

## **Team FLUX**

**Members:** Acquiat, Hao, and Mejia

### **Project Description:**

AcademiX is an all-in-one student platform designed to address the critical challenges faced in online learning environments. Developed by Team FLUX, AcademiX aims to streamline the educational experience by providing a comprehensive suite of tools to help students stay organized, reduce stress, and enhance their productivity. Our platform integrates essential features to ensure that students can effectively manage their academic responsibilities and foster a collaborative and supportive online community.

### **Requirements:**

- **User Interface and Navigation:** Seamlessly navigate and interact with intuitive, user-friendly interfaces.
- **Customization:** Customizable to the user's needs. The app having lots of features that the user may not necessarily use can be hidden or disabled in order to easily navigate the app.
- **Task Tracking and Deadline Reminders:** Simplify your workflow with intuitive task management tools that allow you to keep track of assignments, set deadlines, and receive timely reminders to stay on top of your academic schedule.
- **Collaborative Study Groups:** Facilitate effective collaboration through virtual study groups where students can share resources, discuss topics, and work together on projects, bridging the gap created by the isolation of online learning.
- **Gamified Learning Tools:** Enhance your study sessions with engaging gamified elements such as flashcards and quizzes. These interactive tools are designed to make learning more enjoyable and effective, helping you retain information better.
- **On-Demand Tutoring:** Access personalized academic assistance with our on-demand tutoring feature. Connect with experienced teachers and tutors for one-on-one sessions to help you understand complex concepts and improve your academic performance.

### **Design Space:**

**What requirements may be difficult to realize?**

Creating an intuitive user interface that serves a diverse student population is challenging. Balancing accessibility with a clean design requires extensive planning and testing. High customization, where users can hide or disable features, adds complexity to settings management and interface adjustments. Additionally, facilitating effective real-time collaboration in study groups, with stable interactions and seamless resource sharing, demands advanced backend support and reliability.

**What are some tradeoffs that you should or did explore?**

Balancing feature richness with usability is a key tradeoff. Adding many features can complicate the interface, so prioritizing essential features and allowing optional customization helps. Another tradeoff is between performance and functionality. Advanced features like real-time collaboration and on-demand tutoring can slow down the app, so optimizing these features is crucial. Privacy versus collaboration is another consideration; promoting collaboration while protecting user data requires a careful balance to comply with privacy regulations.

**Which tasks will be easiest to support? Which are the hardest?**

Easiest tasks include implementing task tracking and deadline reminders, supported by existing frameworks for scheduling and notifications. Adding gamified learning tools, such as flashcards and quizzes, is also straightforward due to available gamification frameworks. The hardest tasks are supporting real-time collaboration in study groups, requiring robust infrastructure for video conferencing and live document editing, and building an on-demand tutoring system that effectively matches students with tutors and supports seamless interactions.

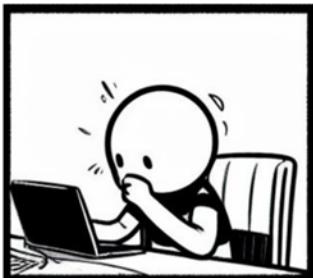
In summary, AcademiX's design space involves balancing usability, performance, and privacy while providing a rich set of features. Easier tasks include task management and gamified tools, while real-time collaboration and on-demand tutoring are more complex and demanding to implement.

## Design Summary:

### Designs:

#### StoryBoards:

- **Scenario 1:** Mark's heart jumped as a notification popped up - an upcoming deadline he'd completely forgotten about loomed. With a frantic rush, he barely scraped by finishing the assignment, only to be hit with another notification for a forgotten project. Talk about double trouble!



This is Mark



Mark received an email about his deadline for an assignment



Mark completely forgets and starts to panic



Mark frantically researches the assignment



Mark barely passed the assignment on time



With no rest, Mark receives another email for another deadline he forgot

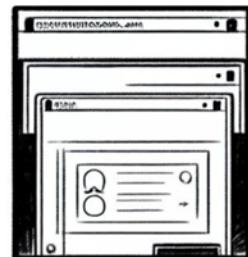
- **Scenario 2:** Sam stared at the confusing topic on his screen, brow furrowed. A desperate internet search only deepened the fog. Feeling lost with no one to turn to for help, Sam resigned himself to whatever fate awaited him on the quiz.



This is Sam, he is currently studying for a quiz



Sam is confused on a certain topic



Sam then researches the webs for an explanation



Sam then gets overloaded with information



Sam is now more confused than he was awhile ago



Sam is now just accepting his fate

- **Scenario 3:** Cris while walking did a quick check for his schedule which quickly turned into a frustrating hunt for his flashcards app. Just as he found it, a notification for an unexpected online meeting popped up. Panic surged - the platform wasn't even installed on his phone!



This is Cris ; he is currently walking to class



While walking, Cris wanted to check his to-do list



Cris now opens his phone's notes application to look at his schedule



Cris, seeing his schedule, now needs to find the application for his flashcards to study for an upcoming test



Cris is getting a notification that he needs to attend an online meeting and unfortunately does not see the application



Cris is now frustrated that he needs to have multiple apps for his schoolwork

### **Problem Statements:**

- Students face organizational challenges and increased stress.
- Students lack of instant access to personalized academic support
- Students face fragmented and ineffective learning experiences.

### **Application Icon Size Comparison**



**36x36**

**48x48**

**72x72**

**96x96**

**144x144**



**192x192**

The icons displayed above represent the selected application logo in various sizes. This detail is crucial for understanding how the application logo will appear across different screen ratios.



For the AcademiX student platform, we've chosen a vibrant and functional color palette to enhance the user experience. Mint green (#76c4a9) symbolizes growth, peach (#f2aa8b) adds warmth, and white (#FFFFFF) ensures clarity. Dark teal (#125062) conveys professionalism, bright green (#50d890) encourages engagement, and teal green (#108775) promotes calmness. Cyan (#50d8e6) highlights innovation, while sky blue (#1087ab) evokes openness and aspiration. These colors create an inviting, trustworthy, and dynamic environment conducive to academic success.

**ABCDEFGHIJKLMNPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**0123456789**  
**!@#\$%^&\*()\_-+=[]{}\\;:,.<>/?**

The font we used for "AcademiX" is a clean, modern sans-serif typeface. Its design features uniform stroke widths and open, well-spaced characters, enhancing readability and providing a contemporary look. This font supports various characters, including uppercase and lowercase letters, numerals, and symbols, making it versatile for different content needs. The simplicity and clarity of this font align perfectly with the platform's goal of providing a user-friendly and professional academic environment.

### **Design 1:**

#### **Overview:**

Design 1 is crafted to be minimalistic and clean, ensuring an organized and user-friendly experience. Despite its simplicity, users can personalize their experience through a wide range of color palettes and navigational bar customization options. This minimalist approach not only enhances visual clarity but also ensures the app remains easy to use, even with its rich feature set. By balancing simplicity with customization, users can enjoy a streamlined and efficient interface tailored to their preferences. This is just a wireframe without the icons.



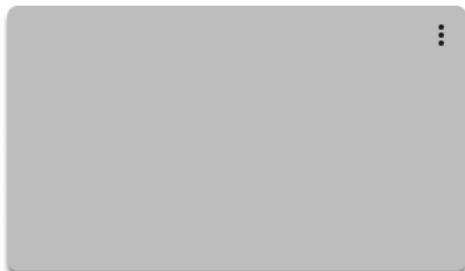
### Greeting Page

When entering the app for the first time you are greeted by a welcome page of the clutter free app with which requires you to log in or register using a google account or email address. You are then introduced to a step-by-step tutorial on how to use AcademiX.

