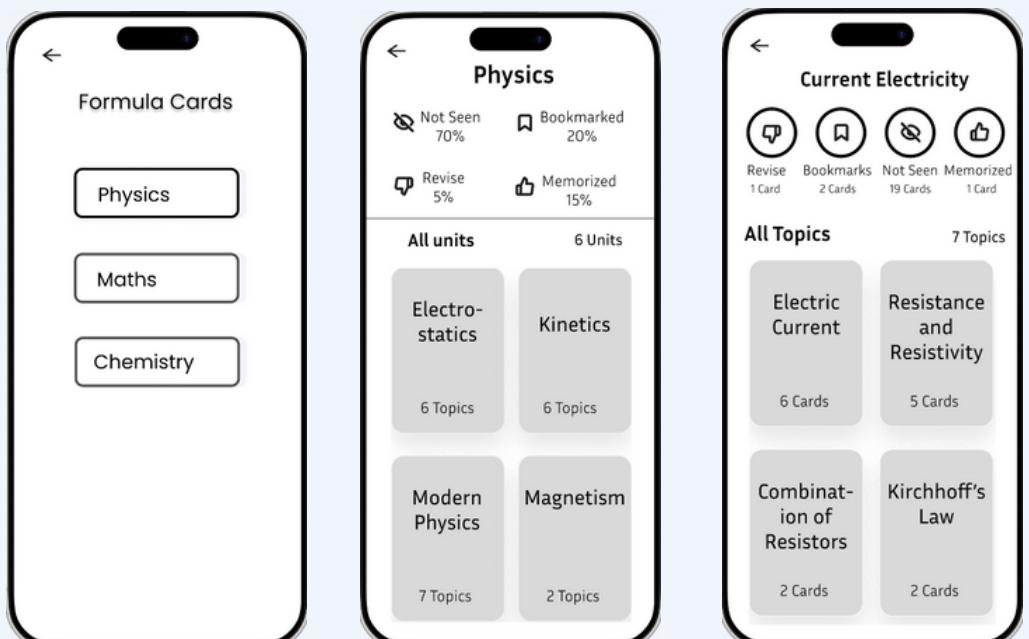




## Login, Signup & Dashboard Pages

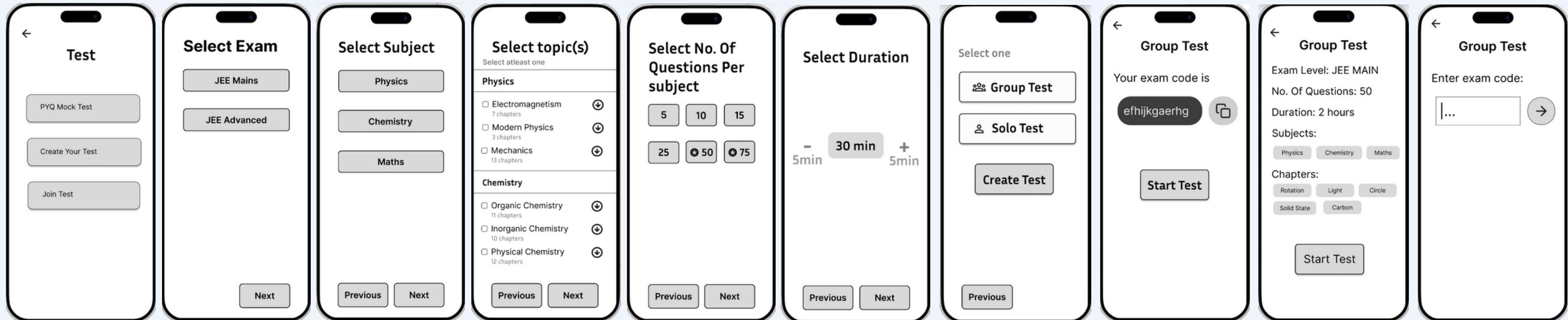


## Question Bank, Ask & Solve Doubts Pages

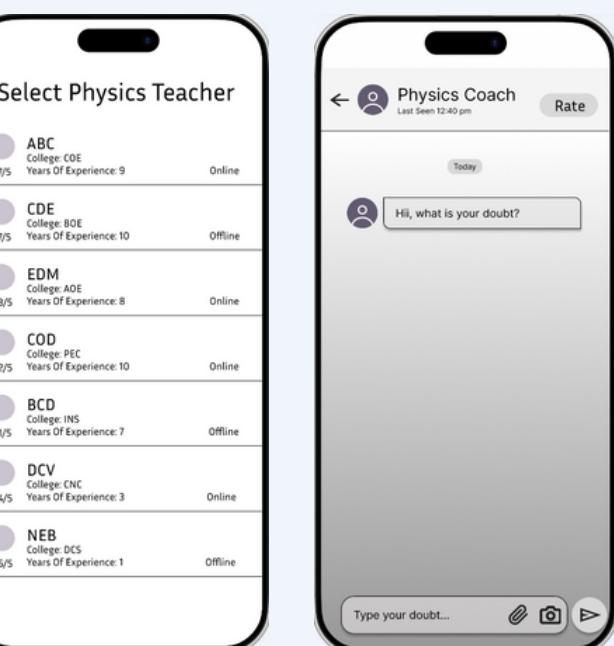
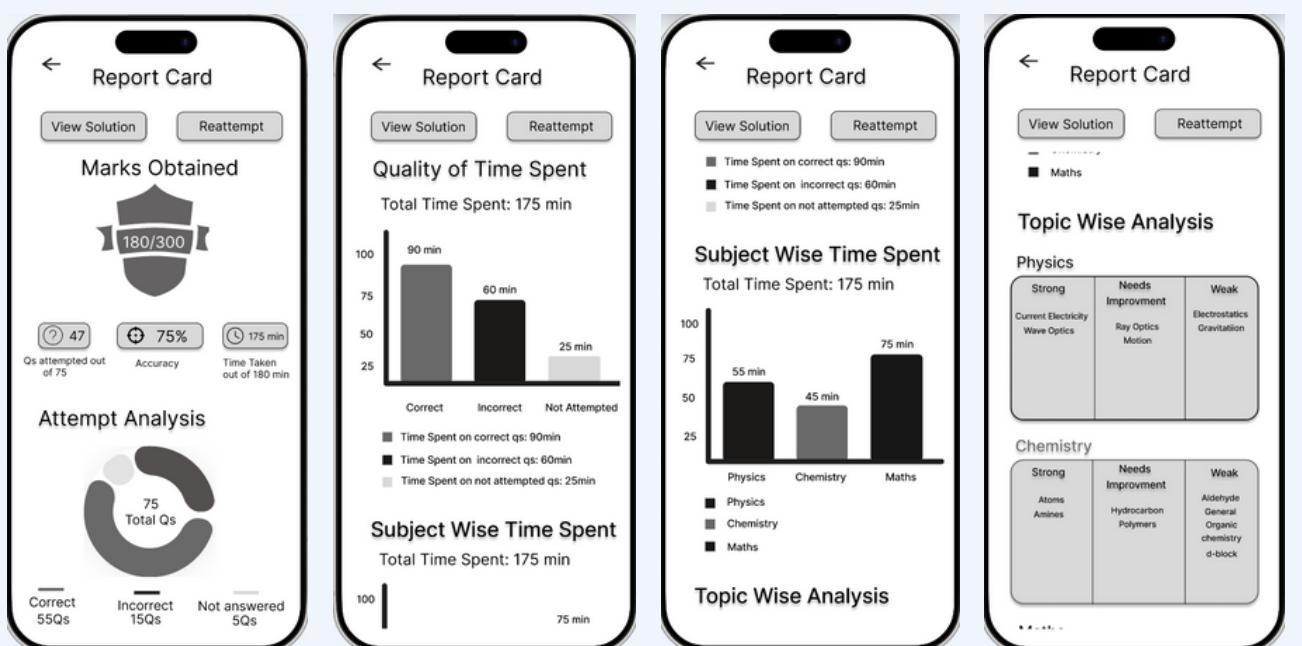


