CogniCrew

Collaborative learning made fun

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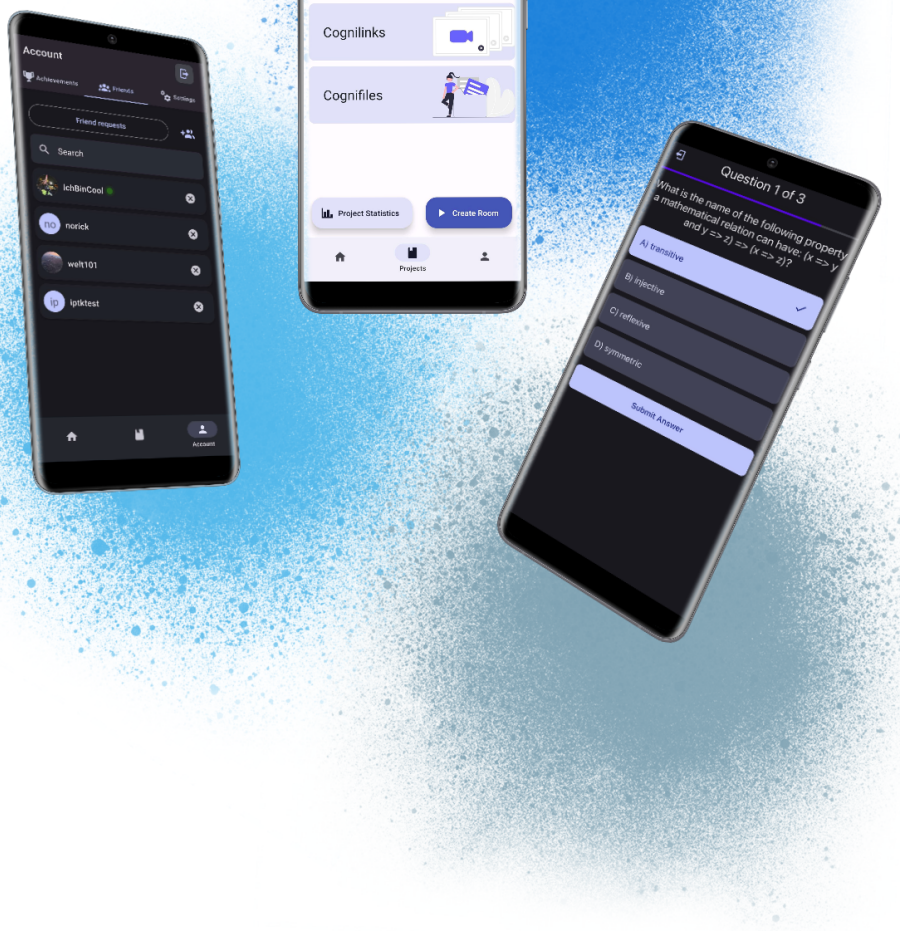

TECHNISCHE UNIVERSITÄT DARMSTADT

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1 Introduction

1.1 Purpose of the document

This document serves as a comprehensive guide to the CogniCrew app, detailing its functionality, features, and usage. It aims to provide users, developers, and stakeholders an insight into the app's functionalities.

1.2 Overview of CogniCrew

CogniCrew is an application designed to transform the learning experience through collaboration and interactivity. It offers a unique platform for users to create, share and engage with educational content, fostering a dynamic and inclusive learning environment.

1.3 Target audience

CogniCrew is tailored for a diverse user base. It is especially beneficial for those who embrace collaborative and interactive learning methods. This includes especially students who engage in group projects, but also educators seeking advanced teaching tools and individuals who enjoy immersive and participatory educational experiences.

1.4 Motivation

CogniCrew emerges in response to a crucial need for innovative learning in an era where digital education is paramount. Its relevance lies in its ability to foster a dynamic, interactive learning environment, catering to modern learners who thrive in collaborative settings. The app addresses the shift from traditional, passive learning methods to a more engaging, active approach, making education not just informative - but also enjoyable. By integrating interactive elements like the ability to play learning games and uploading various learning material to projects, CogniCrew maintains high user engagement and motivation, fostering a sense of community and cooperative discovery among its users. It transforms the solitary act of learning into a shared journey, encouraging collaboration, creativity and a deeper understanding through collective insights and experiences.

1.5 Builds

The latest installable .apk build for Android of the app can be found here: iptk.w101.de/files/builds or in the *deliverables* folder.

2 Features

2.1 Project creation and management

CogniCrew enables users to initiate and manage learning projects. Project editing is exclusive to the project owner, ensuring control and integrity of the content.

- **Cognicards:** This feature facilitates the creation and management of our implementation of digital flashcards. All flashcards need to belong to a flashcard set. Flashcards always have one answer and question and users can create, add, edit and delete them within their respective sets. Sets and flashcards can further be organized by sorting them alphabetically, by the date of creation, or by priority.

- **Cogniquiz:** Besides flashcards, users can also create, edit, delete as well as sort quizzes and quiz sets. Each quiz question typically offers four answer choices, but users have the flexibility to add up to 6 answers or to remove answer options. Multiple answers can - and at least one answer has to be correct.

- **Cognilinks:** Users can further add weblinks, termed as *Cognilinks*, which consist of a title, a subtitle, a description, and an URL. These weblinks are meant to reference relevant, external learning material. Users have the ability to share these links with other people through messaging applications like WhatsApp.

- **Cognifiles:** Each project in CogniCrew also has a file repository where users can upload files. These files get automatically sorted depending on their specific file ending into one of five distinct categories: PDF, DOCX, XLSX, Miscellaneous, and Photos. A download option exists as well, and all uploaded files can be deleted.

- **Project rating:** Users are able to rate projects and are able to have an insight into rating statistics, which consist of the total amount of ratings as well as the amounts of particular ratings.

2.2 Collaborative study rooms

CogniCrew offers users the ability to establish virtual study rooms within the context of their projects. These rooms serve as a dedicated space to engage in joint learning

activities, utilizing the learning content created within *Cognicards* and *Cogniquiz*. Each room is based on exactly one learning project, and users can play games based on content included in that specific learning project. The games are interactive, allowing for real-time competition.

There are two types of games: **Cognicards** and **Cogniquiz** - which are based on quizzes and flashcards respectively. Room creators have full control over the room's accessibility, with options to open the room for other users, close the room for privacy, or delete the room whenever they choose to do so. When creating a room, the user can specify the room's name, can optionally make the room password protected, make it a friend's only room and specify the room's maximal player amount.

Once the owner decides to start a game within a room, he chooses the quiz-/flashcard sets he wants to play a game with and then has the option to specify the duration of each round of the game and the number of total rounds that should be played. After each round, the correct answers will be highlighted. If a question was answered correctly by the user, he gets points. In a podium screen, the current highscore-leaders and their respective scores will be shown.

2.3 Settings

CogniCrew offers customizable settings to the user which consist of:

- **Profile details:** Users can view their account details here. The details consist of their username, E-mail, account creation date and last login date. They are also able to change their profile picture via uploading a photo from their phone.
- **Design:** A switch is provided for users to alternate between a light and dark design theme of the app.
- **Interests:** Additional interest tags can be specified here that influence the recommendation system and get matched with other users' projects' tags.
- **Interest tags:** Users can input tags that resonate with their interests, tailoring their Discover page.
- **Username Update:** Allows users to change their username.
- **Password update:** Users can change their password.
- **Mail update:** Users can change their E-mail.
- **Music control:** Adjust the music volume of the app's songs.

2.4 Manage friends

The app's *Manage Friends* feature provides a way to grow and organize social networks. Users can easily add peers, search for specific contacts via usernames, and remove connections as desired. Furthermore, all the users' friends' online statuses are shown.

2.5 Statistics

Statistical data is being monitored at two distinct levels:

- **Project statistics:** If a user is a member of a project, he can view statistical data about that project. That includes data about learning material, so the user can view the amount of flashards, quizzes, inks, documents, and photos in that project. Also, the global rank of the user for a given project and his rank among his friends is shown. Both are based on the accumulated game scores for Cogniquiz and Cognicards the user has achieved by playing games. These scores as well as the total amount of wins and time spent in each of the games are tracked and displayed. Finally, the time spent in each of the games is also visualized in a pie chart.
- **Global statistics:** Here, the accumulated statistics of all the projects the user is a member of are shown. That includes the above learning material data summed up over all the user' projects, as well as the game data for every game he has played summed up. The data is then again visualized in the form of a pie chart.

2.6 Discover

A recommendation system analyzes the user's preferences to curate a list of public projects specifically tailored for him. This feature ensures that the user discovers new, relevant content that aligns with his interests and learning goals.

2.7 Search projects

The Search projects page displays a list of all public projects. The search functionality can be utilized to find projects based on title, tags, or description. By separating the search terms with commas, the user can search for multiple queries at once.

2.8 Music

There are two custom-made songs included in the app. One lobby song and one song that plays when competing against other players.

2.9 Achievements

Users can unlock achievements by fulfilling certain requirements, and once accomplished, they appear on the user's dedicated achievements tab. There are ten achievements in total, and all the achievement icons are custom-made.

3 Technical overview

This section provides an overview of the technologies we used for the development of our mobile application. It serves to inform the reader about the synergy between the selected tools and frameworks, reflecting our choices aimed at creating an efficient tech stack. The chosen stack harmonizes design, functionality and performance, aligning with our goal of creating a robust and user-friendly application. Additionally, this section will offer a view of our database structure, including the entity-relationship diagram and other relevant details. We implemented the whole project in *TypeScript*, a type-safe programming language that compiles to plain JavaScript.

Figure 1: Tech Stack & Tools

3.1 Version control

During the development of this app, we used *Gitlab* for the creation and assignment of user stories. As the development process reached its final stages, we mainly switched to our *Discord server* we had been using solely for communication until that point, to track unfixed bugs and new to-do's.

Figure 2: Gitlab

3.2 Frontend

During the development of our Frontend, we have made use of three important technologies:

- **Figma:** We used *Figma* to enable a collaborative and iterative design process. After deciding on specifics regarding app design, we created mockups in a *Figma* template and detailed them afterward. This helped us agree on stylistic choices and enabled a homogenous look.

Figure 3: Figma

- **React Native:** The frontend of our application was developed using *React Native*, enhanced with *React Native Paper* for a rich set of UI components. This combination allowed the creation of a smooth and responsive user interface that functions seamlessly across different platforms. We have made use of many packages and the most important ones shall be mentioned here. Navigation within the app is managed by *React Navigation*, offering a flexible solution for routing. State management is handled by Zustand, so we can easily work with global states and experience performance benefits. Our visual aesthetics are supported by a range of libraries as well, including libraries for icons, graphics, and animations, such as *React Native Reanimated*. We even created our own library called *react-native-paper-fastalerts* for consistent and visually pleasing alert design.[1]

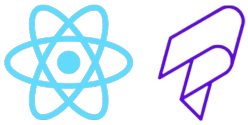


Figure 4: React Native and React Native Paper

- **Expo:** *Expo* played a crucial role in streamlining our development process, particularly in builds, deployments, and updates, making the development cycle more efficient. With the *Expo Go* app, we could view the effects of changes made to the code during development in realtime.

[1] https://fastalerts.adriansoftware.de/

Figure 5: Expo

3.3 Backend

Our backend is powered by Supabase, which we host independently on our own server. This decision allowed us to have enhanced control over customization and security for our backend services. Hosting Supabase ourselves ensured that we could tailor our backend to meet the specific needs of our application, guaranteeing scalability and performance. The backend structure supports and complements the frontend, ensuring a cohesive and efficient application experience for users. We have decided to calculate each major function - if possible - directly with one supabase database call due to performance reasons. We successfully optimized the cloning process, project statistics retrieval, global statistics retrieval, achievements checking, and recommendations retrieval by consolidating these functions each into a single remote procedure call each.