Search Flashcards



## Flashcards

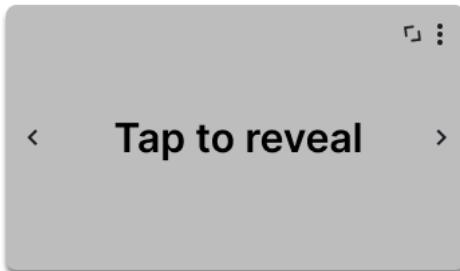


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Search Flashcards : =

## Flashcards



+



### Flashcards page

In the flash cards page the user can filter out his/her flashcards using the button on the upper right. Then press a flashcard set to open it.

Search Games



## Games

### Features

Discover and find new roommates around the world

Try

### Popular

Math

Math

Math



Search Games

⋮

≡

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## subject name

★★★★★

Try

Description

Hello this is a good game

Header 8m ago  
Good for memorizing.....

Header 8m ago  
Good for memorizing.....

Header 8m ago  
Good for memorizing.....

### Games Page

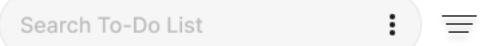
In the games section there will be a variety of options to choose from. This part shows the gamified lesson topic or even games with customizable questions for you to be able to study the topic in a fun way. Students can also rate the game mode and leave comments on their experience.

Search To-Do List



## To-Do List

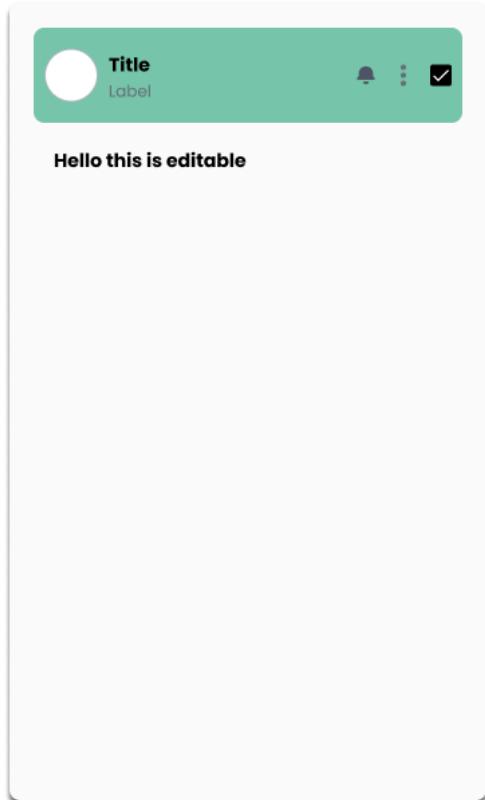




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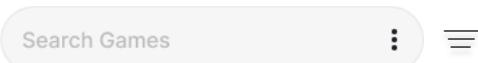
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## To-Do List



### To-Do List Page

In this section, the student can create many items in the list and edit by tapping on a specific item. Students can also set alarms or notifications to remind them of their task, even making them recursive so they can keep reusing the item.

A search bar with the placeholder "Search Games".

## Edit Navbar

- > **Flashcards**

Learn using flashcards
- > **To-Do List**

Take note of things that are essential
- > **Games**

Learn through interactive games
- > **Student Hub**

Connect with other fellow students
- > **On-Demand Tutoring**

Stuck in on a problem find a tutor
- > **Coming Soon...**

Excited for a new feature

### Editable NavBar Page

In the NavBar the user will press the plus sign icon and will be brought to this page. In this page they are able to disable and enable features in the app making it as customizable and not waste Navbar space with only features that the user will use on the daily.

### **Design 1 User perspective:**

Jack was looking for an application with a variety of features to help him manage his school life, so he decided to install AcademiX. Upon opening the app, he was greeted with a welcome page that prompted him to log in and guided him through a tutorial. This introduction made it easier for him to navigate the app.

Initially, Jack only wanted to use the Games and Flashcards features. Remembering the app's customization option, he disabled the other features to reduce clutter, making it easier to focus on what he needed. Jack was pleased to find that he didn't need to download multiple apps. With AcademiX, he could switch between features with a single click instead of swiping through his home screen to find different folders or applications. This convenience and efficiency greatly enhanced his user experience.

### **Assessment of design 1:**

#### **Advantages of Design 1**

Design 1 excels in its simplicity and minimalist approach. A clutter-free design allows users to focus on their tasks without unnecessary distractions. Additionally, the customization options enable users to tailor the app to their specific daily needs and preferences, enhancing overall usability and satisfaction.

#### **Disadvantages of Design 1**

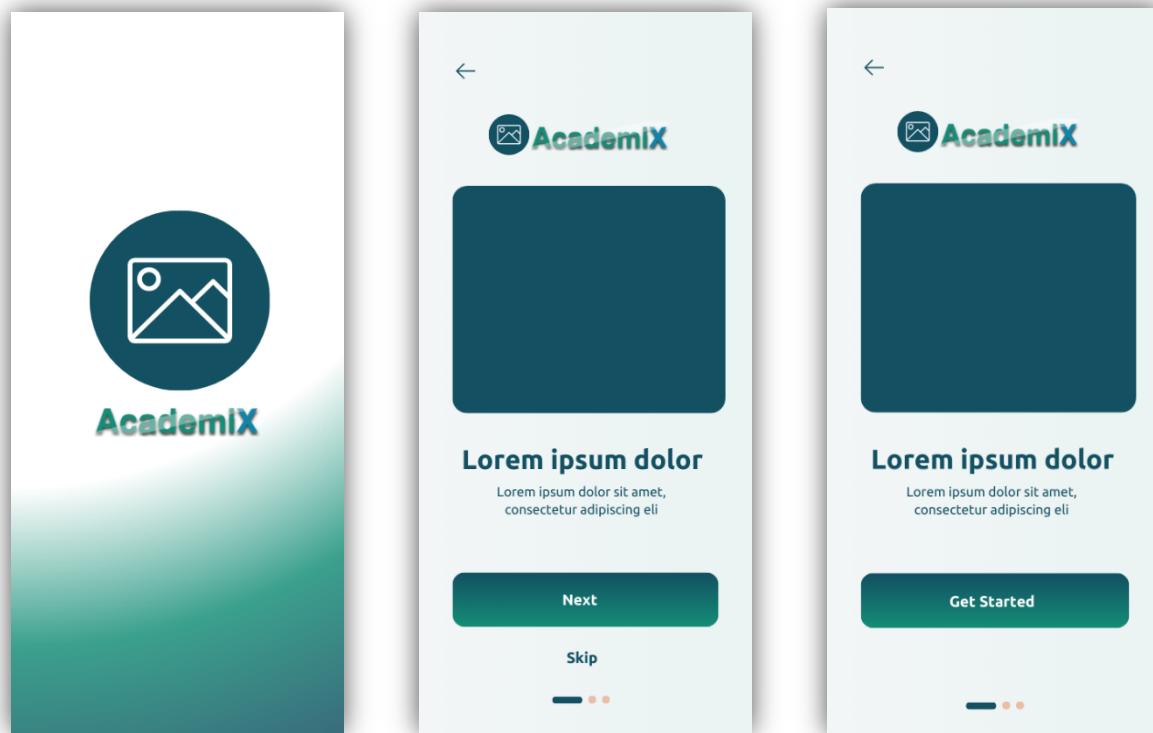
However, the simplicity of Design 1 can also be a drawback. Essential features might be overlooked or omitted, reducing the app's functionality compared to more complex applications. This minimalist approach could lead to limitations in certain areas, potentially impacting the user experience for those who require more advanced features.