## Formula Card Pages

# Create & Join Test Pages

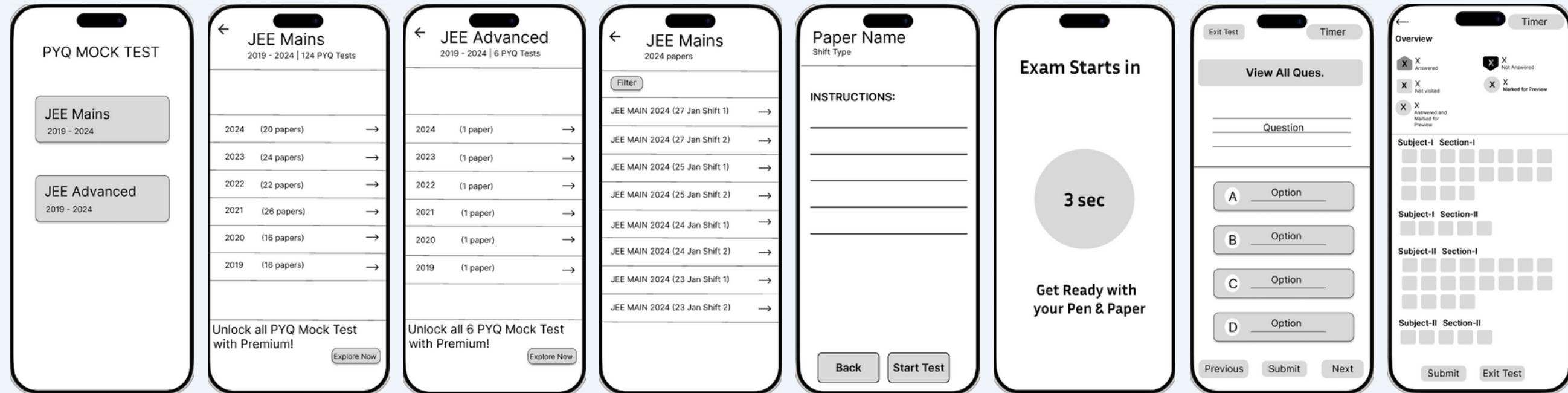


# Test Report Pages

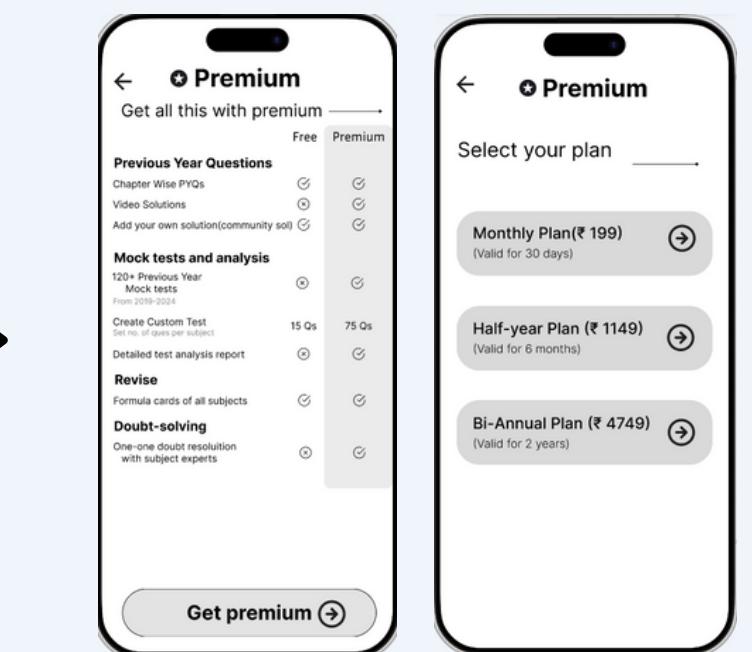


Ask to Teacher Page

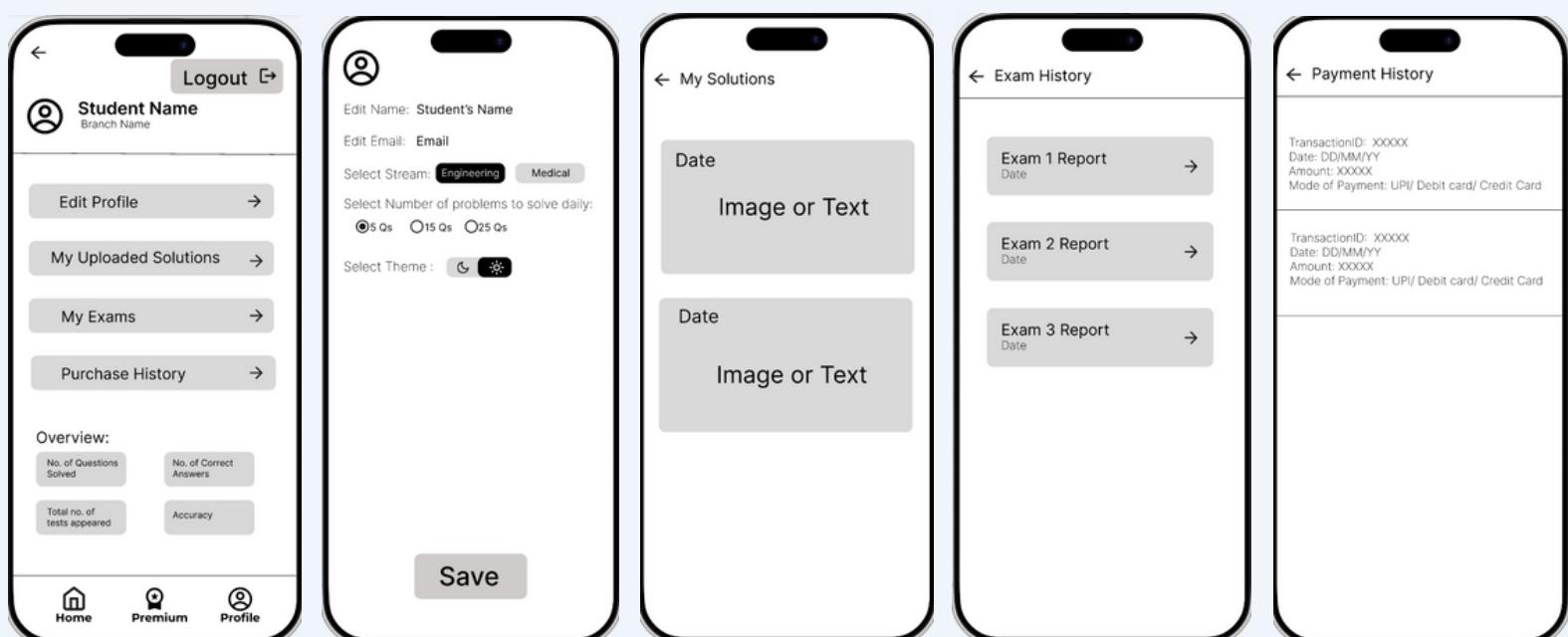
# PYQ Mock Test Pages



View & Buy  
Premium  
Page

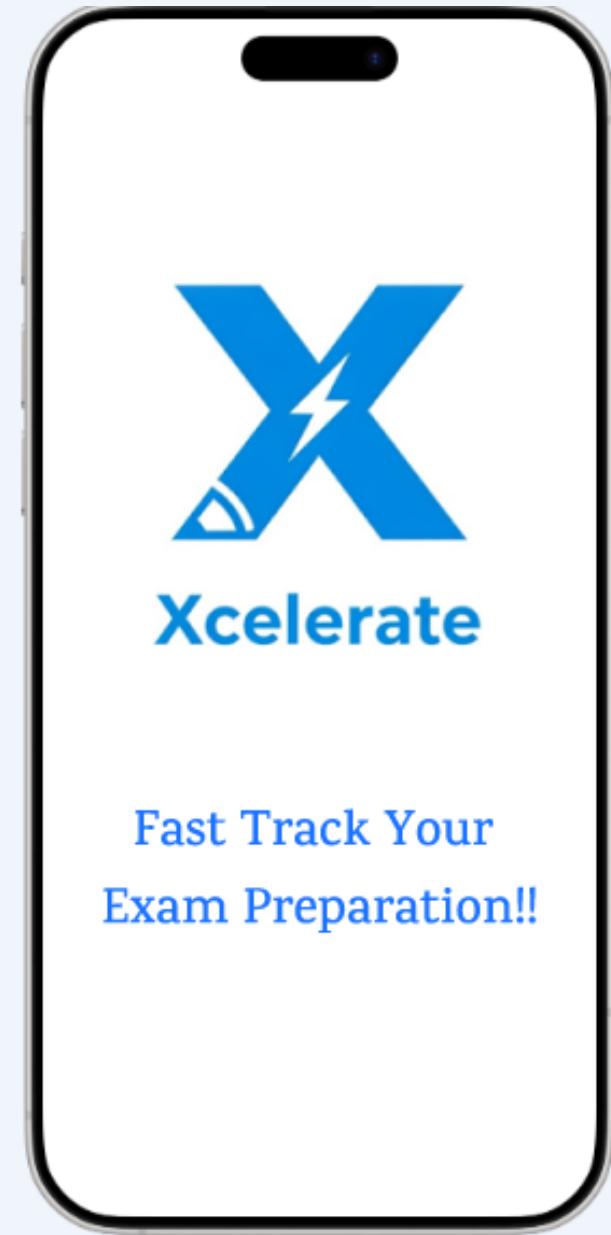


View & Edit  
Profile Pages

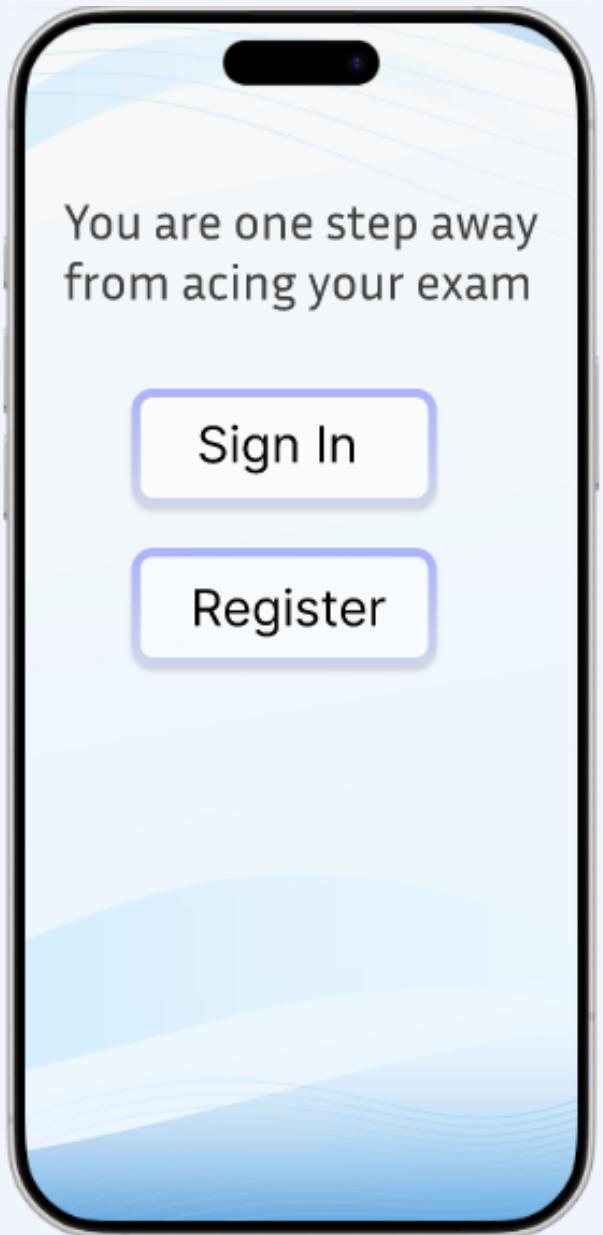




# High Fidelity Wireframe



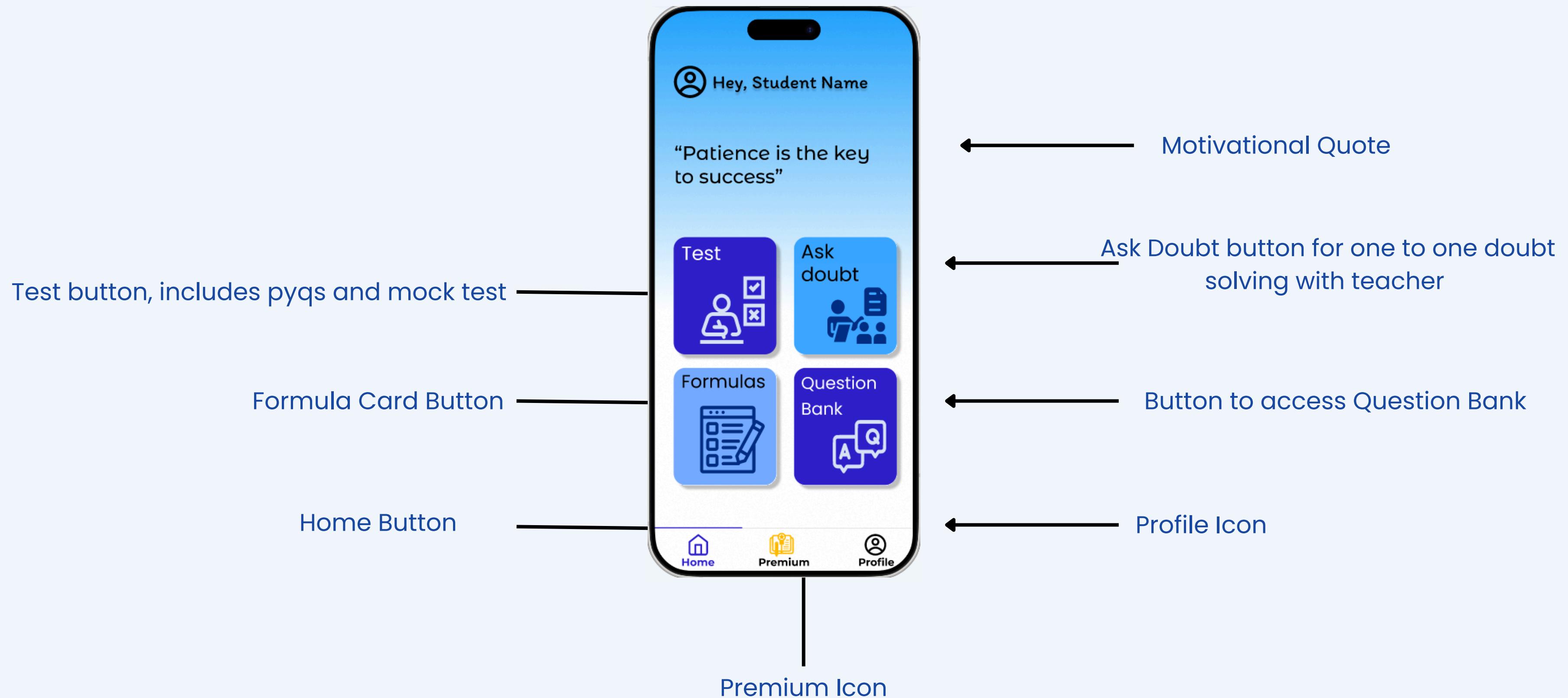
# Splash Screen



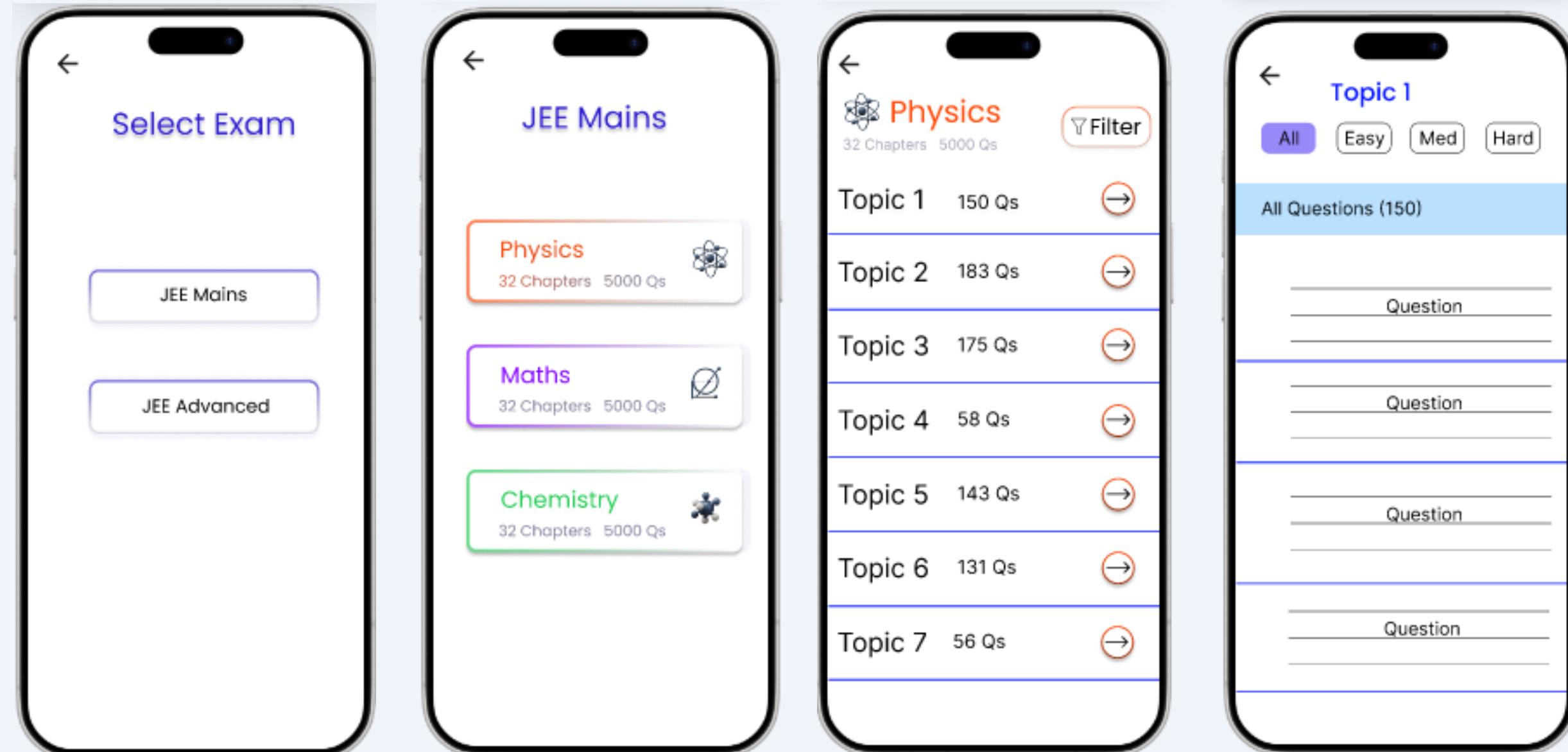