Figure 6: Supabase

3.4 Architecture

The Supabase database relies on *PostgreSQL*. The user communicates with the server via Supabase's remote procedure calls and Supabase's real-time API.

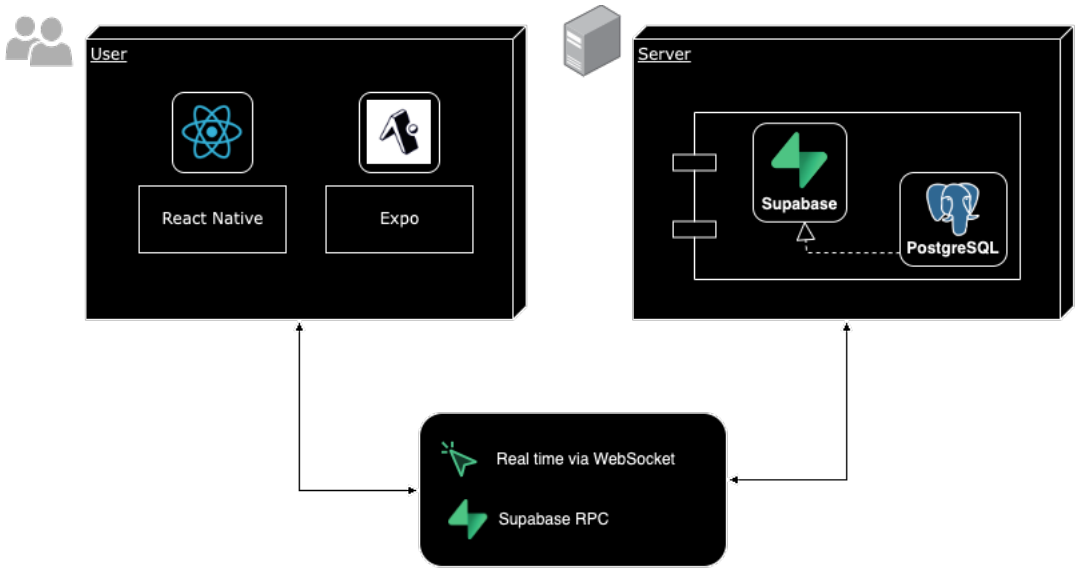


Figure 7: App architecture

3.5 Real-time content modification and interactive multi-user

We decided on two different real-time approaches:

- We chose the subscription based real-time system from Supabase for Frontend-achievements, ratings, friendslist and manipulating learning projects. We listen to changes made to tables in our database and then immediately fetch these changes to the user.[2]
- For the game loop and game-based achievements, however, we don't listen to changes to the database via the Supabase real-time API, but rather have programmed a timer that fetches every second for possible changes to the database. For performance

[2] see https://supabase.com/docs/guides/realtime/postgres-changes

reasons, the checks for achievements happen a bit delayed, checking only every ten seconds for possible changes.

3.6 Recommendation system

The logic of the recommendation system algorithm is as follows: All the projects a user is not already a member of are fetched and their tags are matched with the user's personal interest tags and the tags of the projects the user is already a member of. Then the projects get scrambled so the user gets new recommendations. We limited the amount of received recommendations to be a total of three at a time. Furthermore, only projects are considered that have at least one rating.

3.7 Security

Per default, every message that is sent via the internet gets transported according to TLS-protocol standard.

- **Authentication:** Supabase offers a broad set of authentication components.[3] When a user registers an account, he has to choose a username, an E-mail and a password that get associated with his account. After confirming, a text with an OTP gets sent to the users mail. He then has to reenter the OTP into the app. Same goes for mail-change. Upon successful registration, the password get stored automatically into a safe vault with special protection.
- **Authorization:** Within the Supabase database system, one can create Postgres' row-level-security policies and attach them to tables.[4] Using these policies, we control which user is allowed to modify which datasets inside the table, maintaining full control over the user's ability to update, insert and delete data. We also use definer functions that do not take the tables' policies into regard, but when doing so, we are still save from attacks like sql-injections however, as the parameters of the functions get checked and converted to the correct types before the backend function gets executed.
- **Abuse protection:** Supabase enables different safeguard mechanisms by default. Client messages are always throttled down to ten messages per-second as a safety

[3] see https://supabase.com/docs/guides/realtime/postgres-changes
[4] see https://supabase.com/docs/guides/realtime/postgres-changes

feature. Furthermore, there are several specific rate limits. [5] Especially important for login abuse protection is the *Token refresh* rate limit of 1800 requests per hour.

We want to note that currently there is neither authentication nor authorization functionality integrated into Supabase real-time API for *Broadcast* and *Presence*, which means that potentially attackers could send any information they want via these channels. That is why we mostly restrained from using them and only used *Presence* for tracking users' online statuses and checking if a user changes a quiz / flashcard. This is a big issue and we hope that Supabase addresses this in the future.[6]

3.8 Automated testing

- **Why We Chose Cypress:**

  Cypress is an end-to-end testing framework designed for modern web applications. It enables developers to write various types of tests such as end-to-end tests, integration tests and unit tests. We opted for integration testing over unit testing due to its ability to test the application as a whole and simulate authentic user interactions, including the interplay between multiple components. Integration testing with Cypress offers a more realistic scenario compared to isolated unit tests, what enabled us to detect and fix integration issues more easily and ensured that all integrated parts function seamlessly together. Additionally, Cypress was an attractive choice due to the fact that we were able to work with Cypress Studio which works as a graphical testing interface. We used it for visually creating foundational tests by recording interactions with our app. Over time, we refined these tests to cater to more specific scenarios.

- **Example test cases:** We set our focus on testing the key features of the app such as room and project management, focusing on their creation and deletion processes, alongside vital functionalities like user authentication. For every test, we performed a series of actions. For instance, in testing our room functionality, we opened the app, logged in, created a room, verified its status, toggled its lock and ultimately deleted it. Similarly, our authentication tests assess various cases, ranging from successful logins with valid credentials to failed attempts with incorrect details and scenarios involving empty input fields.

- **Cypress configuration and custom commands:** To enhance maintainability and readability of our tests, we also defined environment variables to standardize test

[5] see https://supabase.com/docs/guides/realtime/quotas
[6] see https://supabase.com/docs/guides/realtime

credentials. Moreover, to streamline our testing process and abstract repetitive actions, we introduced custom commands.

3.9 Database ERM

We began the development process by thinking about what kind of database structure we would need in order to realize our project. We created an ERM in regard to extensibility and tried to adhere to normalization standards, so we could later add new tables to our needs and wants.

- The learning projects are stored in the table *learning_projects*. The table *links* as well as the table *sets* each reference a learning project. Each row in the table *sets* includes a boolean variable called type that is either zero or one depending on if the set is an exercise set or a flashcard set. The tables *exercises* (which contains the quizzes) and *flashcards* store the actual learning material and both reference *sets*. Table *exercises* is then again referenced by the table *answers_exercises* that contains all the answers to every quiz question. Also there is a table *ratings* that contains all the data about which user gave which project a rating.
- The relation between users and the learning projects they are a member of can be found in the table *user_learning_projects*.
- We store the achievements in a table called *achievements* and there is a table called *user_achievements* that contains all data about which user got which achievement.
- Friend relations are stored in the table *friends* linking one user to another.
- The table *tracker* is used for internal real-time tracking of several things.
- Finally, there are a few tables, in which there is game data being temporarily stored in. First, there are the tables *rooms* and *public_room_states* which contain information about all the rooms currently being hosted by users. Then there are the tables *private_room_state* and *player_answers* in which game round data is being stored in and finally there is the table *queue* that stores internal command information which is being used reset rooms.
- The full database schema with all internal tables can be found here.

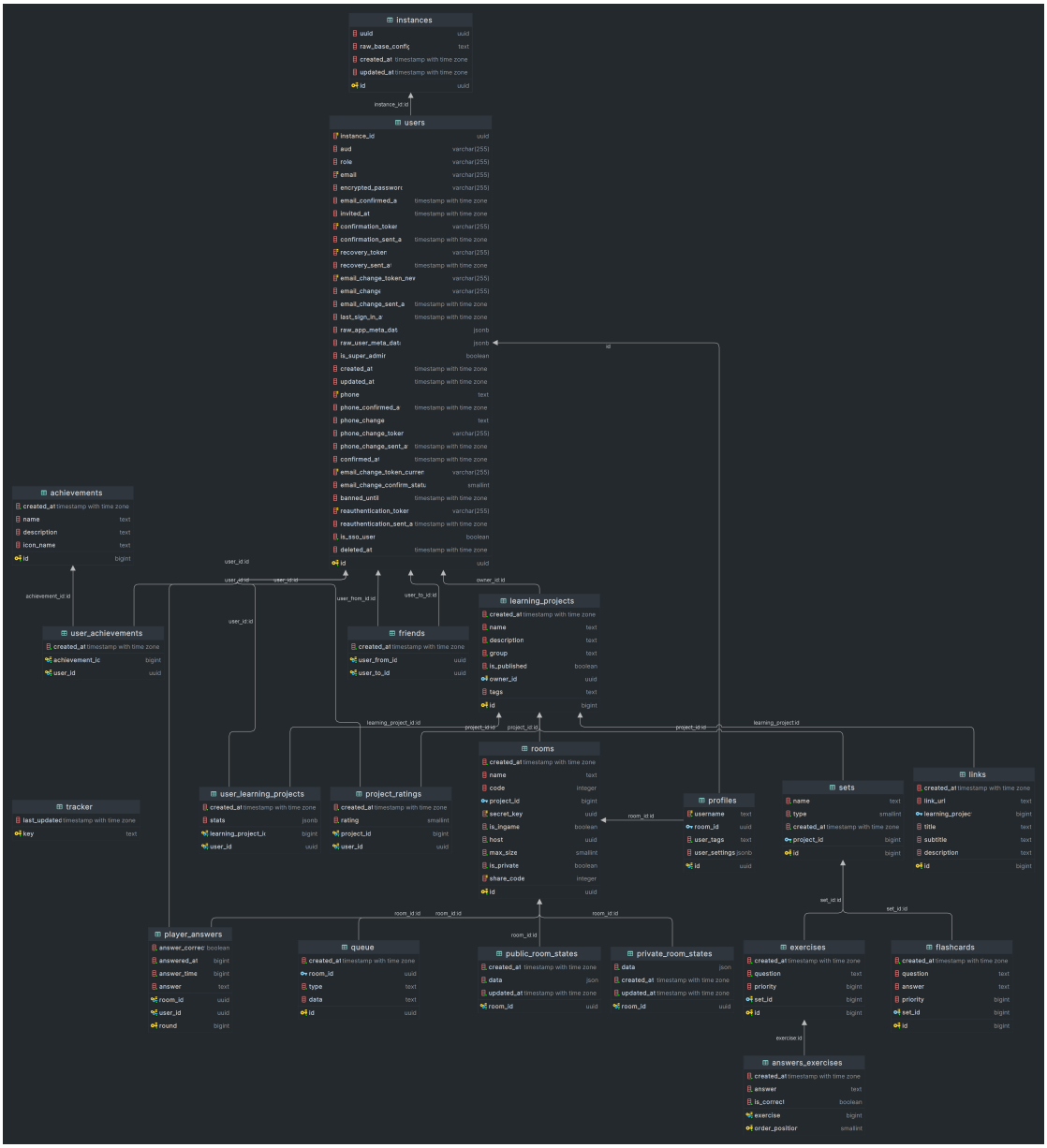


Figure 8: Structure of our database

4 Understanding the user interface

4.1 Login

The initial interface presented to the user is the landing page of the CogniCrew app. On this page, users are greeted with an inviting message that encapsulates the essence of CogniCrew – a place to supercharge learning, collaborate with peers, and unlock one's full potential.