## Design 2:

### Overview:

Design 2 balances a clean aesthetic with subtle decorative elements, creating a visually appealing yet straightforward interface. Utilizing a soothing and modern color palette of teal and coral, the design maintains a fresh and engaging appearance without being overly minimalistic. The layout is structured to provide clarity, with distinct sections for flash quizzes and study groups, complemented by intuitive navigation and a prominent search bar. Rounded edges and subtle shadows add depth, while large, bold fonts for headings ensure readability. This design perfectly balances functionality and visual appeal, fostering an efficient and enjoyable user experience.

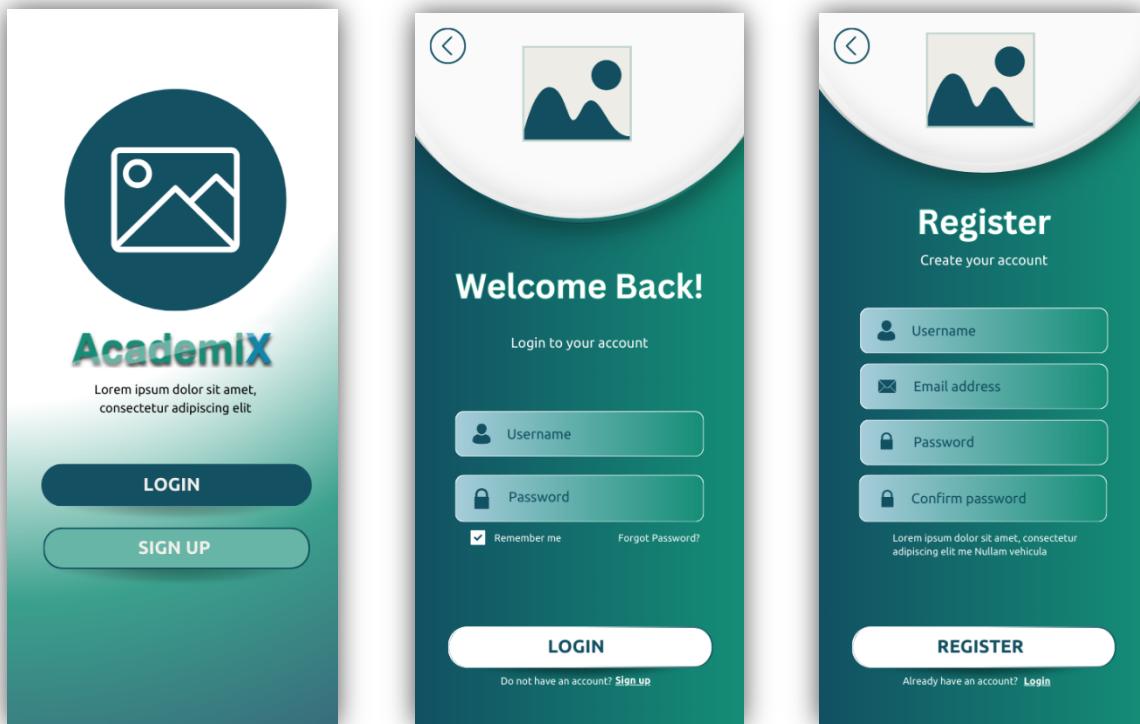
### Greeting Page



This is the first screen you'll encounter upon opening the app. Here, you'll see the app's logo, representing our brand identity, and a brief introduction or tutorial explaining the app's purpose. This introduction gives users a snippet of what to expect when using the app.

You will find two buttons on this screen: "Next" and "Skip." Clicking either of these buttons will take you to the final page of the introduction, which features a "Get Started" button. Clicking "Get Started" will redirect you to the login/sign-up page, where you can use the app.

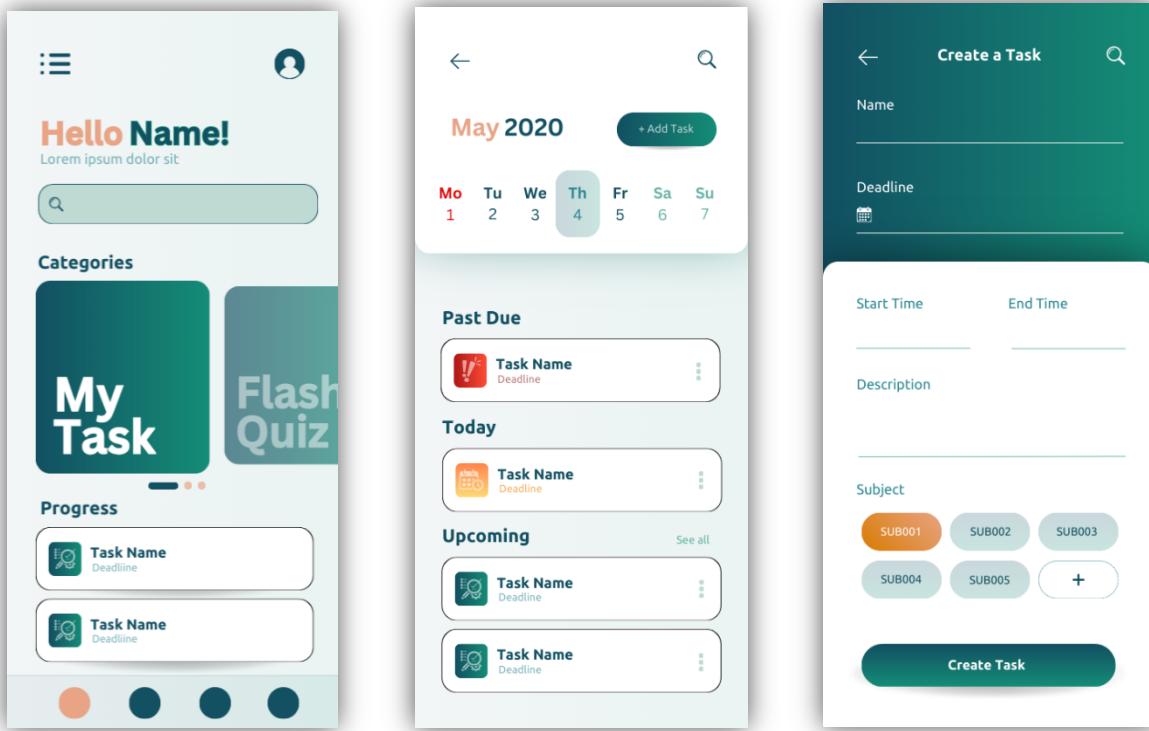
## Login/Sign Up



On this page, you'll see the app's logo and a brief introduction to the app. The user can sign up or log in to access the app. On the login page, the user can enter their email and password. There is a "Remember Me" option to retain the account information and a "Forgot Password" link for recovering a forgotten password. After entering their credentials, the user can click the login button to continue using the app. If a person still needs to sign up, there is an option below the login button to be redirected to the sign-up page.