# Onboarding Page



# Dashboard

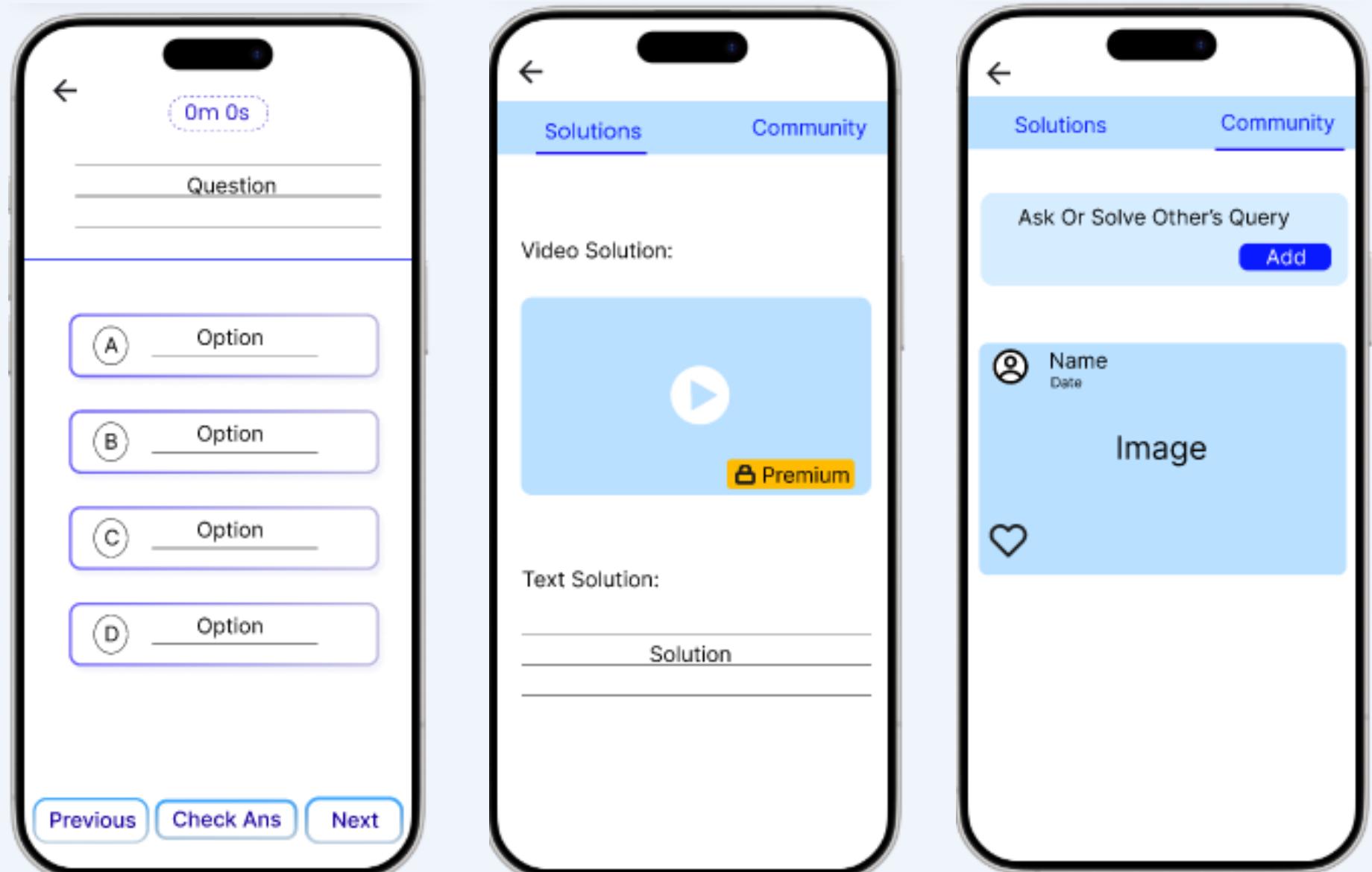


# Question Bank



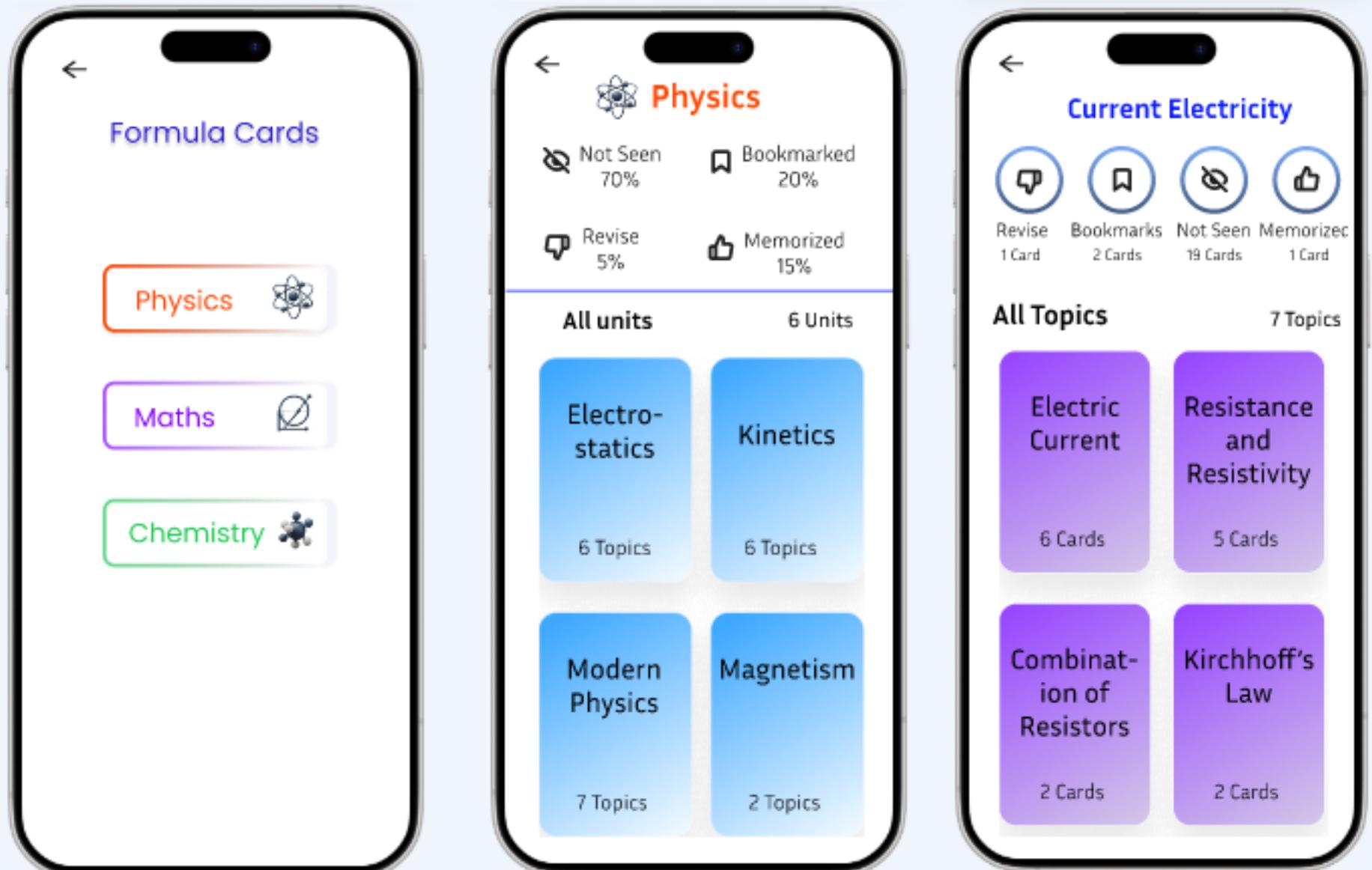
- First Student has to select the exam type and then select the subject.
- After Selecting the Subject, student has to select the topic of that subject, he can also apply filter on topics
- After Selecting the topic student can choose question of that topic, student can filter question based on difficulty easy, medium or hard.