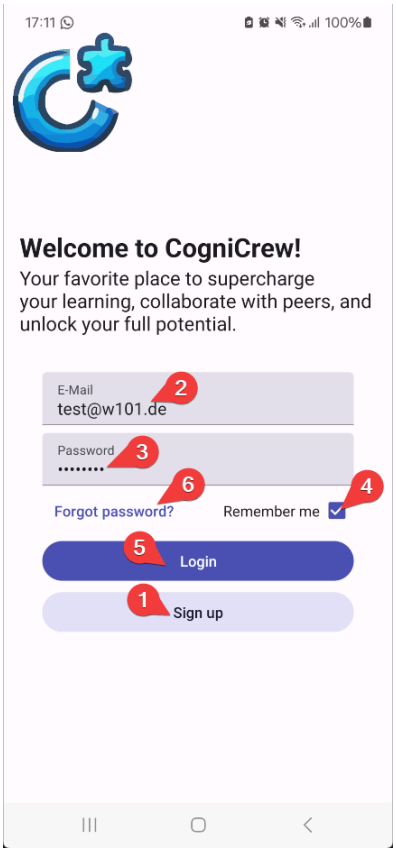


Figure 9: Login

1) **Sign up:** The journey within CogniCrew begins with the *Sign up* button, prominently

placed for new users to create their account and join the collaborative learning platform.

2) **E-mail:** Once an account is created, users can enter their E-mail address in the provided field as part of their login credentials.

3) **Password:** Users are assured of their privacy with a field to enter their password, which is safeguarded through encryption.

4) **Remember me:** For convenience, the *Remember me* checkbox-option allows returning users to maintain their login details for quick access on subsequent visits.

5) **Login:** After entering their login credentials, users can tap the *Login* button to dive into the app.

6) **Forgot password:** Should users forget their password, a button to reset credentials ensures they are never locked out from learning.

4.2 Home

Once a user has logged in he will find himself on the Home screen.

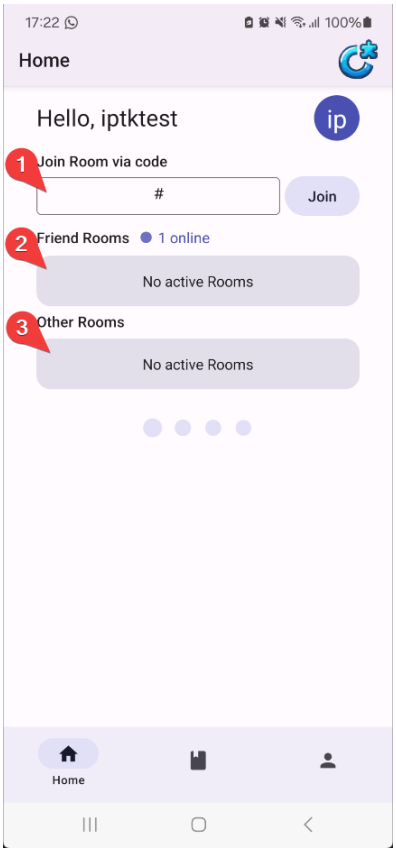


Figure 10: Home

1) **Join room via code:** Room creators have the option to set a code during the creation process, providing a convenient way to enter a room without dealing with a password. Simply enter the designated code on the Home tab and join the room by tapping on the *Join* button.

2) **Friend rooms:** If you wish to join a friend's public room, navigate to the *Friend Rooms* list. Choose a room that interests you and seamlessly join by tapping the *Join* button in the dialogue that appears. If you tapped on the wrong room or changed

your mind, you can go back to the Home tab by tapping on the *Cancel* button.

3) **Other rooms:** For those looking to broaden their knowledge and explore new questions and topics, the *Other Rooms* list is available. Select any public room that intrigues you and join by tapping the *Join* button in the accompanying dialogue. If you tapped on the wrong room or changed your mind, you can go back to the Home tab by tapping the *Cancel* button.

4.3 Discover

Here, the user can see his recommendations.

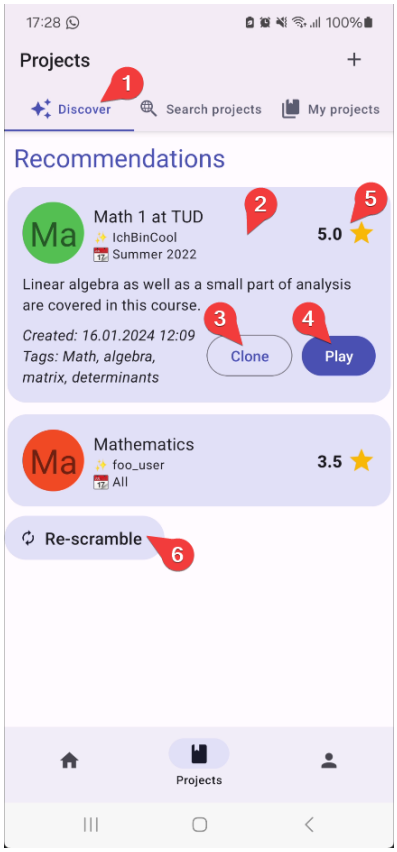


Figure 11: Discover

1) **Project recommendations:** This main view provides personalized project recommendations through an algorithm that considers the user's tagged interests, the tags associated with projects they are currently involved in and overall project ratings. The page is dynamically generated to ensure that the content remains relevant to the user's evolving interests. By leveraging the *Discover* page, users are encouraged to explore new public projects.

2) **Project details:** Tap on a recommended project to expand the card to reveal ad-

ditional details such as project description and tags, aiding in the decision-making process for cloning and playing.

3) **Clone button:** Each project card includes a *Clone* button. Upon tapping, you can input a new project name, creating a duplicate of the content, where they become the new owner. The newly created, cloned project will then appear in the *My projects* tab of the user.

4) **Play button:** Tap on this button on a project card to initiate the *Create Room* interface (see 5.12).

5) **Project rating:** Each project card displays a star rating, indicating the community's feedback on the project.

6) **Rescramble button:** Tap on this button to re-run the recommendation algorithm to refresh and present new project suggestions to the user.

4.4 Search projects

Here, the user can search for public projects.

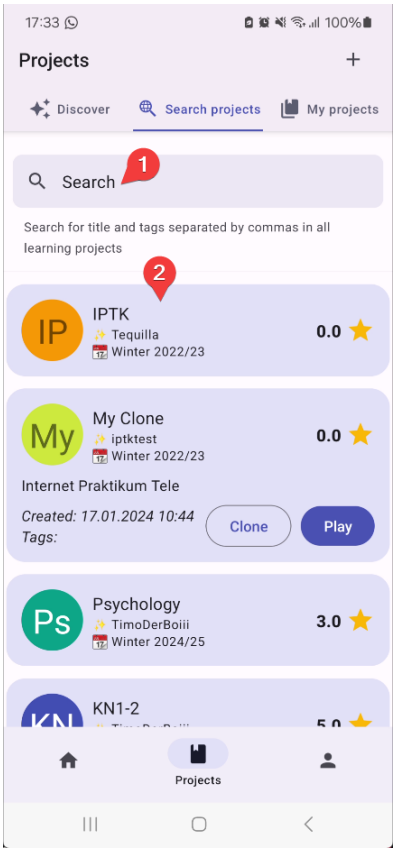


Figure 12: Search projects

1) **Search bar:** At the top of the tab, you can search for projects by title or tags. Simply input keywords separated by commas to filter through the available projects.

2) **Project list:** Below the search bar, projects are listed with key details such as the title, owner's username, creation date, description and associated tags for easy identification.

3) **Clone button:** See Discover 3).

4) **Play button:** See Discover 4).

5) **Project rating:** See Discover 5).

4.5 My projects

Here, the user can view all of his projects.

Figure 13: My projects

1) **Semester categorization:** You can view and navigate to projects organized under academic period headings. These include *Winter 20XX/YY* or *Summer 20XX*, along with an *All* category for projects not specific to a particular semester.

2) **Project representations:** Each project is represented by an element featuring a unique color and icon. The first two characters of the project's name are prominently displayed within this element, with the full title provided below.

3) **Create new project button:** To start a new project, you can navigate to the *Create*

Project interface, which is accessible by tapping the + button located at the top right corner of the Projects tab (for details see 5.4).

4.6 Project suite

When you open a project you will be redirected here.

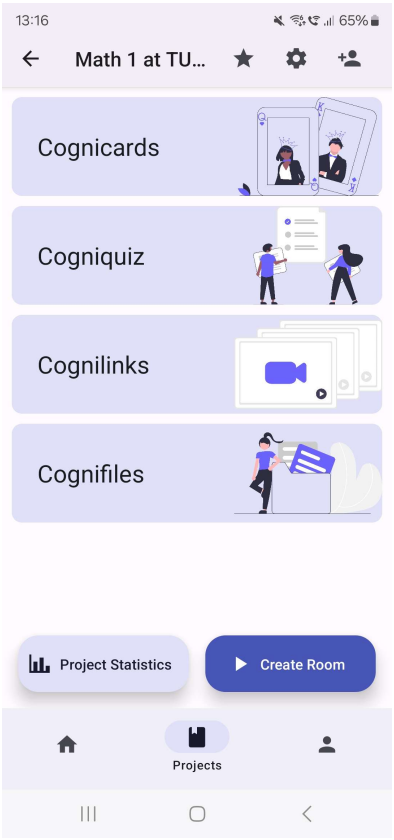


Figure 14: Project suite

Each project consists of Cognicards, Cogniquizzes, Cognilinks and Cognifiles, which will be further elaborated on in the following subsections.

4.7 Cognicards

The platform for creating and managing dynamic flashcards and their respective sets.

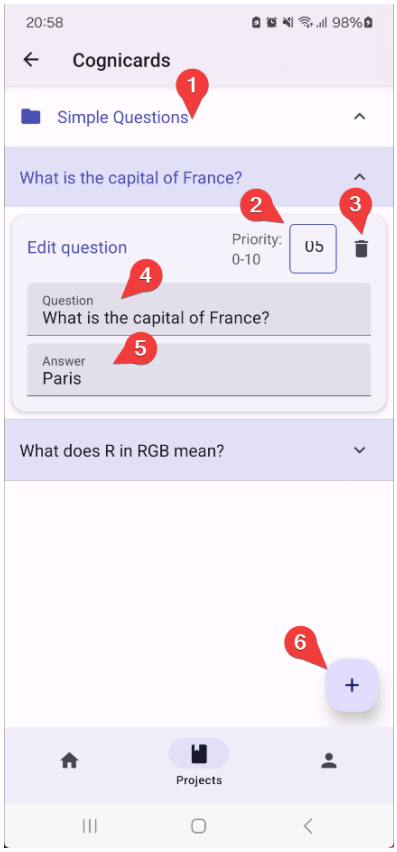


Figure 15: Cognicards

1) **Cognicards set button:** Tap on a flashcard set to open up the list of flashcards within this set.
2) **Priority field:** Adjust the priority settings of each card within a set ranging from 0 to 10.
3) **Delete flashcard button:** Delete your flashcards as needed.
4) **Edit flashcard question field:** Edit questions of your individual flashcards.

5) **Edit flashcard answer field:** Edit answers of your individual flashcards.

6) **Cognicards FAB button:** You can open four additional buttons that offer the option of sorting flashcards and flashcard sets, adding new flashcards and flashcard sets and editing and deleting existing sets.