The user can enter their username, email address, password, and password confirmation on the sign-up page. Once all fields are filled out, they can click the register button to create their account. If the user has an account, they can proceed to the login page using the option below the register button.

## Task Management Page



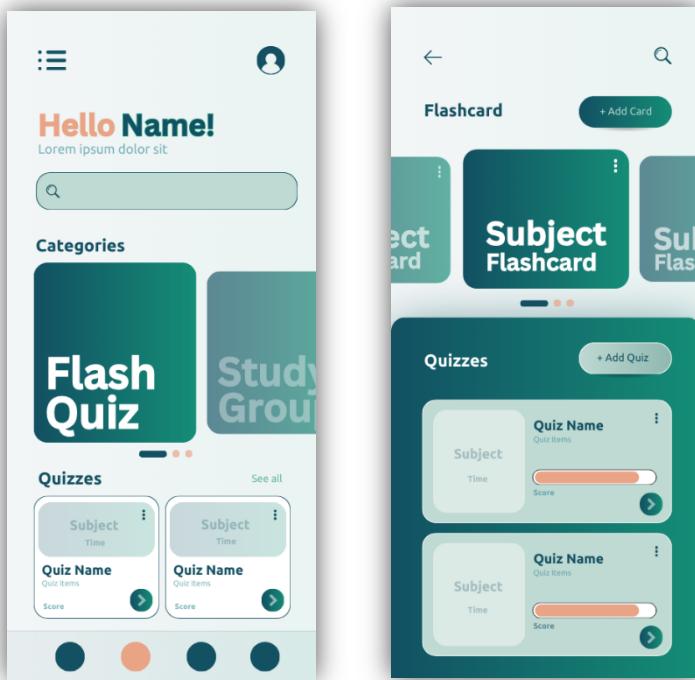
This is the home page where the user will be greeted. Every feature in this app is displayed in the category section, such as task tracking, flashcards, and more. If the user swipes to their preferred feature, the details of that feature will be displayed. For example, the user will see the tasks they have created on the "My Tasks" page, including the task name and deadline. The navigation bar is at the bottom of the screen. The user can also search for what they are looking for. The menu bar is at the top of the screen, where all feature options can be found, along with the account button.

Once "My Tasks" is opened, it will display the calendar and the current week. The current date will be highlighted. Users can observe different colors for each date, which indicate the status of tasks. Red indicates that the task is past due, and light green indicates that there are tasks on that date.

Below the calendar, the user's created tasks are displayed, showing the task name and deadline. Tasks are color-coded based on their deadlines: red for past due, orange for today's deadline, and green for upcoming deadlines. An "Add Task" button is at the top of the screen, where users can add new tasks.

On the "Create Task" page, users can type in the name of their task and the deadline. They can also specify the task's start date and end date and add a description. Users can tag the task based on its subject; if the subject is not listed, they can add it as a new tag. Once all fields are completed, users can click the "Create" button to finish creating their task.

## Flashcard and Quiz Page

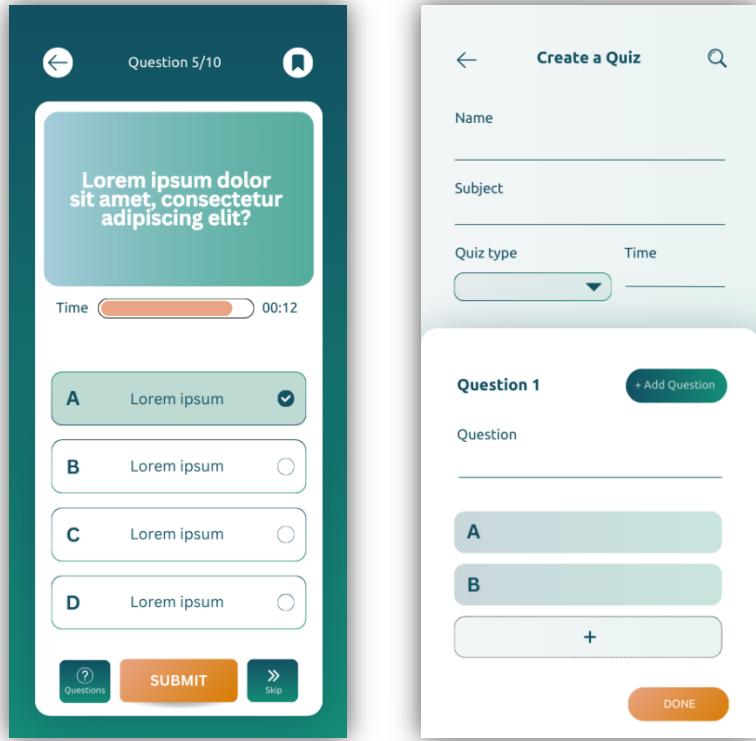


This is the homepage for the quiz and flashcard section. When the user swipes to the feature flash quiz, it will display the details of that feature. Here, you'll see the quizzes available for a subject, their time limits, and your score if you've completed the quiz.

In the flashcard and quiz section, the user can swipe to select the flashcard they want to open. Three small buttons allow the user to edit or delete the flashcard. Above these buttons is the "Add Card" button, which enables the user to create a new flashcard.

Below is the quiz section, where users can choose which quiz to answer. It displays the quiz name, time limit, and subject. If the student pauses the quiz, it will also show their progress. Users can edit or delete the quiz using the three small buttons. They can also add a new quiz by clicking the "Add Quiz" button.

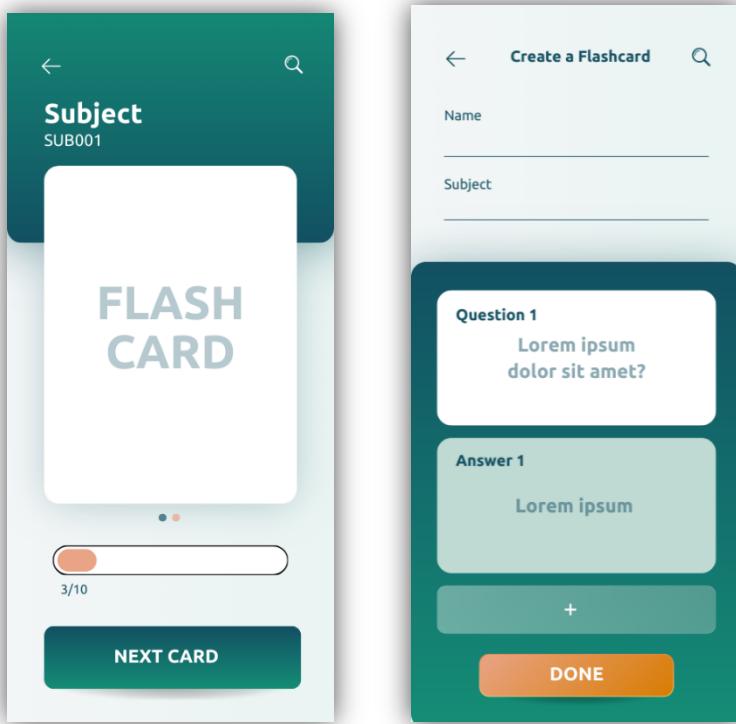
## Quiz Management



This is the quiz page. If the user chooses to start a quiz, this will appear on their screen. In the upper section, you'll see the current question number. You'll also have the option to go back, pause the quiz, or save it as a bookmark to quickly return to it. The main area will display the question with the time limit below it. There will be answer choices based on the number of options set during quiz creation. Below, there are three buttons: the Question List button, which displays a list of all questions, allowing the user to find and answer any unanswered items; the Submit button, which is clicked to submit your answer and proceed to the next question; and the Skip button, which can be clicked to skip a question and return to it later.