# Solution and Community Discussion



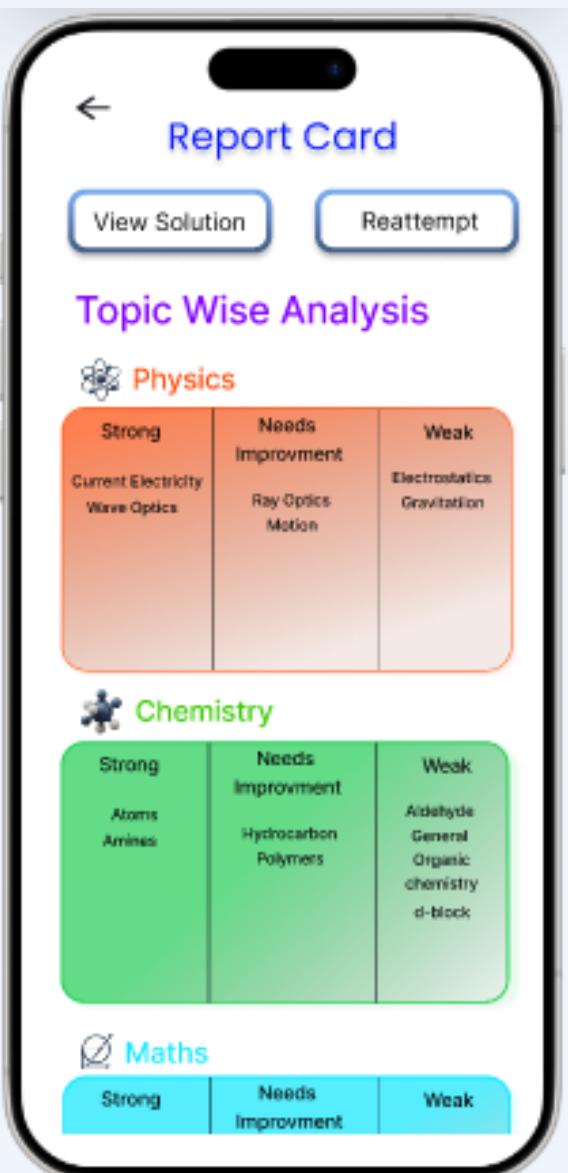
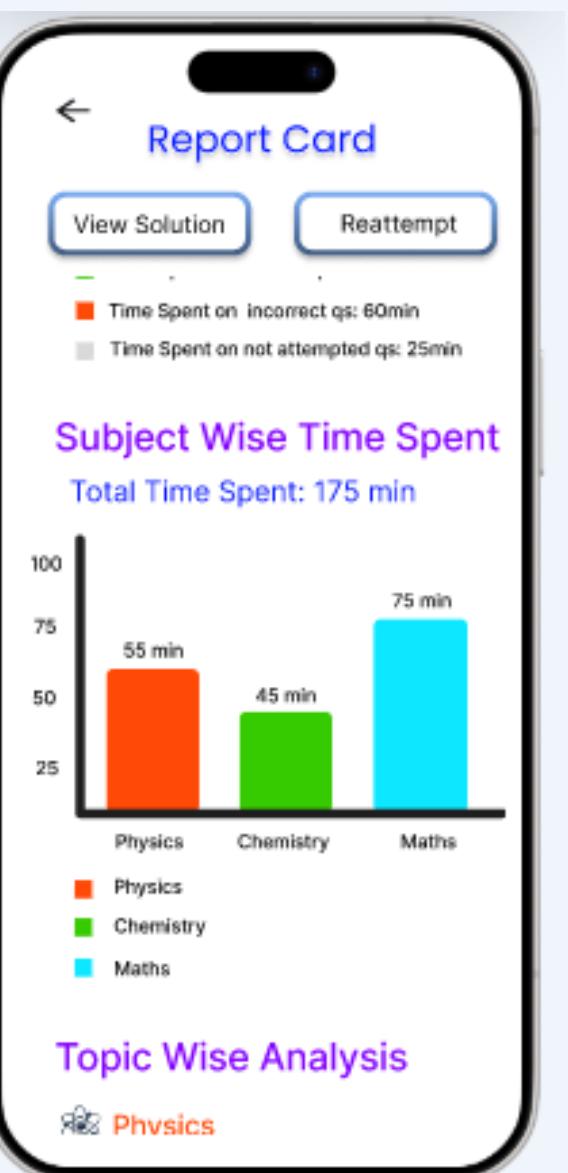
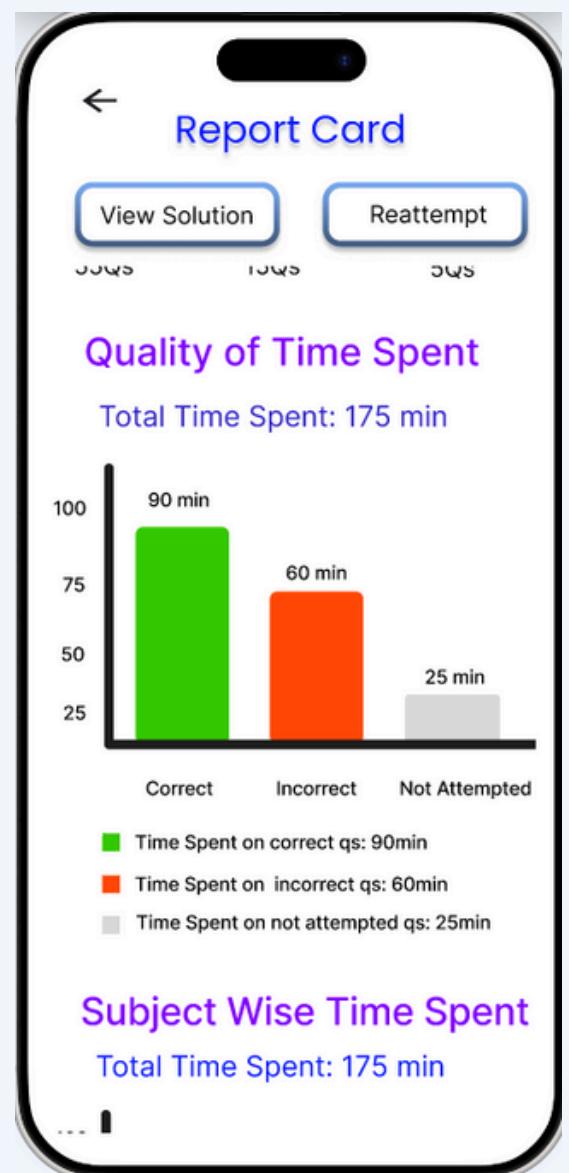
- After selecting the question, student can solve the question and check the answer.
- Student can also view the text solution, if student is subscribed he can also view the video solution
- Student can also ask his doubt or solve other student doubt in community using the add button. Student can also view the other students solution

# Formula Cards



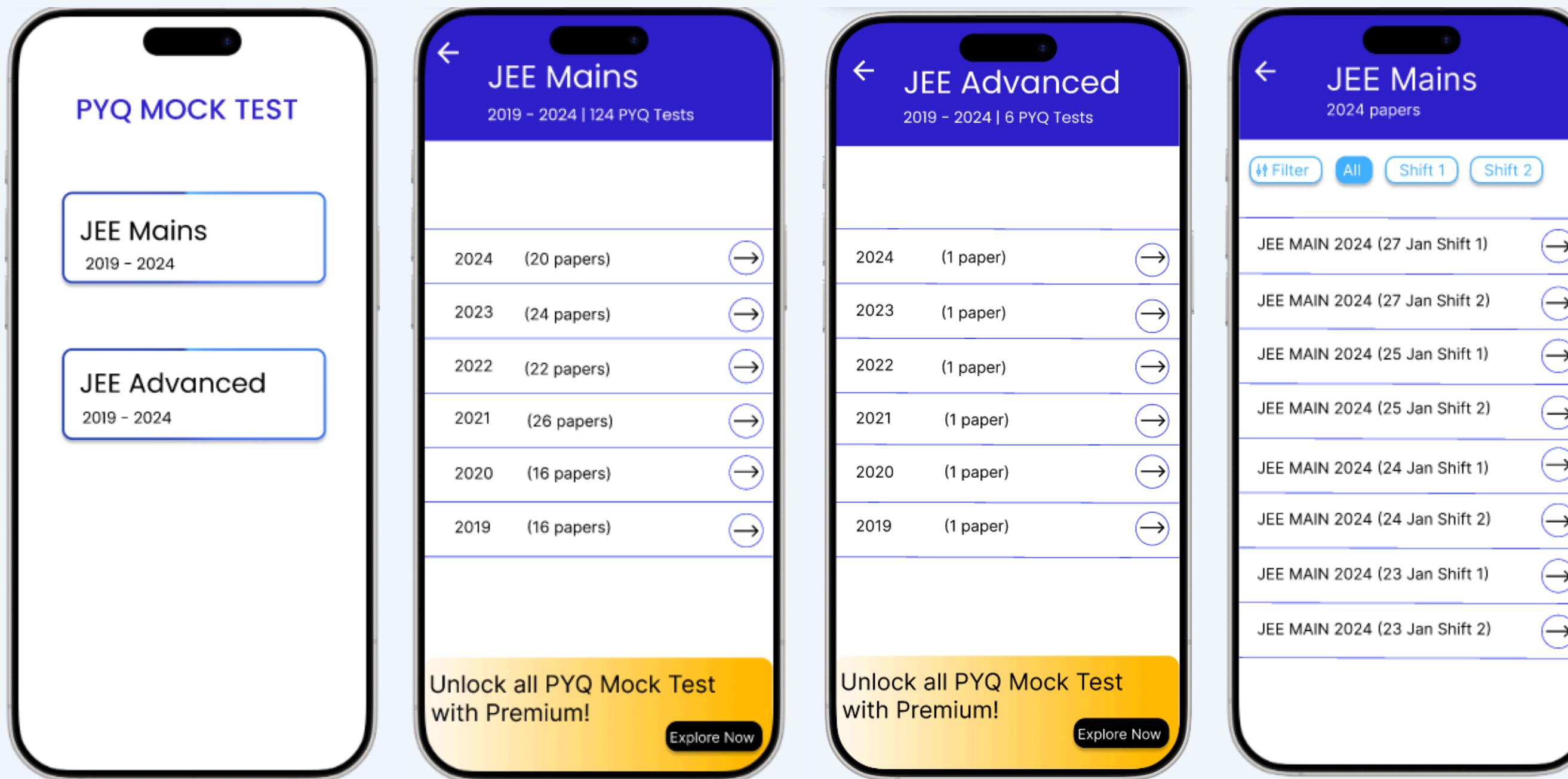
- Student can access the Formula subject wise and Topic wise. After Selecting the subject student has to select the unit.
- Student can also bookmark, revise and memorized the unit.
- After selecting the unit, student has to the topic of that unit of which student want to view the formulas. student can also bookmark, revise, memorized the topic.