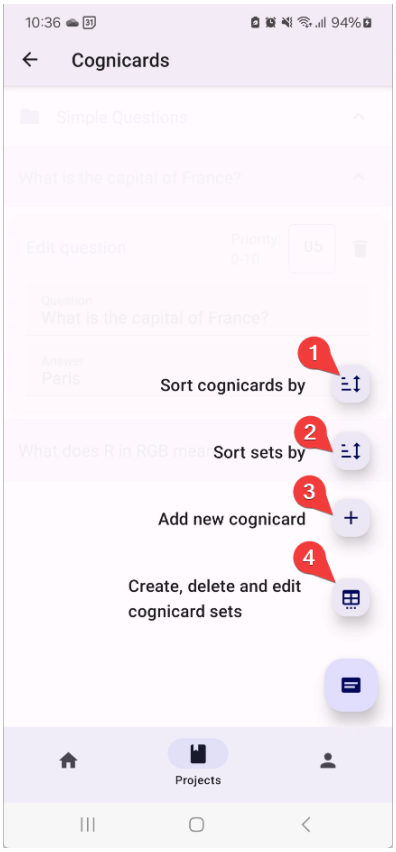


Figure 16: Sorting Cognicards

1) **Sort cognicards by button:** Opens a new window with four sorting options. You can sort flashcards starting with the oldest cards in their collection, but also display the most recently created flashcards first. Additionally, you can sort your cards based on their importance, starting from the least to the most important and vice versa.

2) **Sort sets by button:** Here too, four options are displayed after tapping the button.

You can arrange your flashcard sets starting with the oldest or the newest. Moreover, you can sort their flashcard sets alphabetically or arrange your sets in reverse alphabetical order.

3) **Add new cognicard button:** Allows you to add new flashcards to your existing sets.

4) **Create, delete and edit cognicard sets button:** Enables you to create new flashcard sets and the option to modify or remove existing ones.

4.8 Cogniquiz

The platform for creating and managing dynamic quizzes and their respective sets.

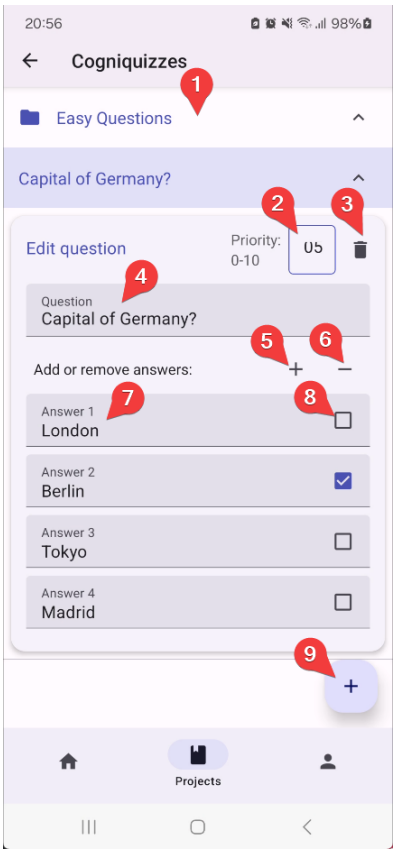


Figure 17: Cogniquiz

1) **Cogniquiz set:** Tap on a quiz set to open up the list of quizzes within this set.
2) **Priority field:** Adjust the priority settings of each quiz within a set ranging from 0 to 10.
3) **Delete quiz button:** Delete your quizzes as needed.
4) **Edit quiz question field:** Edit questions of your individual quizzes.

5) **Add quiz answer button:** This button adds answer options to the selected quiz, up to a maximum of six answer options allowed.

6) **Remove quiz answer button:** This button removes answer options up to at least two that must be present.

7) **Edit quiz answer field:** Edit answers of your individual quizzes.

8) **Correct answer checkbox:** With this checkbox, you mark the correct answer options.

9) **Cogniquiz FAB button:** Opens four additional buttons that offer the option of sorting quizzes and quiz sets, adding new quizzes and quiz sets and editing and deleting existing sets. Similar to Cognicards FAB button.

4.9 Cognilinks

The platform for incorporating and sharing external content.

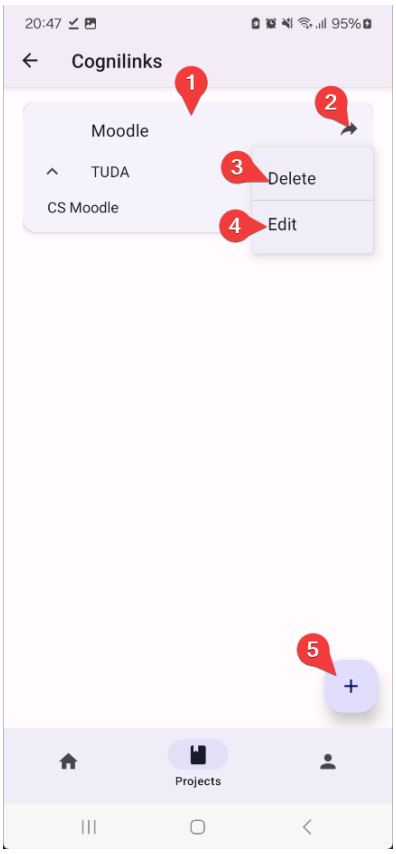


Figure 18: Cognilinks

1) **Cognilink card:** Every cognilink contains a title, a subtitle, a description, and a link. If you tap on a cognilink card, you are directed to the link.
2) **Share links button:** Share links by tapping this button.
3) **Delete links button:** Remove obsolete or unnecessary links.
4) **Edit links button:** You can update existing link entries.

5) **Cognilinks FAB button:** Opens two additional buttons that offer the option of sorting and adding new links. Similar to Cognicards FAB button.

4.10 Cognifiles

Streamlines the management and categorization of various file types. Upon upload, files are automatically categorized to keep collections organized. The system sorts files into five distinct categories. These categories include: .pdf, .docx, .xlsx, miscellaneous and photos.

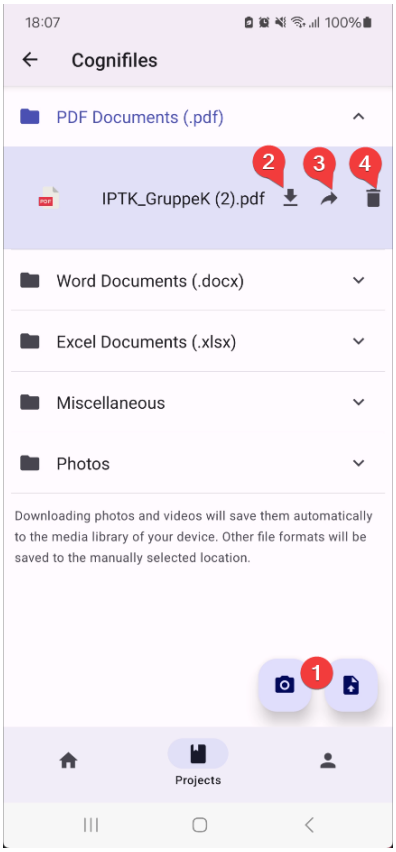


Figure 19: Cognifles

1) **Upload photos button and upload documents button:** The former opens up your media library and allows for uploading photos, and the latter opens up your file system and allows for uploading documents.

2) **Download file button:** You can download files as needed. Photos and videos are

automatically stored in the device's media library. Other file formats are saved to a manually selected location.

3) **Share file button:** Provides the capability to share files with others.

4) **Delete file button:** Remove files from your collection.

4.11 Additional project features

More features to projects can be found in the project suite.

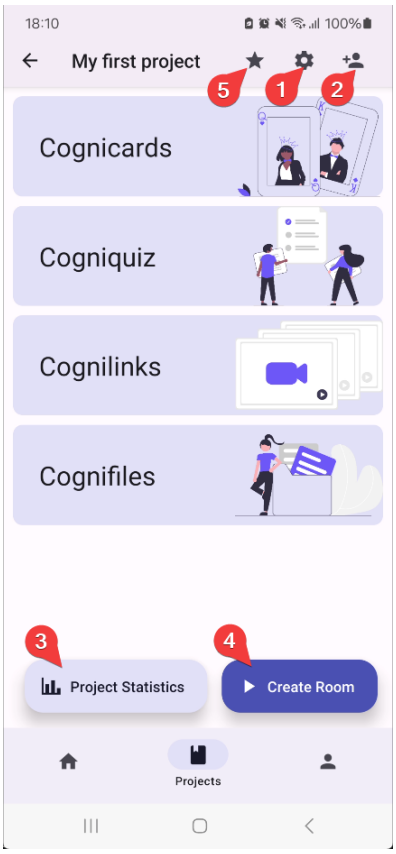


Figure 20: Additional features

1) **Edit button:**

   1.1) **Owner interface:** Owners are provided with an editing interface, similar to the *Create Project* interface, featuring elements like title, description, semester, tags field and a visibility toggle (for details see 5.4). Owners can save changes or delete the project.

   1.2) **Non-owner interface:** Non-owners see a restricted interface, indicating limited permissions and showing the owner's username. They have the option to leave

the project.

2) **Invite friends button:** Owners have the exclusive privilege to invite peers to join the project.

3) **Project statistics button:** All users can access and review project statistics.

4) **Create room button:** Enables all users to create a study room for collaboration within the project (for details, see 5.12).

5) **Rate project button:** Allows users to rate the project, providing feedback on its value and utility.

4.12 Room suite

After successfully creating a room, you are directed to the room suite.

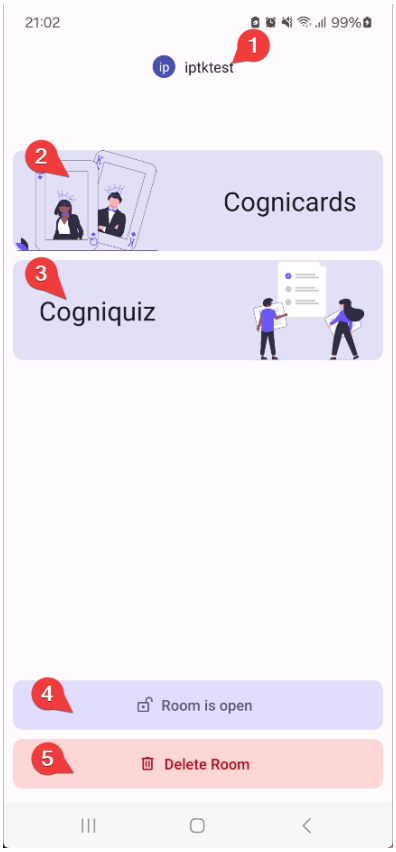


Figure 21: Room Suite

1) **Active user room display:** Shows all users who have entered the room.
2) **Cognicards room button:** Allows for creating a cognicard session within the room with the active users.
3) **Cogniquiz room button:** Allows for creating a cogniquiz session within the room with the active users.
4) **Open and close room button:** Allows for closing and opening the room.

5) **Delete room button:** This button deletes the room.

4.13 Achievements

The user can view his achievements here.

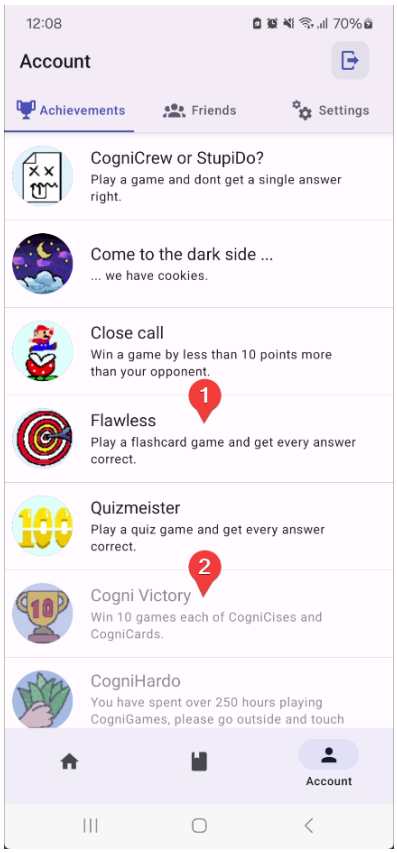


Figure 22: Account

1) **Attained achievements:** Lists all attained achievements. Every achievement contains a title, description, and image.