The user can enter the quiz name and specify the subject on the quiz creation page. The user can choose the type of quiz to determine how the questions are formatted. For example, if the quiz type is multiple choice, the user can input a question and add as many answer choices as they want. Once a question is complete, they can add another by clicking the "Add Question" button. The user can also set a time limit for each question or leave it blank. When the quiz creation is finished, they can click the "Done" button to save it.

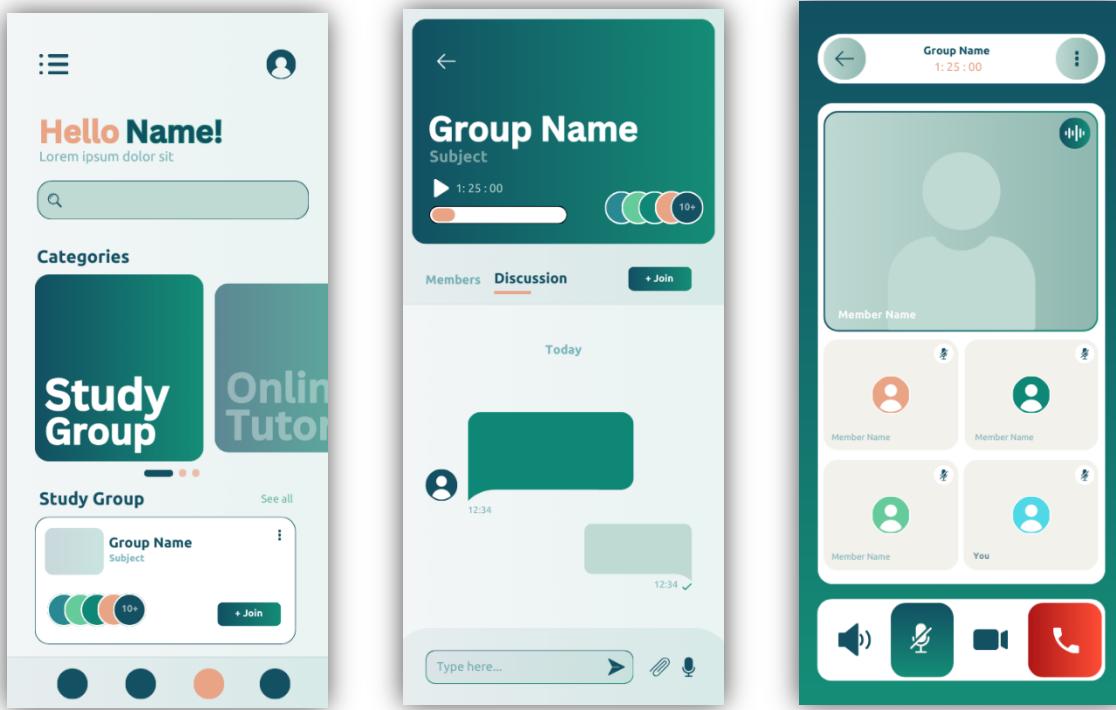
## Flashcard Management Page



This is the flashcard page. If a user chooses to open a flashcard, this will appear on their screen. You'll see the subject for which the flashcard is intended for. The main area will display the flashcards. The user can tap the flashcard to reveal the answer. Below, the user can see their progress on which number is the flashcard. The user can click the next card button if they want to proceed with the other flashcard.

In the flashcard creation, the users can type in the name of the flash card and its subject. They can proceed to add questions for the front page of the card and the answer for the back part. If the user wants to add another card, they can proceed by clicking the plus button. Once they finish the creation, they can click the done button.

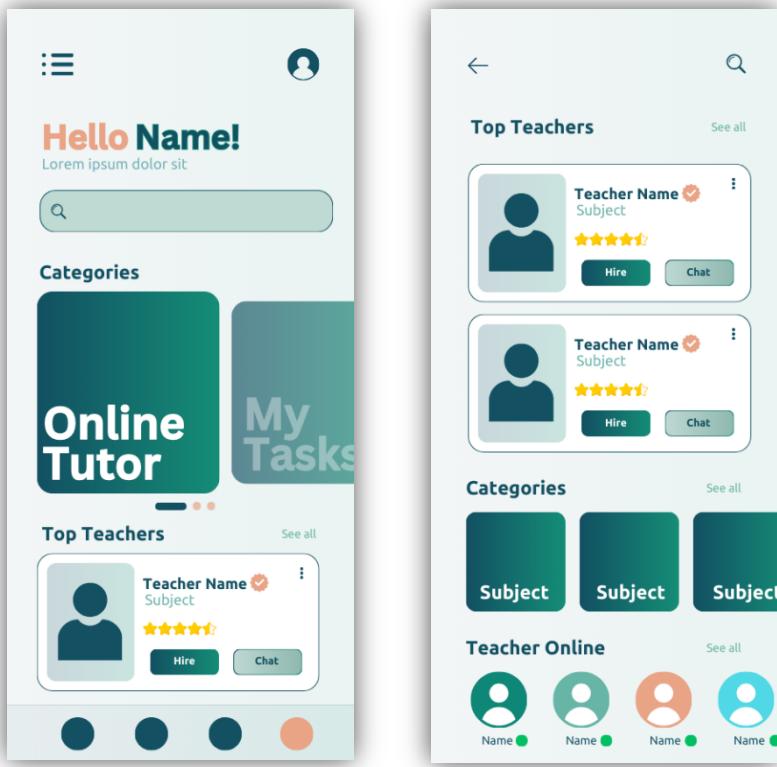
## Study Group Page



This is the study group home page. When the user swipes to the study group feature, details about that feature will appear. You can see a group that you can join. It will display the group name, the subject they are studying, and how many members are in the group. The user can block or leave the group with the three small buttons. Once the user clicks on a specific group to join, they will be greeted by an online meeting where members can join to connect and study. It will show how many members are in the meeting and how long it has been going on. Below, there will be a discussion area where members can chat with each other about specific lessons. They can attach files and even voice recordings. There is also a section where all existing group members can be seen. If the user decides to join the group, they can click the join button.

Members can discuss the lessons and study together in the online meeting area. They can speak or mute themselves, turn their camera on or off, and leave the meeting if they wish. In the upper section, the duration of the meeting is displayed. There are also three small buttons where users can share their screen or modify the settings of their camera or microphone.

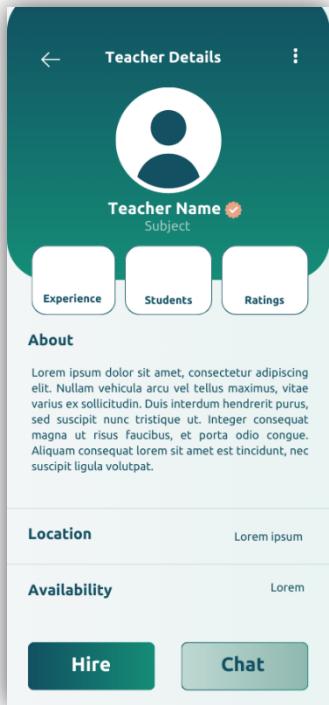
## Online Tutor Page



This is the Online Tutor page. When the user navigates to the online tutor feature, the details of this feature will appear. Here, users can see the top teachers available for hire as tutors. The display includes the teachers' names, teaching subjects, and ratings. Users can click the hire button to hire a tutor or chat with the tutor first to discuss details before hiring. Additionally, three small buttons allow users to unhide a tutor they have hired, add ratings, or block and report a tutor.