# Report Card

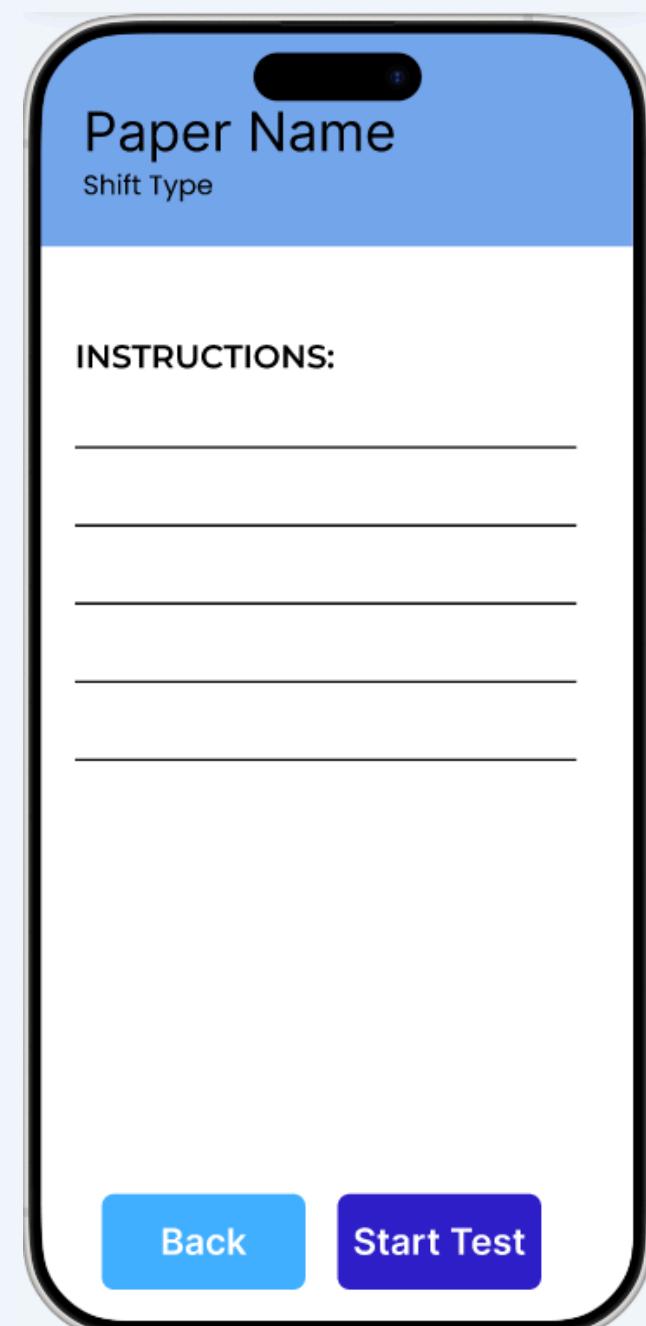


- Student can view the report card, there is also view solution and reattempt that test button.
- Student can view the marks obtained and number of correct, incorrect and not answered question.
- Now If student is subscribed he can also time spent on correct, incorrect and not attempted question. Student can also view the Subject wise time spent and topic wise analysis ( strong, need improvement and weak topics).

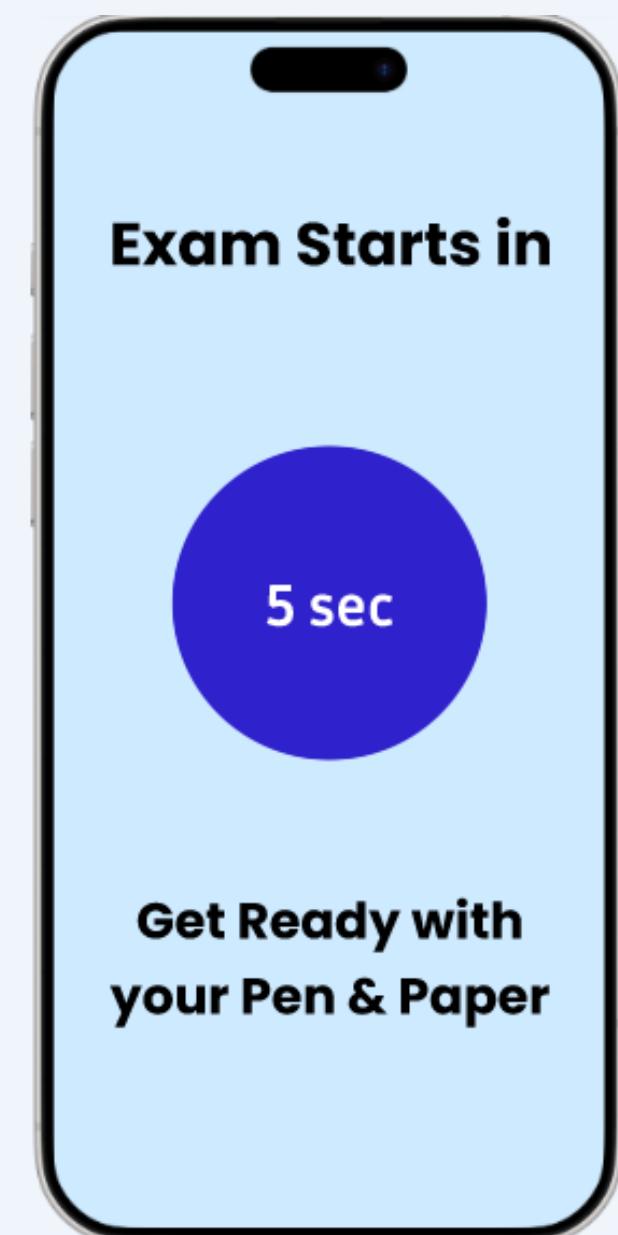
# PVQ Mock Test



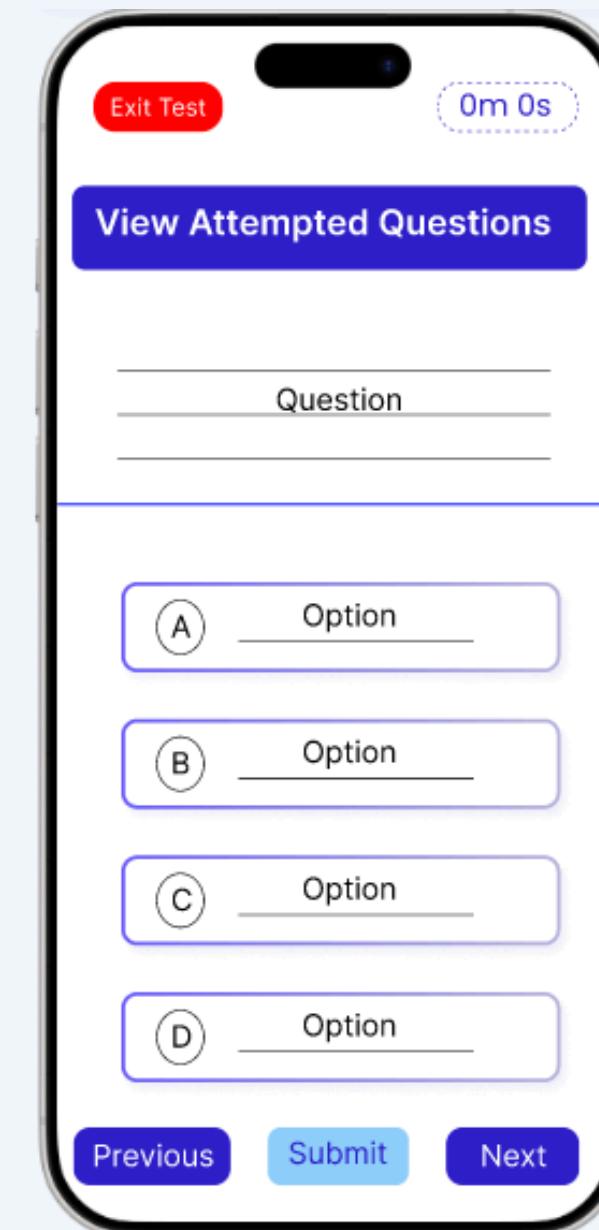
- After selecting pyq mock test button, user will select which type of exam he wants to give. After that user will get list of year and their required question paper.
- User can also filter on basis of shifts for a specific year question paper.



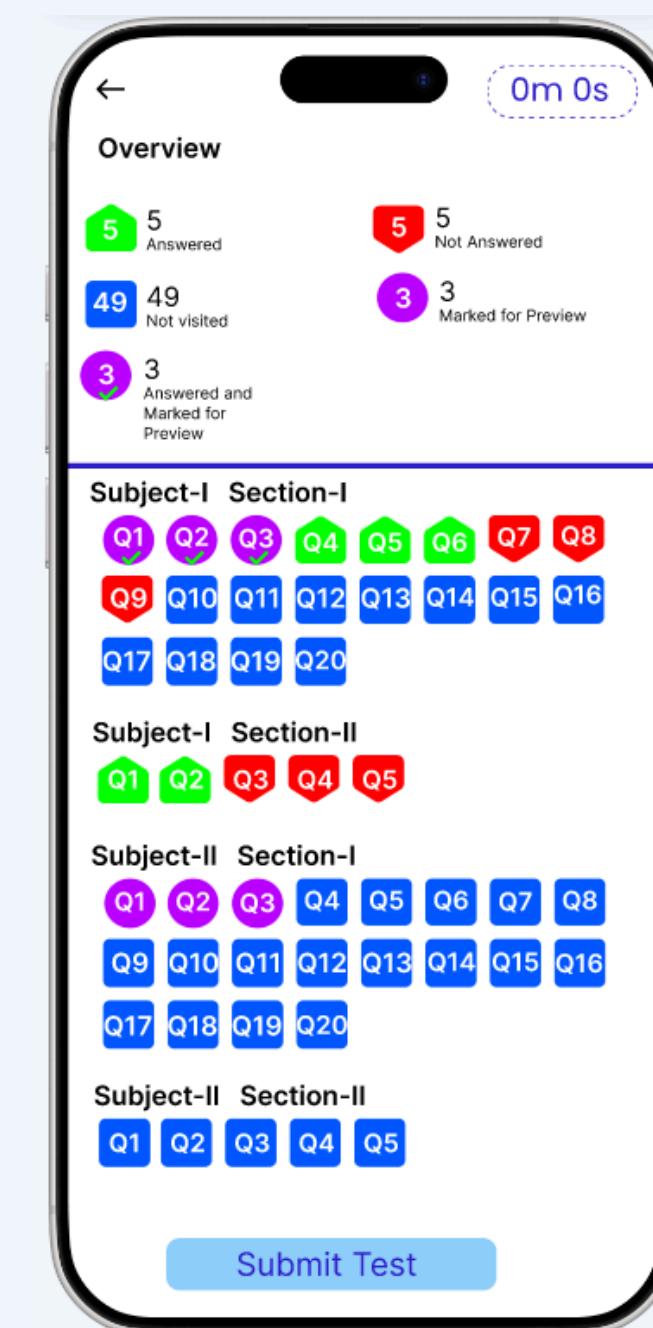
Before attempting exam, student will get list of instructions regarding questions, marking scheme, etc. After that student can start the exam.