2) **Unattained achievements:** Lists all unattained achievements.

4.14 Friends

The user can view his friends here and manage new connections.

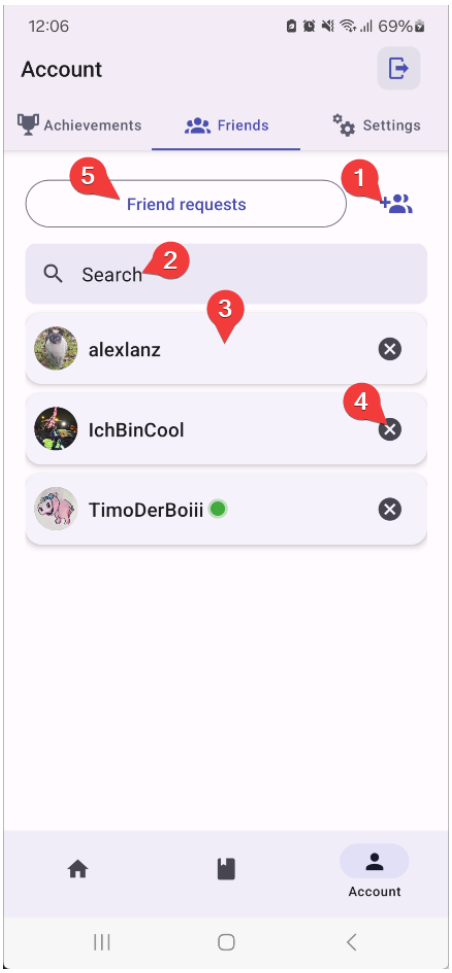


Figure 23: Friends

Friends:

1) **Add friend button:** Enables users to send friend requests to other app users by entering their username.

2) **Friend search bar:** Allows users to quickly locate a friend within their friends list.

3) **Friend list:** Displays all current friends, each entry showing the friend's username and an option to remove the friend from the list.

4) **Remove friend button:** Adjacent to each friend's name, a remove button is available for the user to unfriend, if desired. Confirmatory action is required to complete this process to prevent accidental unfriending.

5) **Friend requests button:** Opens up the user's received friend requests. Users can view, accept, or decline incoming friend requests.

4.15 Settings

The user can manage various settings.

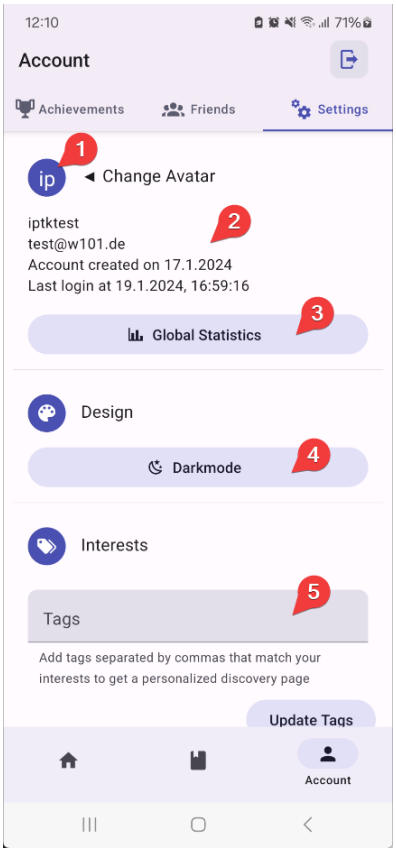


Figure 24: Settings 1

1) **Change avatar button:** Allows the user to remove his avatar or to upload an image which then becomes his avatar.

2) **Profile information display:** Display user's username and E-mail. Also displays account creation date and last login timestamp.

3) **Global statistics button:** Provides an overview of the user's interaction with the app, featuring key metrics and usage statistics.

4) **Darkmode/ lightmode button:** Enables users to switch between light and dark themes to suit their visual preferences.

5) **Tags field:** Users can enter tags separated by commas to personalize their Discover page tailored to their interests and save with the update tags button.

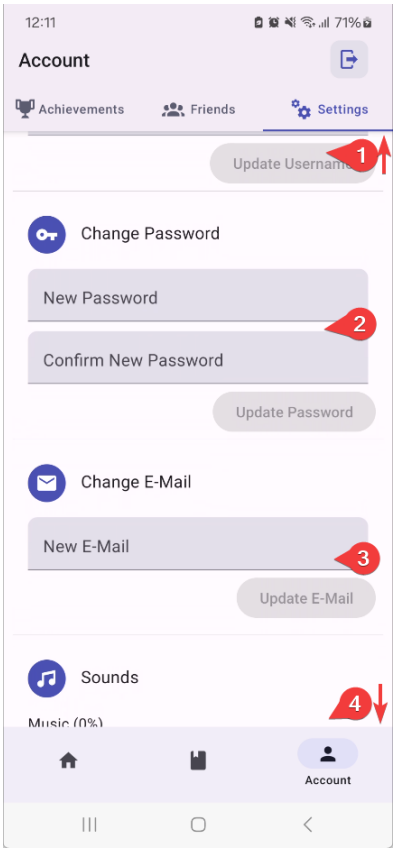


Figure 25: Settings 2

1) **Username update:** Allows users to change their username by inputting a new username and then tapping the update username button.

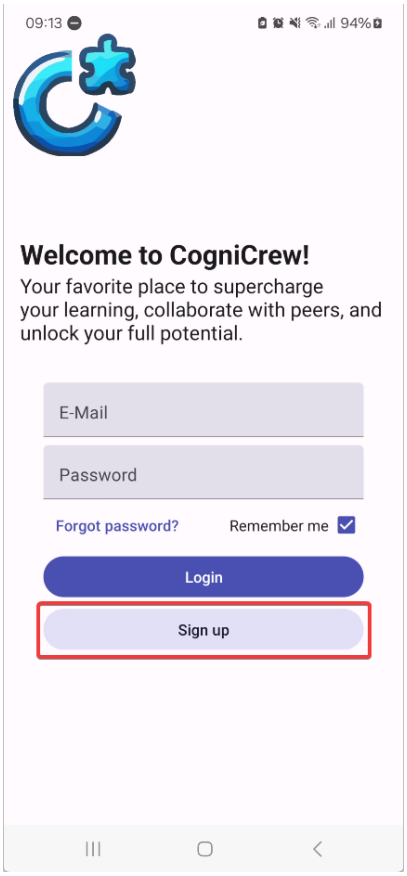
2) **Password update:** Allows users to change their password by inputting a new password and then tapping the update password button.

3) **E-Mail update:** Allows users to change their E-mail by inputting a new E-mail and then tapping the update E-mail button.

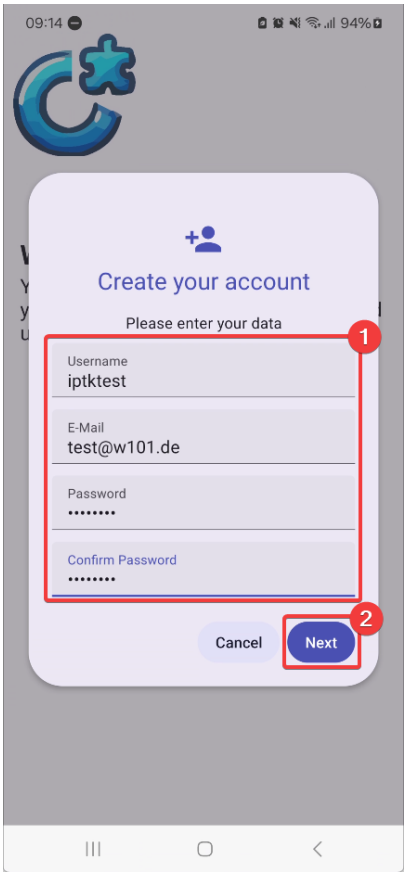
4) **Music control:** Adjust the music volume of the app's sounds.

5 Guides

5.1 Create an account



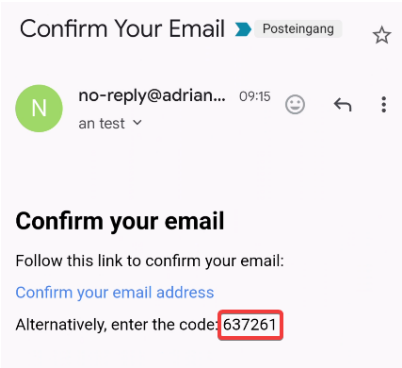
(a) To create an account, you start by tapping on the *Sign up* button at the bottom of the login screen. This will open a dialogue.



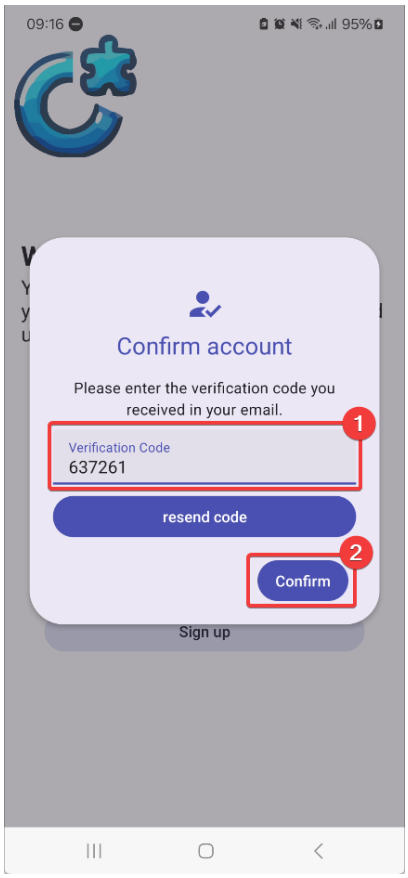
(b)

1) Enter your username, E-mail and password.

2) Continue by tapping on the *Next* button.



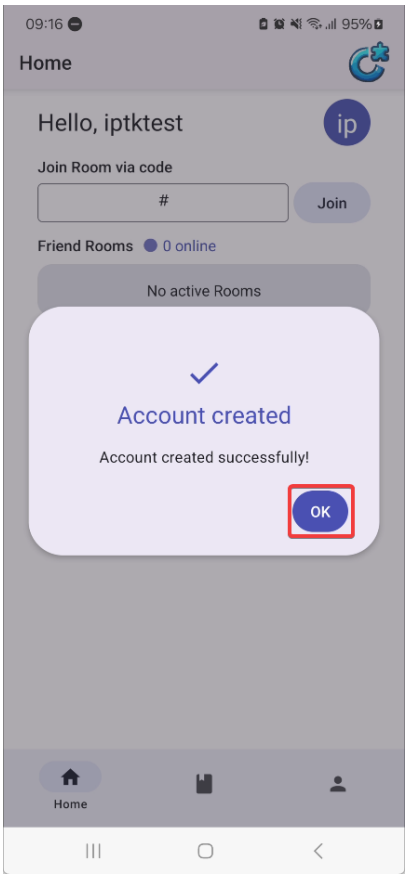
(a) You will now find a new E-mail in your inbox including a verification code.