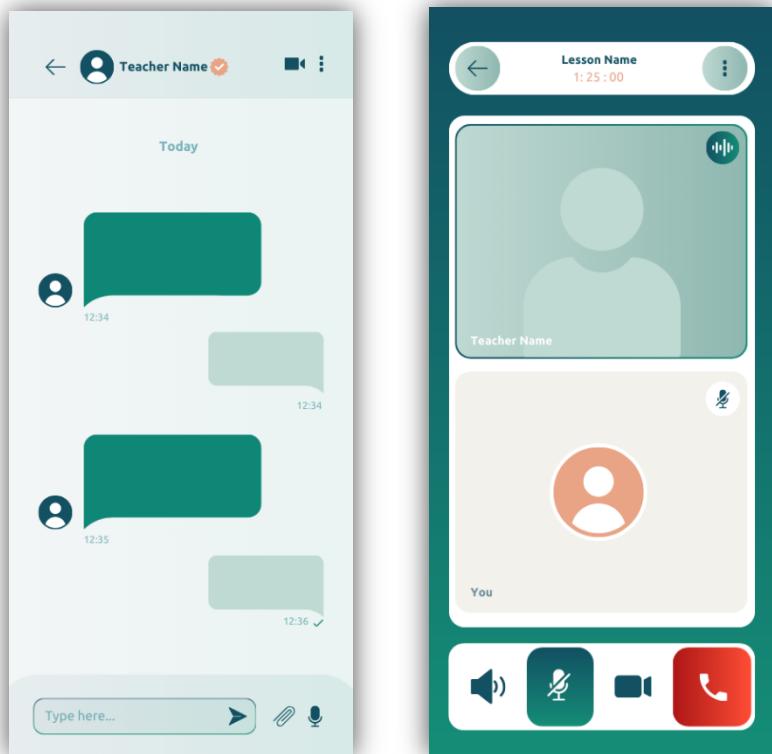
Once the Online Tutor feature is selected, users can browse the list of top teachers to find the right tutor. There are categories for subjects to help filter the teachers. Users can also see which teachers are online and available to respond immediately.

## Teacher Details



Suppose a user chooses to click on a teacher to hire. In that case, they can view detailed information such as how many years the teacher has worked, how many students they have handled, and their ratings. There is also an About page to learn more about the teacher. Users can see the teacher's location and check their availability. Below, users can hire the teacher or chat with them first to make inquiries.

## Tutor Session



In this section, the tutoring session takes place. The student and teacher can send messages to each other to discuss the topic or address any inquiries the student has about the lessons. They can attach files and send voice recordings. Additionally, they can start a one-on-one meeting to discuss a lesson virtually. During the meeting, the teacher can share their screen and record their discussion by clicking the three small buttons above. The lesson name and the duration of the meeting will be displayed. Both participants can choose to speak or mute themselves, turn their cameras on or off, and end the call.

### Design 2 User Perspective:

Sam was thrilled to discover AcademiX, an app that seemed the perfect solution to help her stay organized and on top of her studies. As soon as she opened the app, she was greeted by a friendly welcome screen that guided her through the app's features. She appreciated the clear instructions, which made navigating the app a breeze.

Sam primarily used the Task Management feature to keep track of her assignments and deadlines. She loved seeing her tasks displayed neatly on a calendar, with different colors

indicating their status. The ability to add new tasks quickly and easily ensured that nothing slipped through the cracks.

When Sam needed a study break, she turned to the Flashcard and Quiz feature to review her notes and test her knowledge. The flashcards were especially helpful for memorizing key concepts, and the quizzes were a fun way to challenge herself and track her progress.

Occasionally, Sam joined study groups through the app to collaborate with her classmates. She appreciated connecting with others who were studying the same subjects and found the online meetings and discussion areas valuable resources.

Sam found the AcademiX Online Tutor feature incredibly helpful. She could easily hire tutors, chat with them, and have one-on-one sessions in the app. This convenience made getting extra help with her studies effortless and accessible.

Overall, Sam found AcademiX to be essential for her academic success. Its intuitive design and diverse features made it easy for her to stay organized, study effectively, and connect with others in her academic community.

## **Assessment of Design 2**

### **Advantages:**

The primary advantage of this design is its balance between aesthetics and functionality. The soothing color palette and clean layout make the interface visually appealing and inviting, which can enhance user engagement and satisfaction. The clear organization of sections and intuitive navigation ensure that users can easily find and access the needed features, promoting a seamless user experience. Additionally, using large, readable fonts and well-defined interactive elements like buttons and cards contributes to an efficient and user-friendly interface, supporting usability and productivity.

### **Disadvantages:**

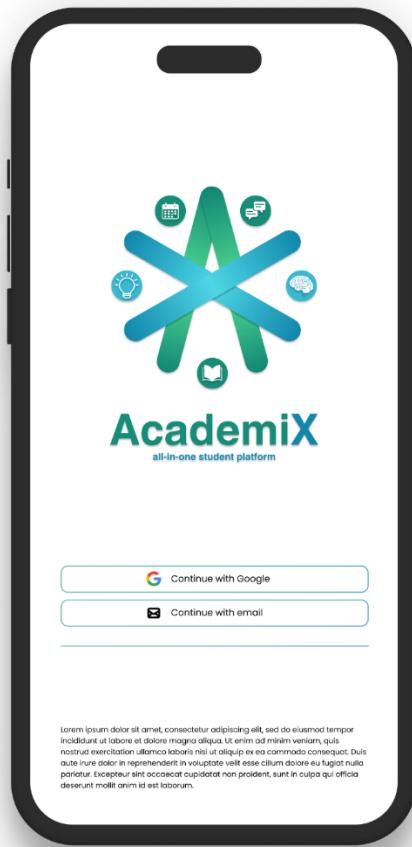
A potential disadvantage of this design is that it may lack the high level of customization some users desire. While the design balances simplicity and visual appeal, it might need more flexibility for users who prefer more personalized or intricate interfaces. Furthermore, while adding visual interest, the subtle decorative elements could distract users who favor a more straightforward and minimalist approach. This design might also need help scaling for more complex features or content-heavy sections without compromising its clean and organized aesthetic.