This page will help student to get ready with pen and paper before attempting the exam.

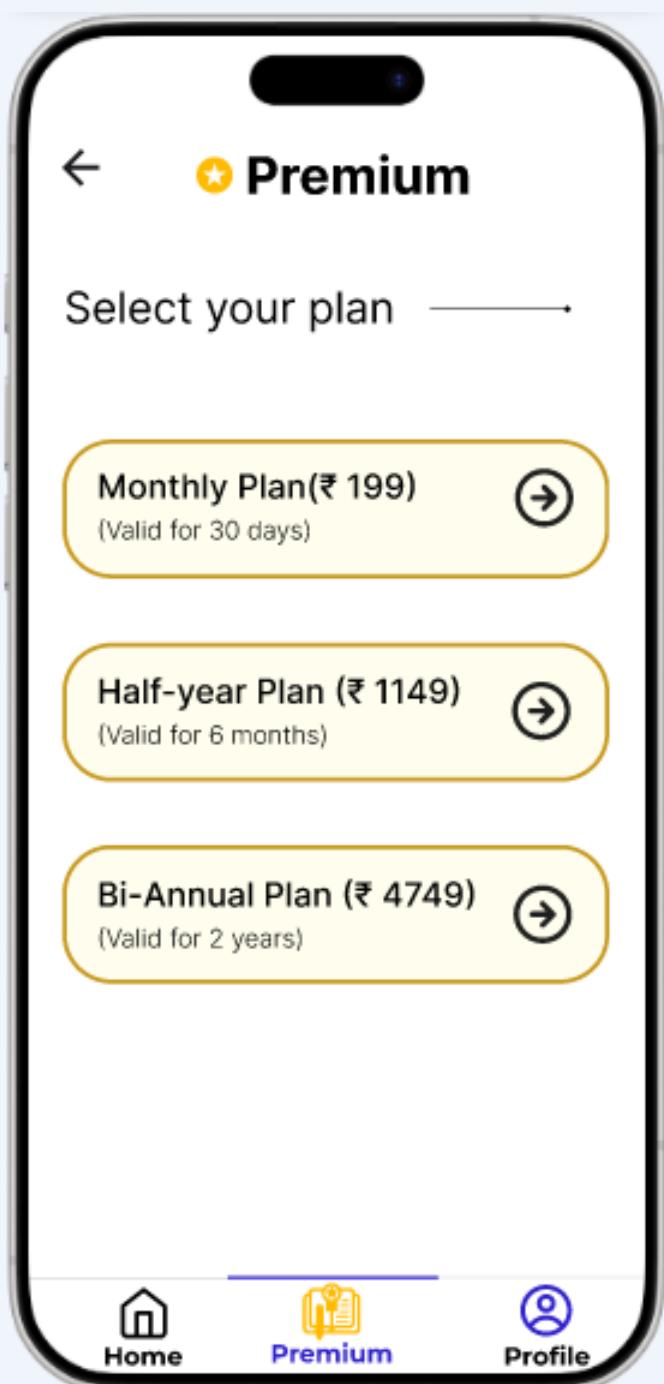
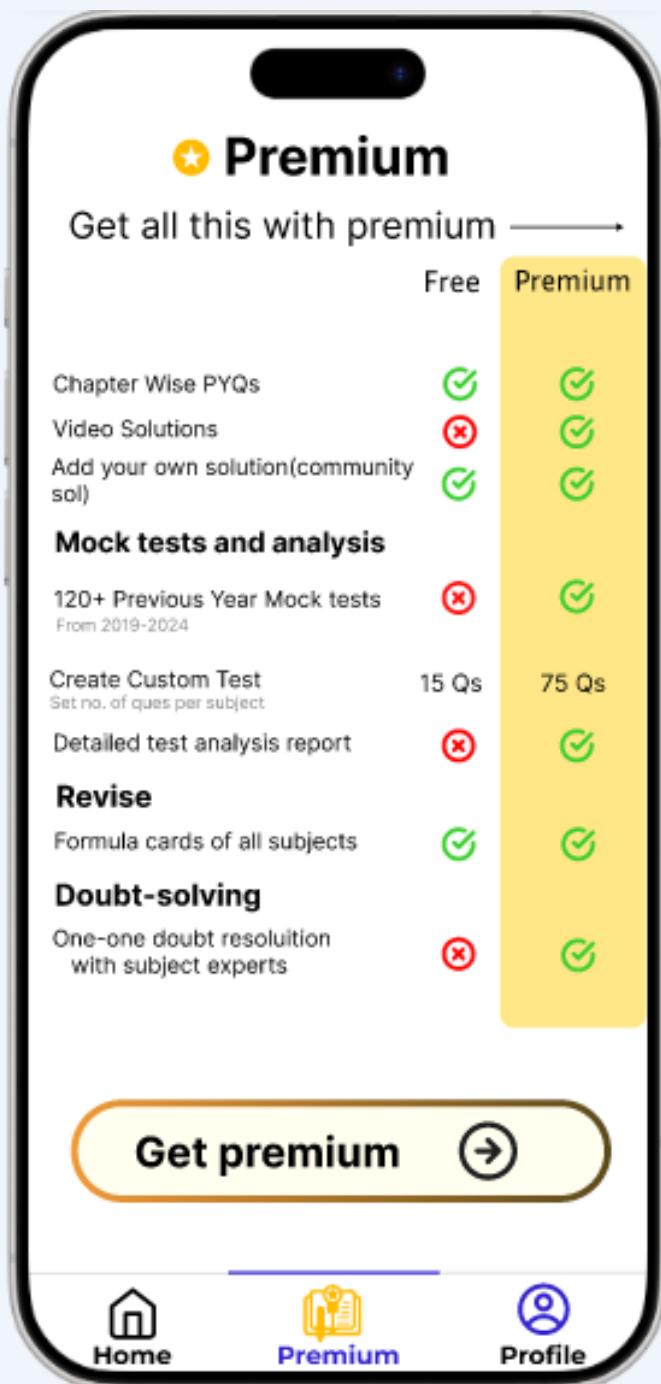


Now student can start attempting questions, He is also provided timer for checking out how much time left.



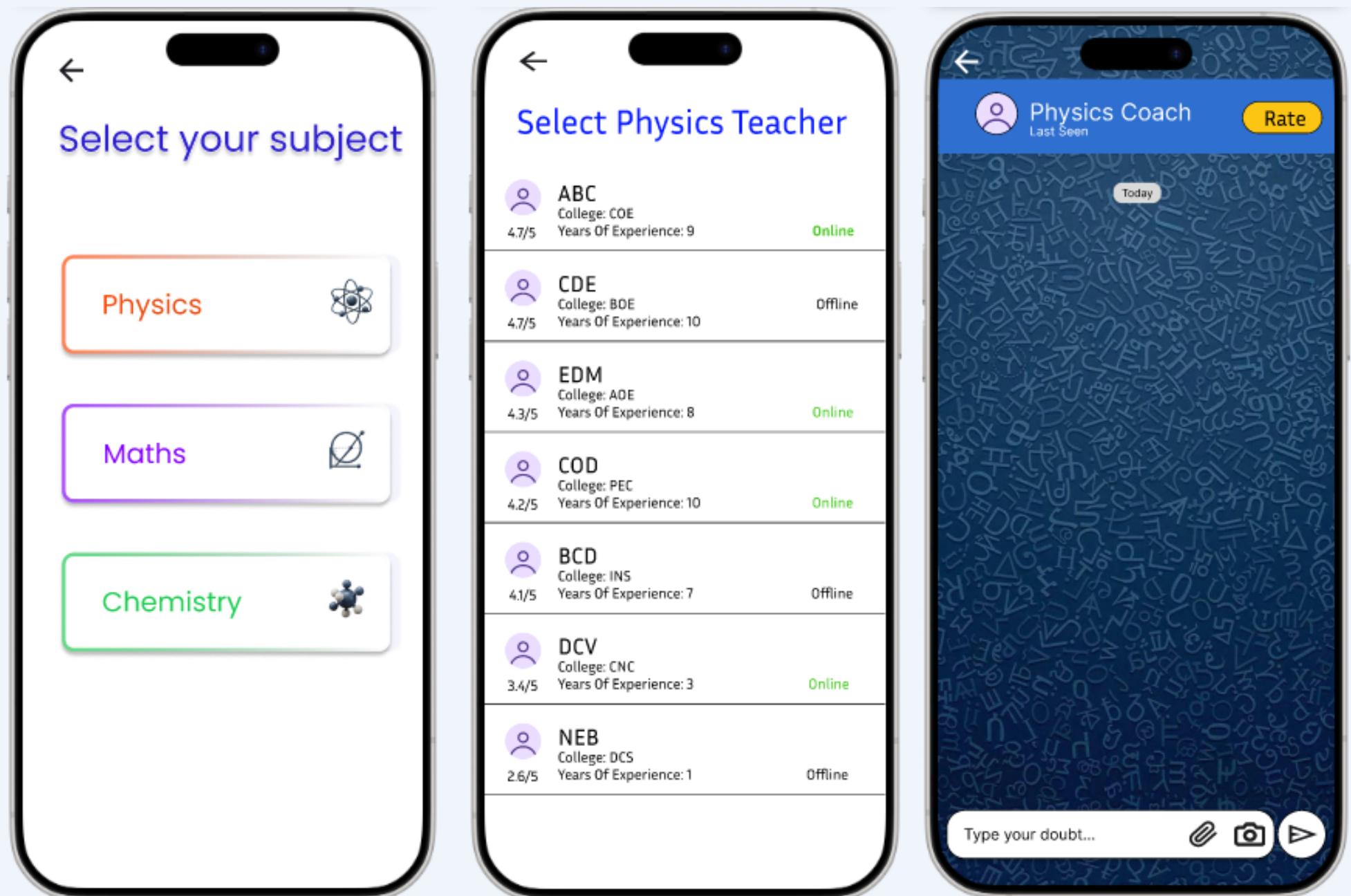
This page shows how much questions student answered, how many he left, how many questions are marked for preview and answered later.