(b)

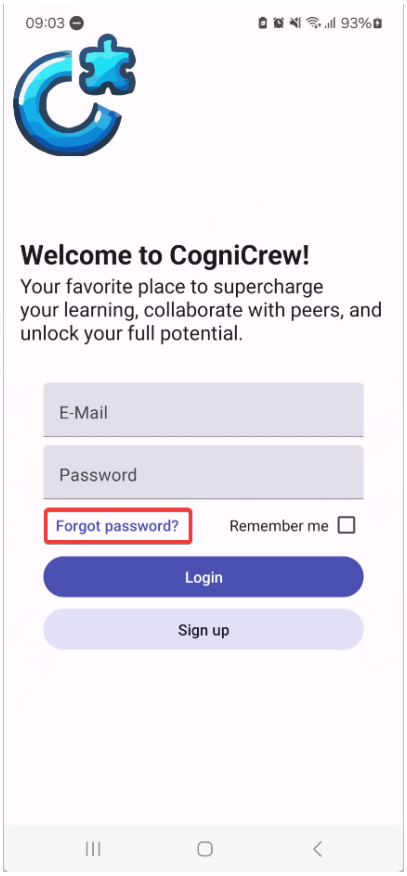
1) Type in the verification code from the E-mail.

2) Tap on *Confirm* to continue. If a new code is needed, tap on *resend code*.

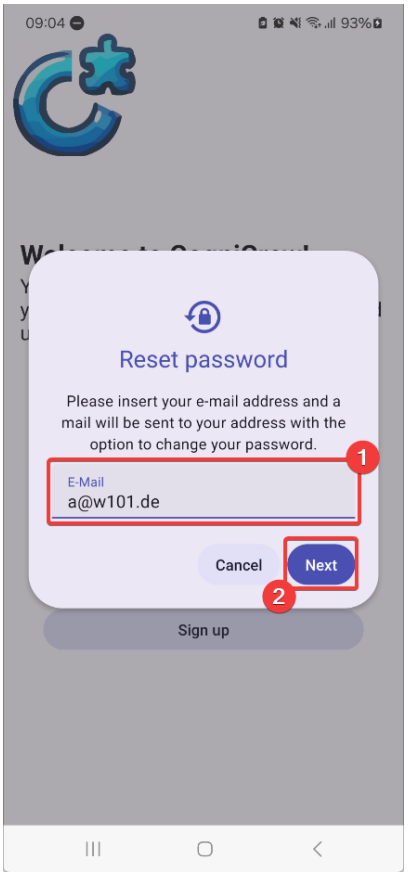


(a) When you have put in the correct code, this message will appear and your new account has been created.

5.2 Reset your password



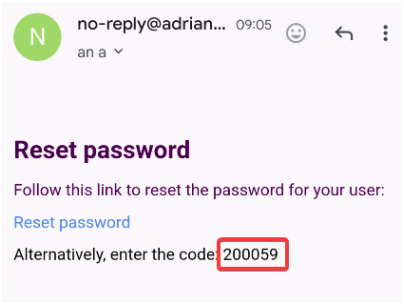
(a) To reset the password, you can tap on *Forgot password?*.



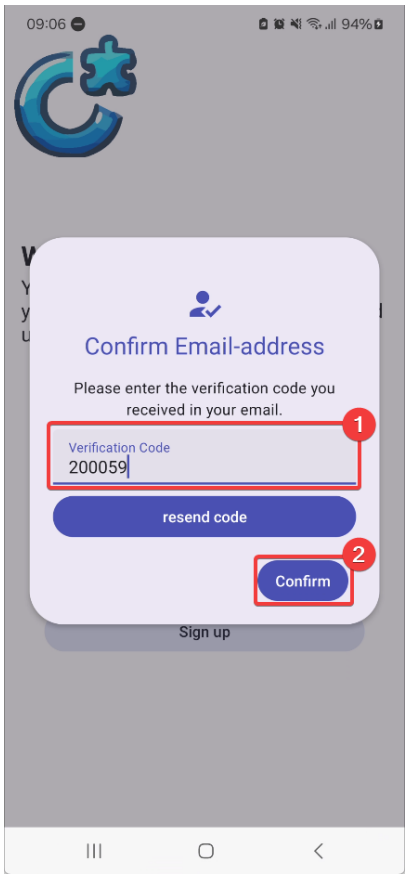
(b)

1) Type in the E-mail of your account.

2) Continue by tapping on the *Next* button.



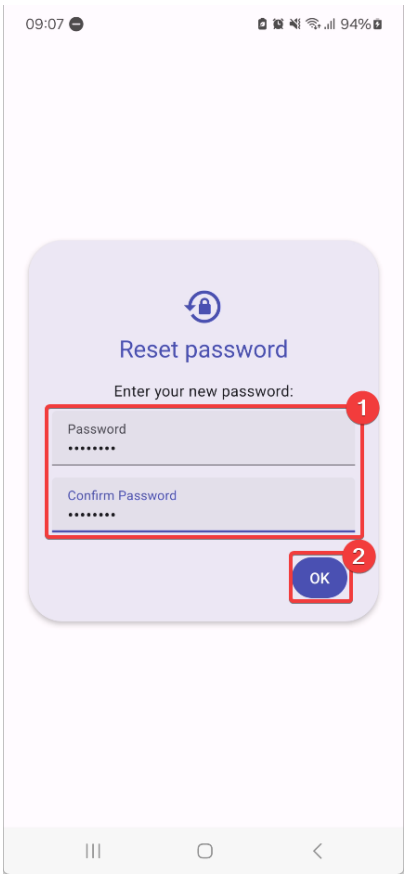
(a) You will now find a new E-mail in your inbox including a verification code.



(b)

1) Type in the verification code from the E-mail.

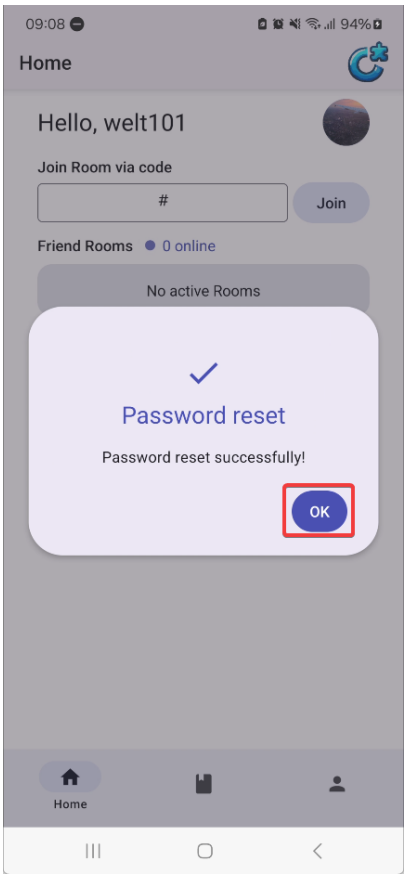
2) Tap on *Confirm* to continue. If a new code is needed, tap on *resend code*.



(a)

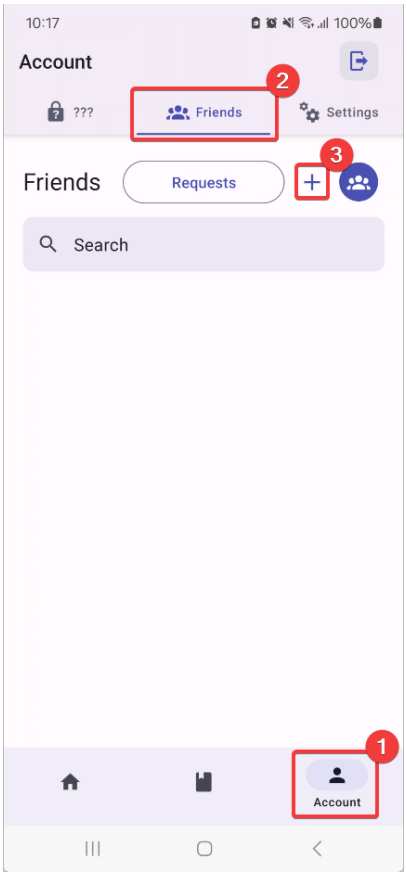
1) Type in your new password in both input fields.

2) Continue by tapping on the *OK* button.



(b) After successfully resetting your password, you can close the dialogue again, by tapping on the *OK* button.

5.3 Add and remove friends

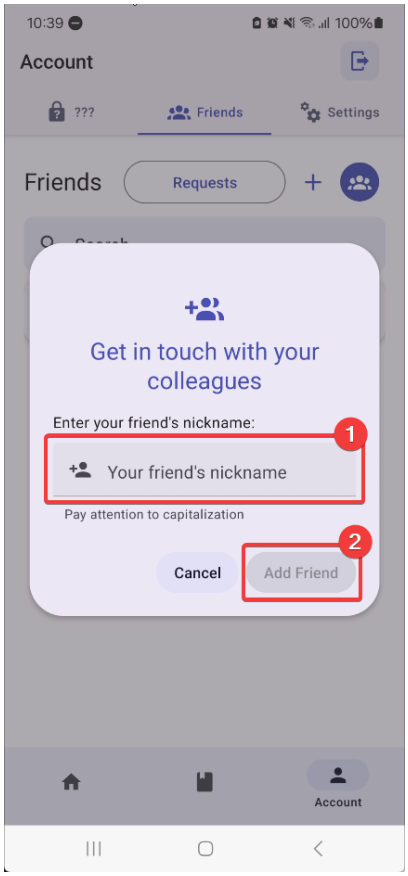


(a)

1) You can start adding/removing friends by navigating to the *Account* tab.

2) Tap on the *Friends* category on the upper navigation bar.

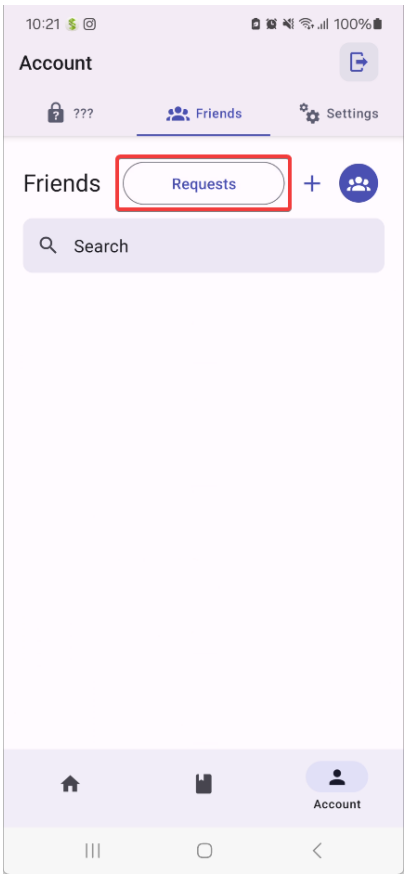
3) Tap on the + icon to add new friends.



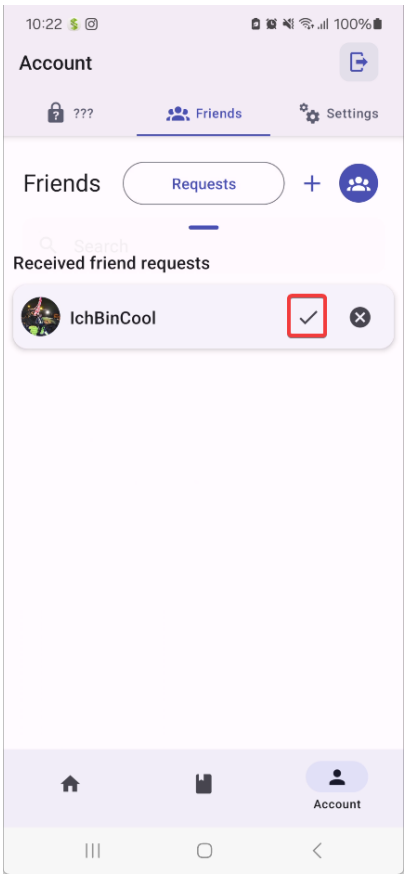
(b)

1) Enter your friend's username.