## Design 3

### Overview:

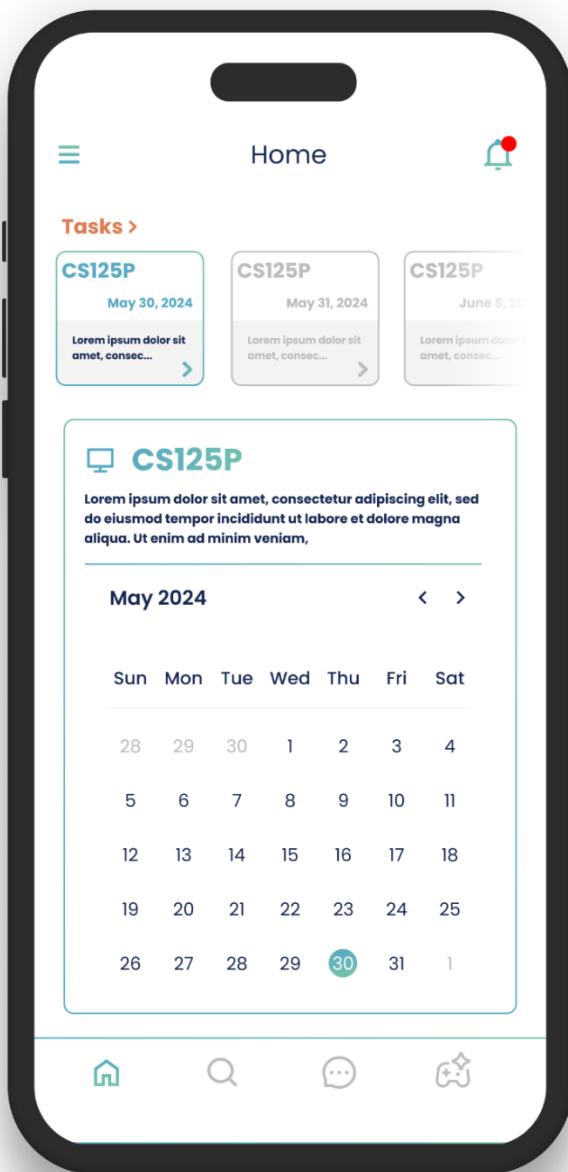
Design 3 is created with users in mind, aiming for easy navigation and appealing visuals. From the welcoming login page to the simple layout of the home dashboard, every part is carefully planned to make it easy to use. Tasks are organized clearly, messaging is straightforward, and notifications are all in one place, helping users stay on top of things effortlessly. With its clean look and user-friendly design, AcademiX makes academic management straightforward and enjoyable for students.

### Log-in



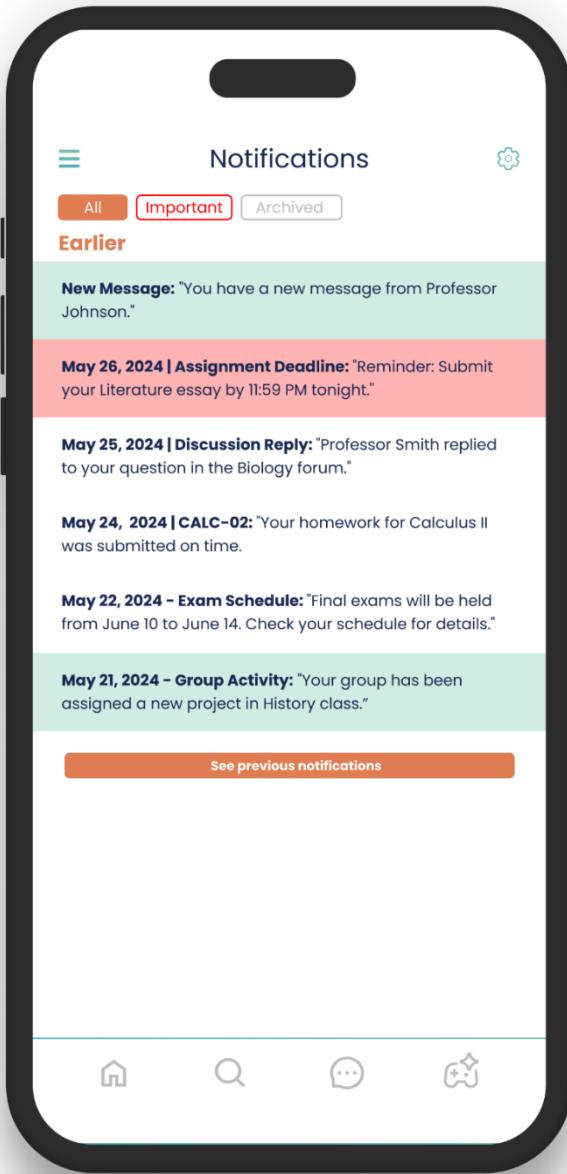
The login page showcases a clean and user-friendly interface, prioritizing simplicity to streamline the login process for students. At the top, you'll find the logo and app name, providing a familiar touchpoint for users. Below, various login options are presented, ensuring accessibility for all users. Placeholder text at the bottom of the screen is reserved for descriptive or legal information, maintaining clarity without cluttering the interface. Overall, the design aims to offer an intuitive and inviting entry point for students into the application.

## Home



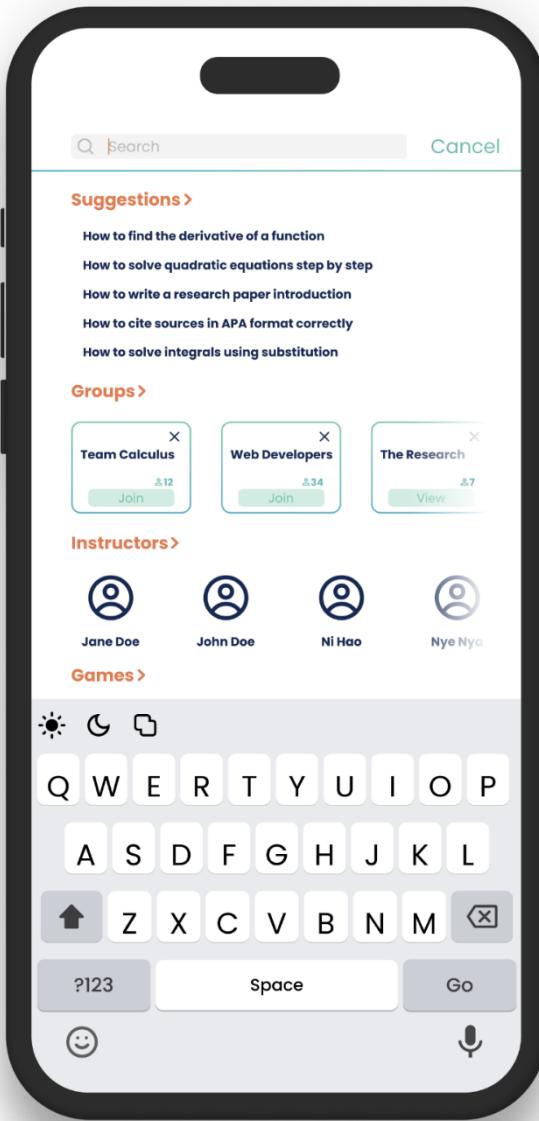
The home page is designed to facilitate efficient task management for students. At the top, students can effortlessly view upcoming tasks, complete with detailed information and a calendar view for convenient scheduling. Additionally, they can access all tasks from this section. Menu and notification buttons are conveniently located at the top for easy navigation. The bottom navigation bar provides quick access to Home, Tasks, Messages, and Games, ensuring a seamless and organized user experience for students.