# Premium



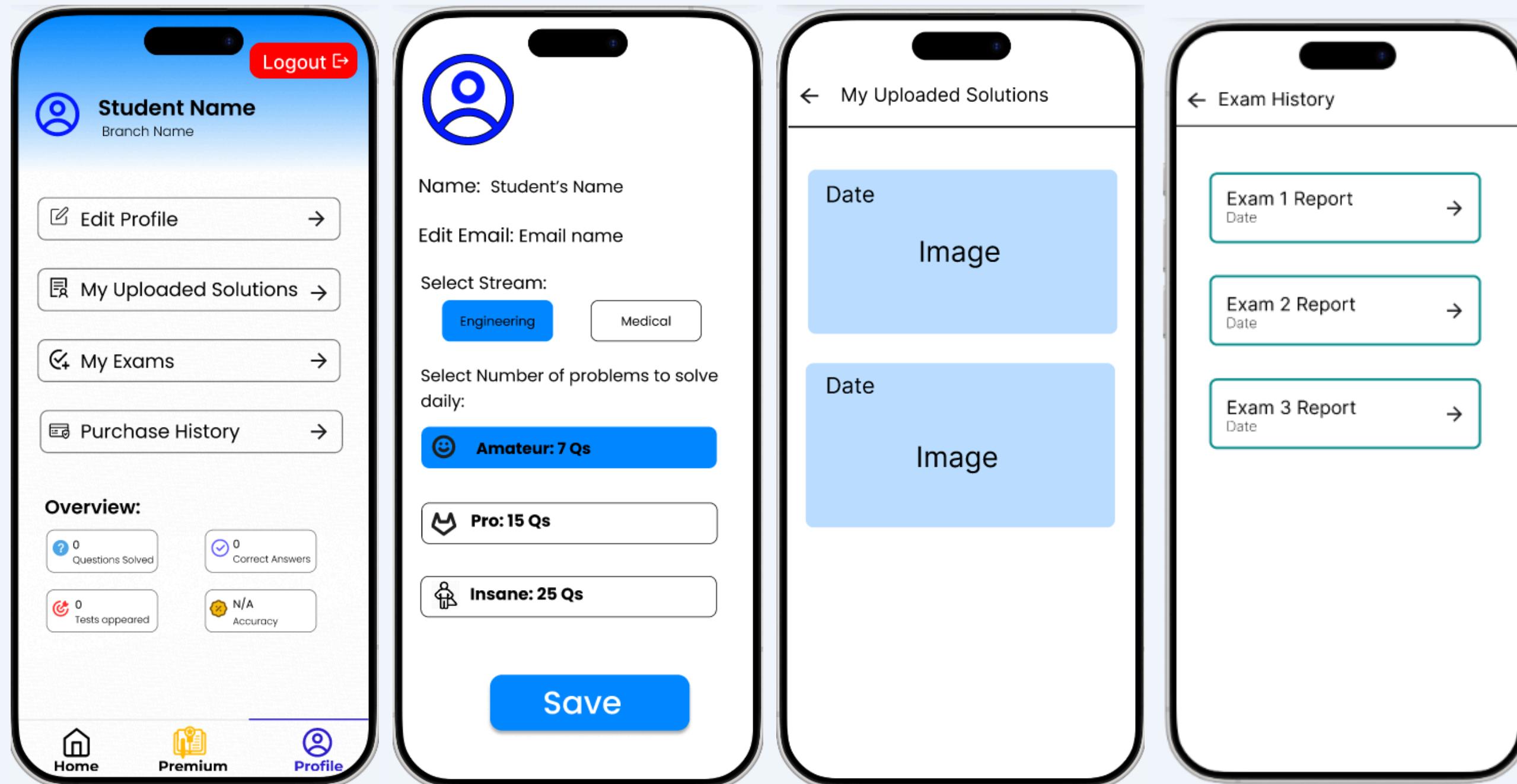
- Our app provides a collection of premium features like one-one doubt resolution, video solutions, detailed test analysis reports etc.
- To get access to these premium features, users have to select a plan according to their affordability and time

# Doubt Solving



- This is a premium feature of our app.
- User can select the subject in which he/she has a doubt and select the corresponding teacher to ask the doubt on the basis of their rating and availability.

# Edit Profile



- This is Profile page, there are 4 buttons for user to edit his profile, view his uploaded solution and attempted exams, and also view a pdf of purchase history if it exists.
- User can also view his performance in overview section.
- On edit profile page, user can change his/her profile, stream, and the no. of ques to solve daily as part of daily goal.

# Custom Tests

The image displays five sequential screens from a mobile application interface for creating custom tests:

- Test Screen:** Shows three main options: "PYQ Mock Test" (with a clipboard icon), "Create Your Test" (with a pencil icon), and "Join Test" (with a person icon). A back arrow is at the top left.
- Select Exam Screen:** Shows two exam options: "JEE Mains" and "JEE Advanced". Below these is a large icon of a student holding a graduation cap and a checklist.
- JEE Mains Screen:** Shows three subjects with their respective icons and details:
  - Physics:** 32 Chapters, 5000 Qs (highlighted in orange)
  - Maths:** 32 Chapters, 5000 Qs (highlighted in purple)
  - Chemistry:** 32 Chapters, 5000 Qs (highlighted in green)A back arrow is at the top left.
- Select topic(s) Screen:** Shows a list of topics for Physics and Chemistry, each with a checkbox and a "Next" button.

Subject	Topic	Status	Action
Physics	Electromagnetism	<input checked="" type="checkbox"/>	Next
	Modern Physics	<input type="checkbox"/>	Next
	Mechanics	<input type="checkbox"/>	Next
Chemistry	Organic Chemistry	<input type="checkbox"/>	Next
	Inorganic Chemistry	<input type="checkbox"/>	Next
	Physical Chemistry	<input checked="" type="checkbox"/>	Next