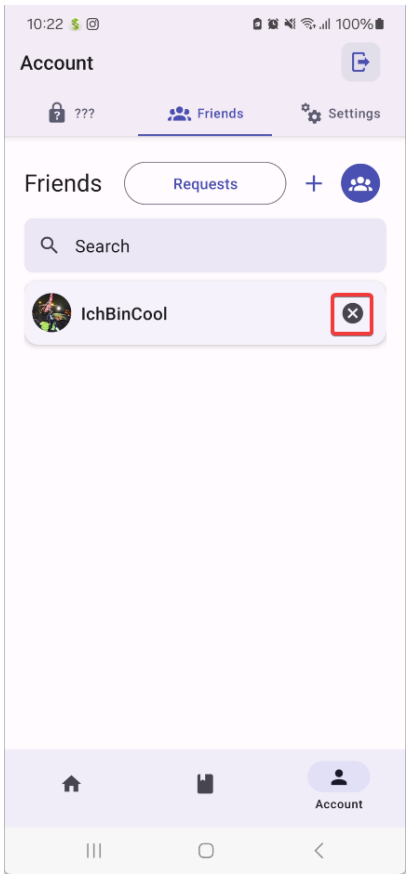
2) Send the request by tapping on the *Add Friend* button.



(a) To accept or delete friend requests, you can tap on the *Requests* button.

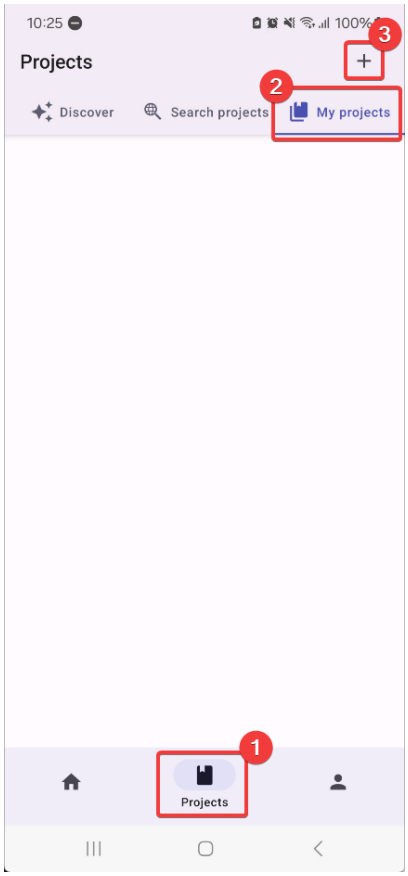


(b) Accept a received friend request by tapping on the ✓ icon.



(a) Remove friends by tapping on the × icon next to your friend's username.

5.4 Create, edit and delete a project

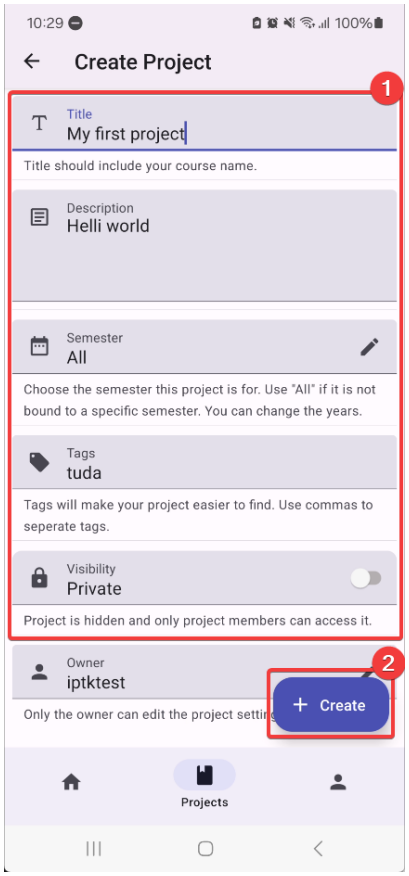


(a)

1) You can start creating/editing/deleting projects by navigating to the *Projects* tab.

2) Tap on the *My projects* category.

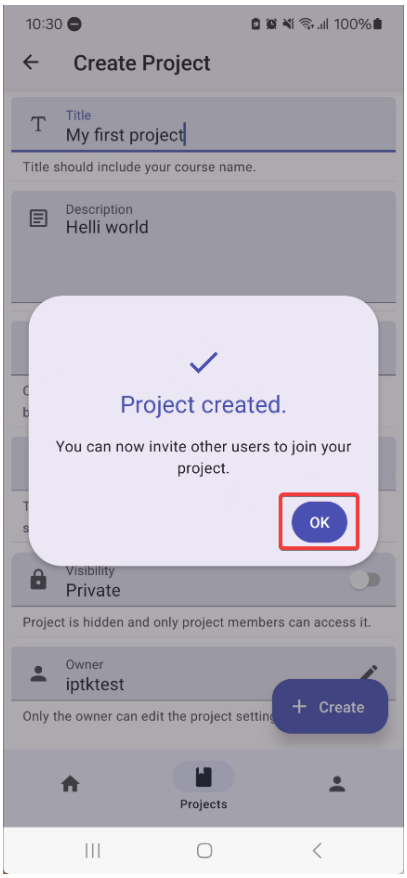
3) Tap on the + icon to add a new project.



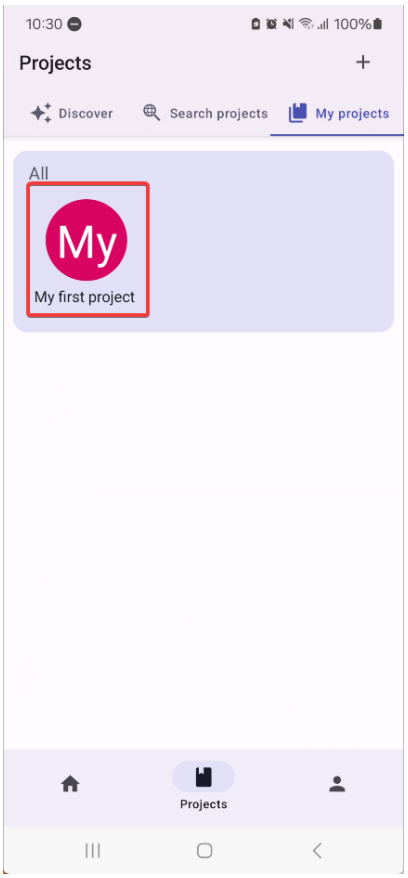
(b)

1) Type the information of your project in, such as its title, description, semester, tags and visibility.

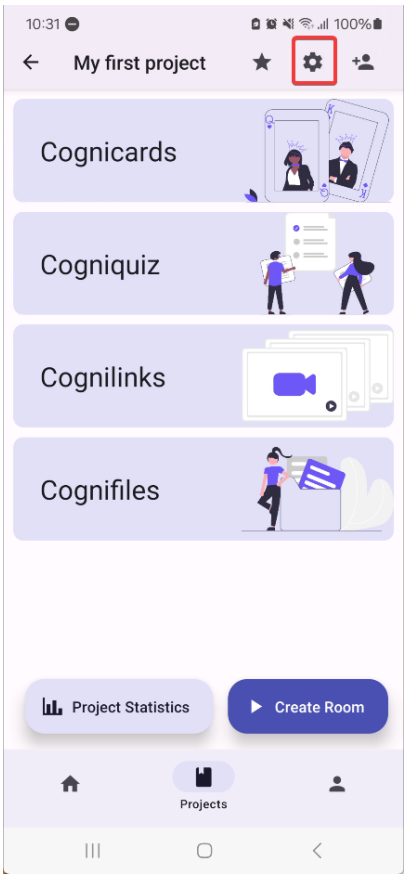
2) Continue by tapping on the *Create* button.



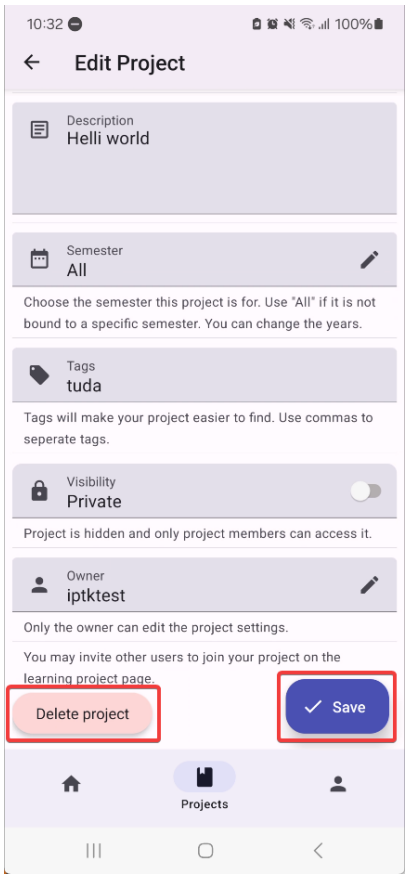
(a) After successfully entering your project information, close the dialogue by tapping on the *OK* button.



(b) Edit your project under *My projects*.

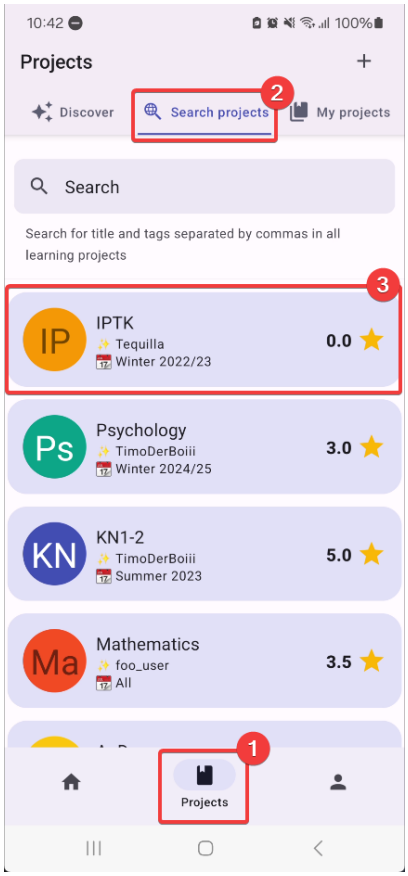


(a) To edit/delete your project, tap on the ⚙ icon.



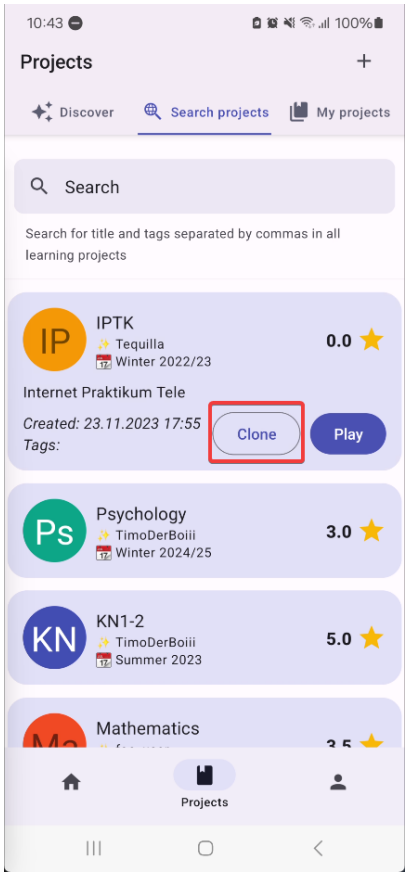
(b) On the bottom left you can find the button to delete the project. On the bottom right you can save the changes you made to the project information.