## Notification



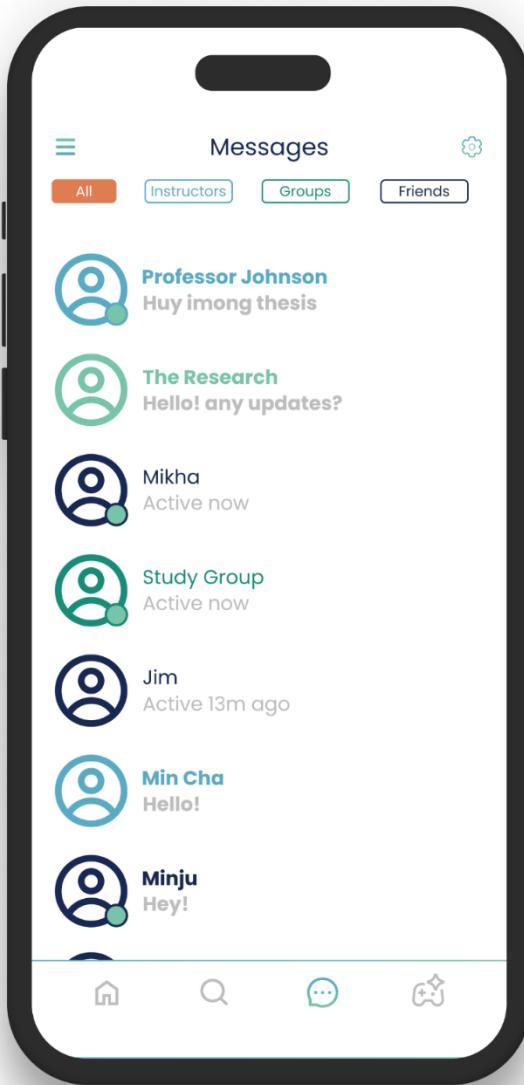
The notification page is designed to make it easy for students to see all their notifications. They can view them all in one place and choose to filter them if they want. The settings button at the top-left lets students personalize how the notification page looks and works, so they can set it up just how they like it. This gives students the freedom to adjust their notification settings to suit them best.

## Search



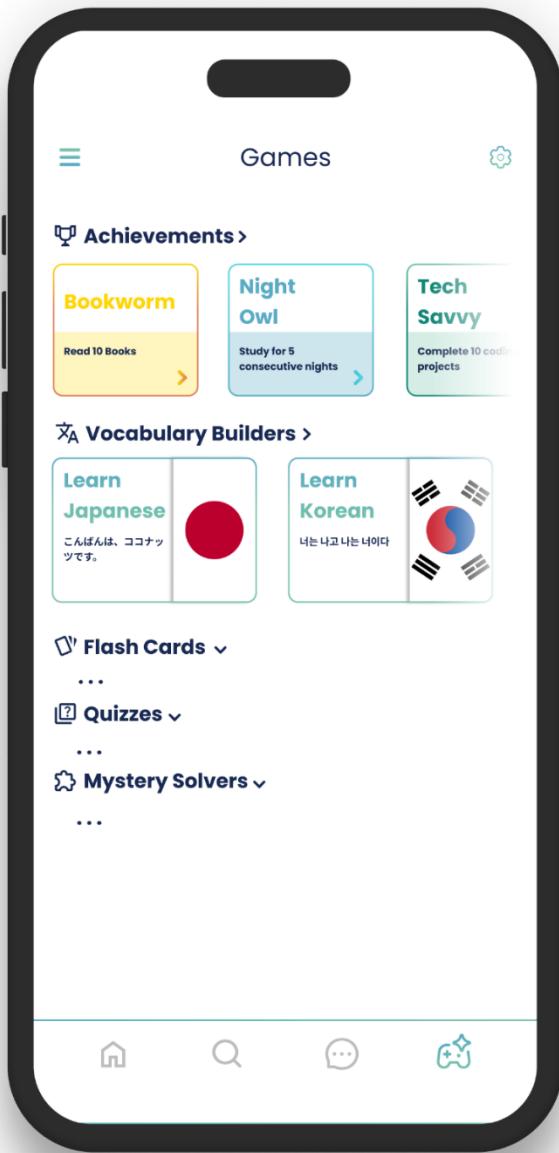
The search page acts as a robust tool for targeted inquiries, offering not just a search bar for direct queries, but also providing supplementary aids such as suggestion categories, group listings, instructor profiles, and even avenues for exploring related games.

## Messages



In the messaging hub, you can effortlessly connect with your instructor, groups, or friends. Messages are easily filterable for convenience, and you can see who's currently active. Just like the notification page, you'll find a settings button in the top-left corner, giving you the flexibility to personalize your messaging experience to your liking.

## Games



The games page is designed to be organized, offering distinct sections for various learning activities. Users can engage in gamified learning through the "Games" section, track their progress with motivational achievements, participate in the reading challenge titled "Bookworm," and explore language-specific vocabulary building exercises like "Vocabulary Builders" with dedicated options such as Japanese and Korean.

### **Design 3 User Perspective**

John opens the AcademiX app and is greeted by a clean and inviting login page. He sees the familiar AcademiX logo and name at the top, making him feel at ease. John quickly selects his preferred login option and effortlessly gains access to the app.

Upon logging in, John lands on the home dashboard. Here, he sees a personalized overview of his upcoming tasks, including assignments and deadlines. He appreciates the calendar view, which helps him plan his schedule effectively. The menu and notification buttons at the top ensure easy navigation.

John notices a message notification and clicks on the messaging platform. He exchanges messages with his classmates about an upcoming group project, discussing ideas and sharing resources. The seamless communication helps John feel connected and supported in his studies.

As John continues to explore the app, he checks the notification center. He sees updates about a new assignment posted by his instructor and a reminder about an upcoming quiz. John appreciates having all his notifications in one place, keeping him informed and organized.

John decides to use the search functionality to find additional resources for his assignment. He enters relevant keywords and quickly discovers helpful articles and academic materials. The comprehensive search tool saves John time and enhances his learning experience.

After completing his tasks for the day, John decides to unwind by exploring the games section. He finds a variety of educational games designed to reinforce his language skills. Intrigued, John selects a flash card game focused on computer programming and enjoys a fun and interactive learning experience.

### **Assessment of Design 3**

#### **Advantages:**

The design presents several advantages. Firstly, its user-friendly interface prioritizes simplicity and intuitiveness, facilitating easy navigation. Additionally, the clear organization of each section, including the home dashboard, messaging platform, and games section, enhances user experience by providing a logical and structured layout. The app offers comprehensive features tailored to students' needs, such as task management, messaging, notifications, search functionality, and gamified learning, providing a holistic academic management solution. Furthermore, the inclusion of personalization options allows users to customize settings according to their preferences, enhancing their overall experience.

Lastly, the engaging gamified learning feature adds an element of fun and interactivity to the learning process, motivating users to engage with the app regularly.

### **Disadvantages:**

Despite its advantages, the design also presents some disadvantages. Firstly, the potential complexity of the app, arising from the inclusion of multiple features and sections, may overwhelm some users, particularly those less familiar with technology. Additionally, users may require time to familiarize themselves with all the features and functionalities of the app, especially if they are new to academic management apps or gamified learning. Moreover, dependency on technology introduces the risk of frustration or disruption if users encounter technical issues such as app crashes or connectivity problems. Lastly, the engaging gamified learning feature may pose a potential distraction, as users may spend more time playing games than focusing on their academic tasks, detracting from the app's primary purpose of supporting learning and productivity.

### **Requirement Changes:**

To enhance user experience, we are introducing customizable features, including the ability to select from various color palettes and personalize the navigation bar. Users can now tailor the interface by choosing preferred color schemes and arranging the navigation bar to prioritize features they use daily, ensuring a more intuitive and efficient interaction with our platform.