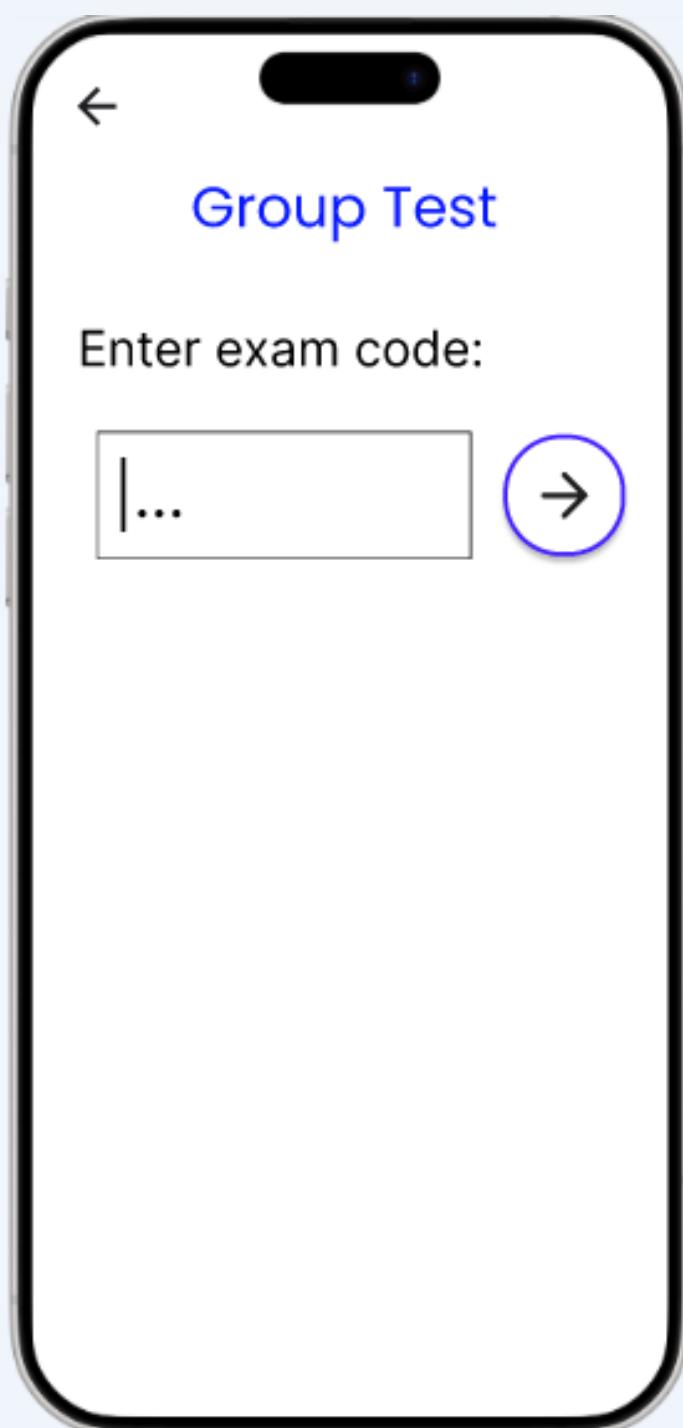
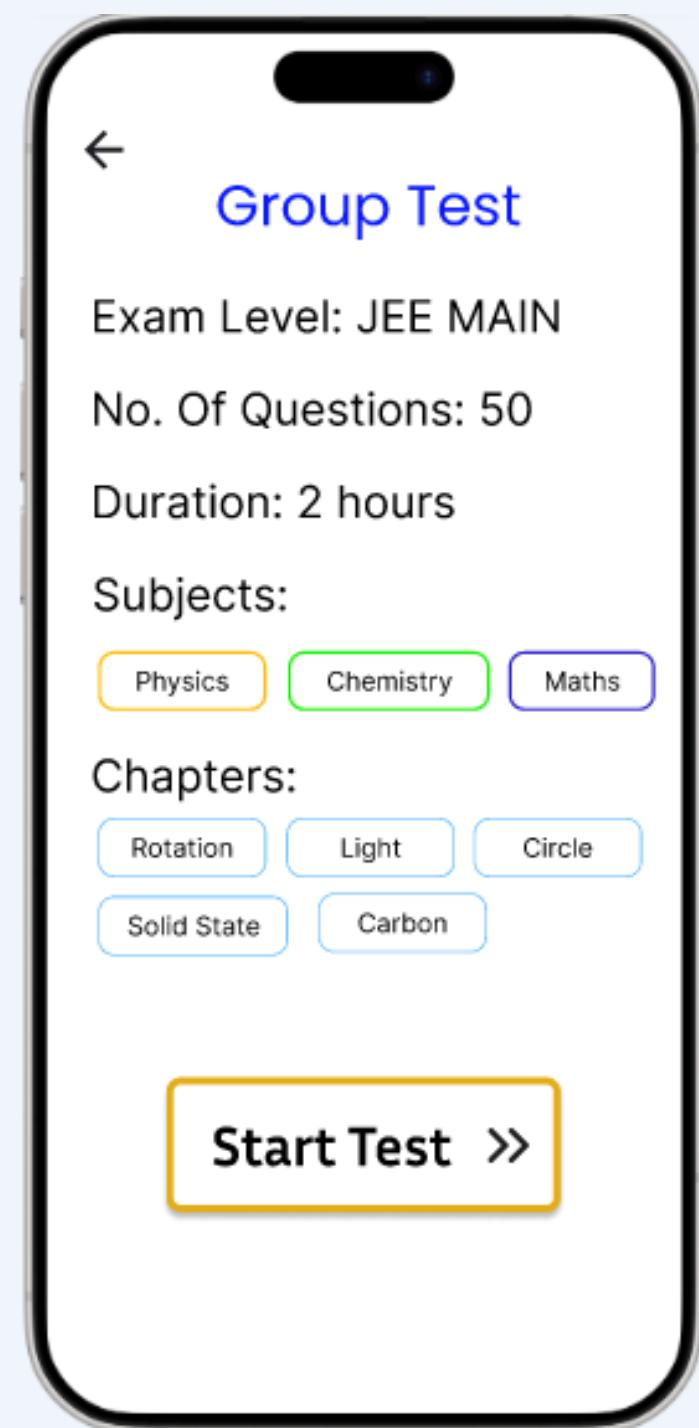
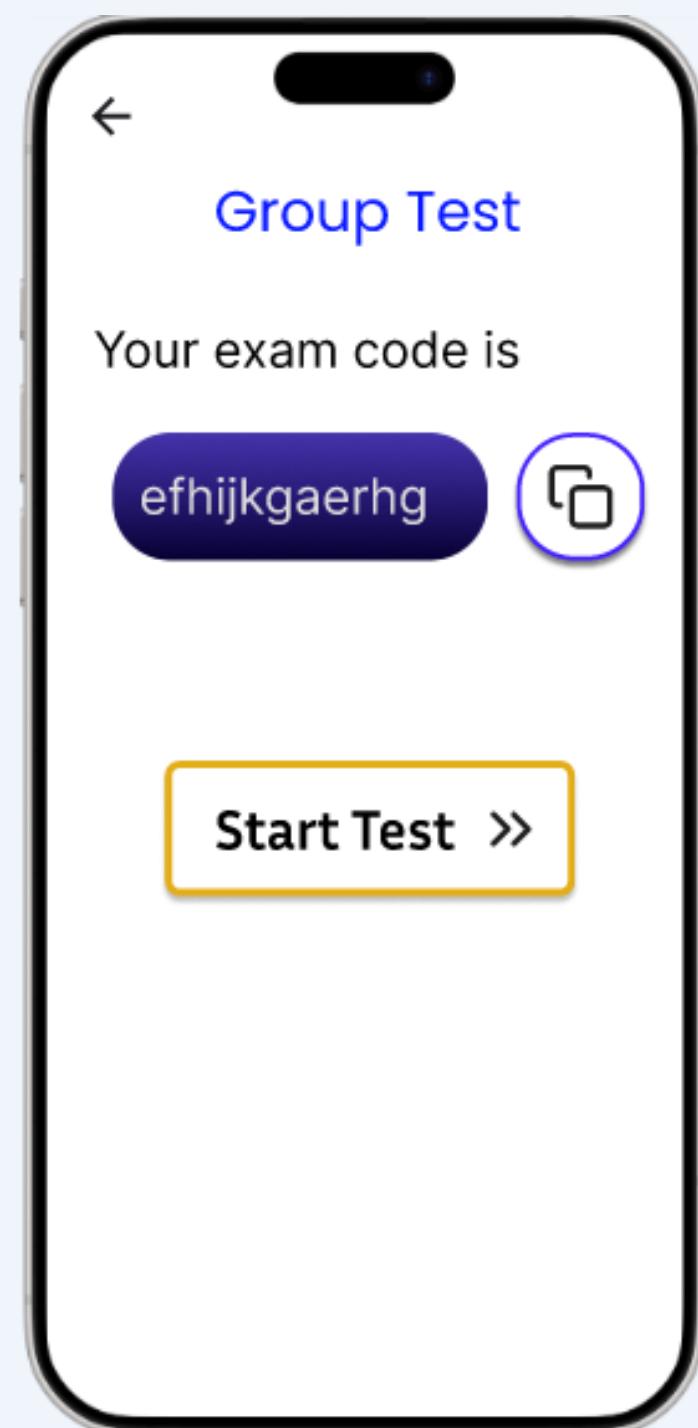
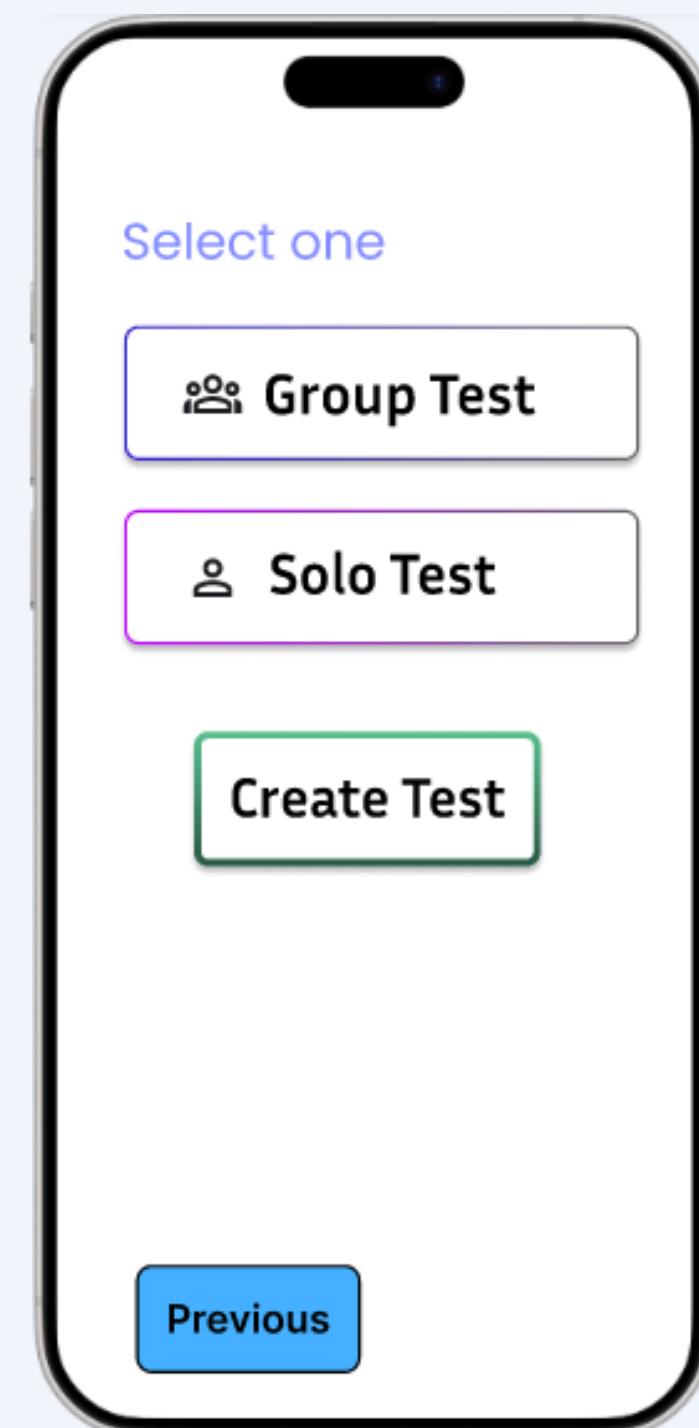
A "Select atleast one" instruction is at the top. "Previous" and "Next" buttons are at the bottom.
- Select No. Of Questions Per subject Screen:** Shows a list of question counts for each subject:

Subject	Count
Physics	5
Maths	10
Chemistry	15
Physics	25
Maths	50
Chemistry	75

"Previous" and "Next" buttons are at the bottom.

# Custom Tests

- Our app has a unique feature called “custom group test” where the user can even create his/her own test and give it with peers

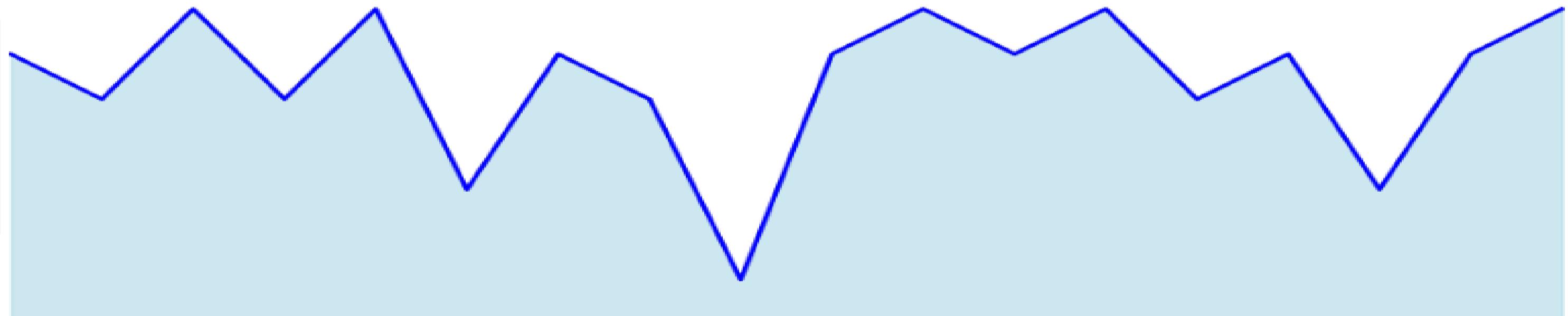




# USER JOURNEY MAP:



Emotions And Thoughts



Actions

User is excited as he finds an app which will boost his exam preparation  User signs up or logs in via email	User enters personal details. User selects their exam type	User selects a past exam year and exam shift for the test.  User completes the timed test	User defines test parameters (subjects, number of questions, time limit, difficulty). Users can create a test for personal use or invite friends for a group test. Test begins with a countdown timer and adaptive difficulty settings	User views overall score and accuracy. Detailed topic-wise and subject-wise time spent breakdown provided.  Suggestions for improvement and recommended study materials.	Users can view formula cards for each subject and its topic.  Users can mark the card for revision, completion and bookmark.	User selects subject and topic to access a categorized question list.  Filters applied for difficulty level	User views text or video solutions for attempted questions.  Community discussions provide alternative approaches.	Users discuss the doubt with the teacher through one-one chat.
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## Opportunities

Enhance user excitement by showcasing key features and success stories during onboarding.  Boost engagement by providing an interactive walkthrough highlighting personalized learning benefits.	Personalize the experience by suggesting study plans based on exam type.  Increase engagement by allowing users to set goals and track progress from the start.	Provide AI generated insights on weak areas post-test.  Introduce a leaderboard to compare scores with peers.	Implement AI-based recommendations for test parameters based on user performance.  Offer hints or explanations for selected questions.	Provide trend analysis to track progress over multiple tests.  Suggest targeted question sets and learning materials.  Allow users to share performance reports with mentors or parents.	Enable voice search to find formulas quickly.  Allow users to create and share custom formula decks.	Provide AI-driven recommendations based on weak areas.  Offer daily practice challenges for engagement.  Enable bookmarking and personalized question sets.	Introduce AI-generated step-by-step solutions for complex problems.  Allow users to request new solutions if none exist.  Implement community voting to highlight the best explanations.	Offer instant AI-powered doubt resolution before teacher interaction.  Allow scheduled live doubt-solving sessions for better planning.
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Thank You