5.5 Clone a project

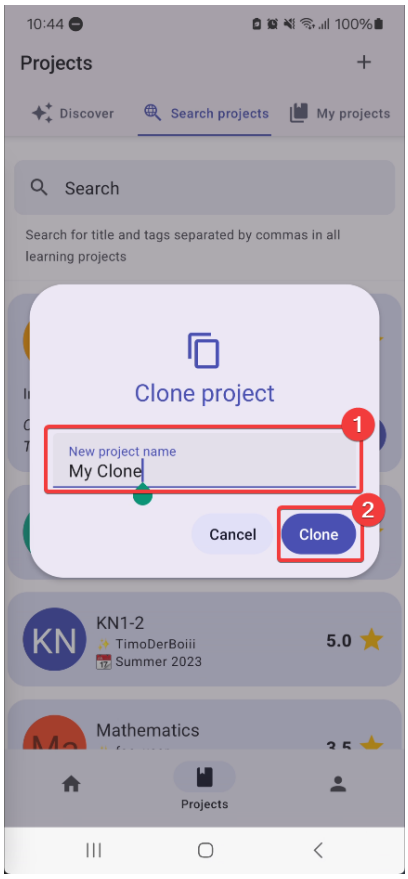


(a)

1) You can clone a project by navigating to the *Projects* tab.
2) Tap on *Search projects* on upper bar.
3) Tap on a project to see additional information.

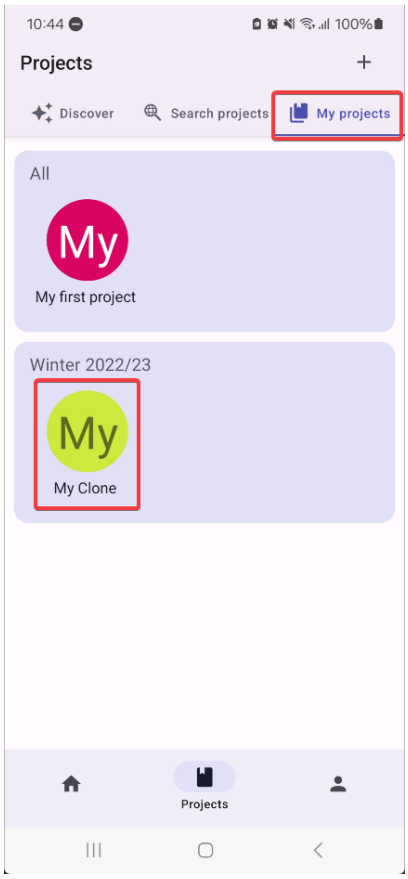


(b) Continue by tapping on the *Clone* button.



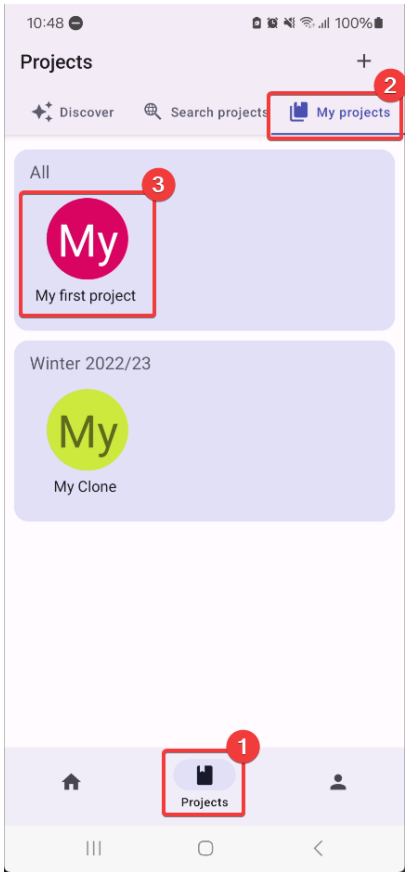
(a)

1) Type in the new name for the cloned project.
2) Complete the cloning by tapping on the *Clone* button.



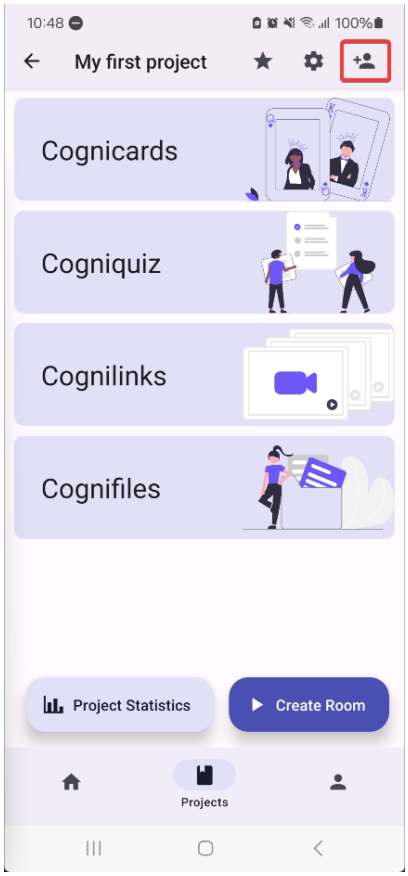
(b) You can find the cloned project under *My projects*.

5.6 Invite users to project

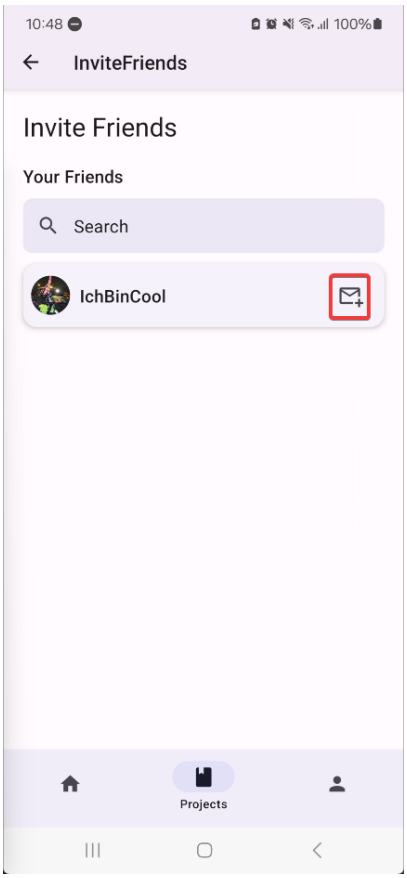


(a)

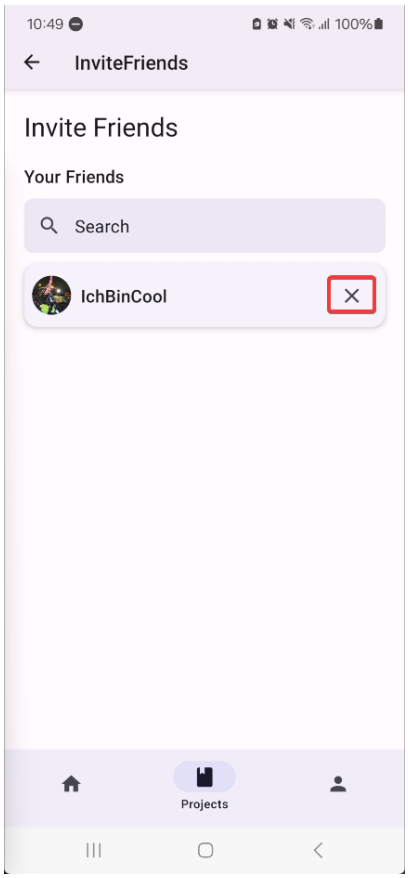
1) Start inviting users to projects by navigating to the *Projects* tab.
2) Move to the *My projects* category.
3) Tap on the project for which you want to add users.



(b) Tap on the icon at the top right corner.

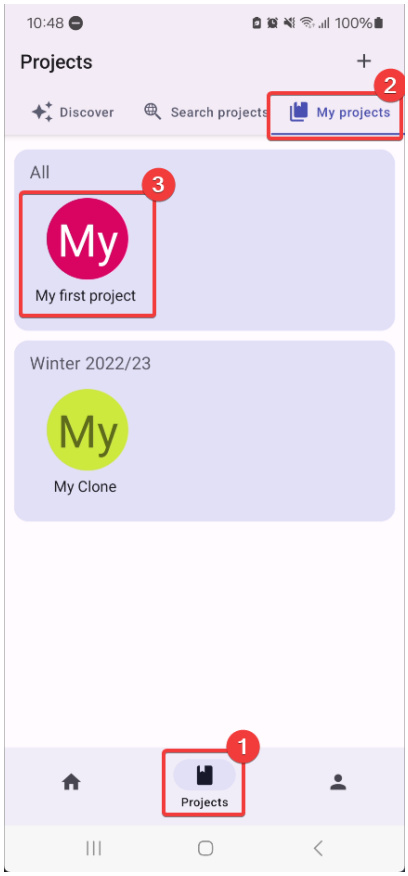


(a) Tap on the ✉+ icon next to the username to send an invitation.



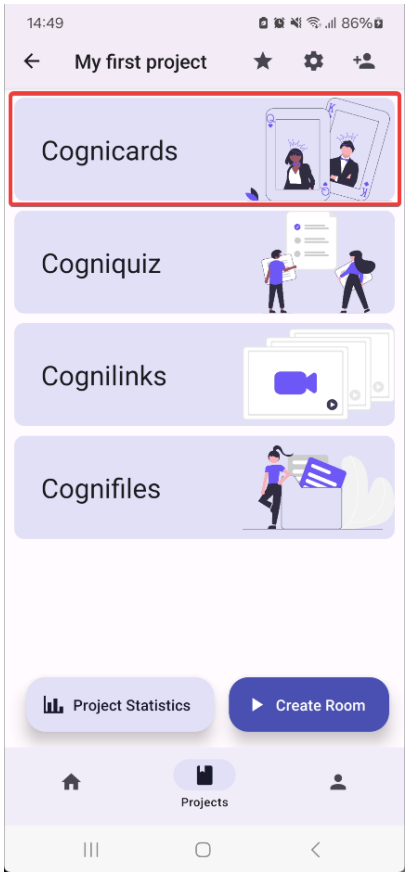
(b) Tap on the × icon next to the username to cancel out the invitation.

5.7 Create, edit and delete Cognicards sets

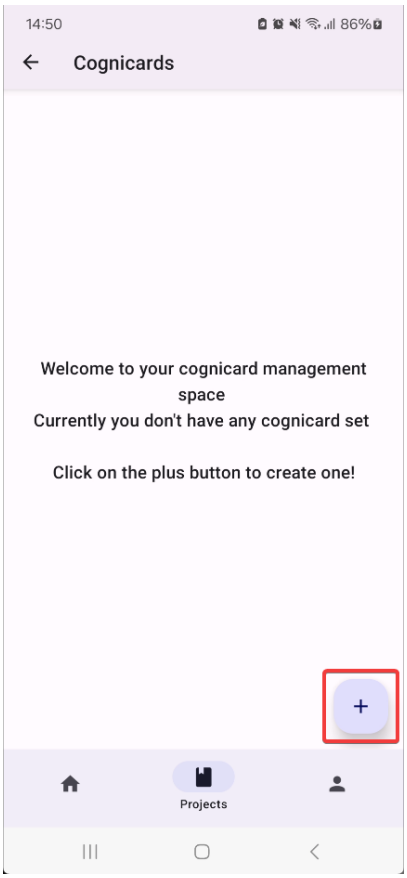


(a)

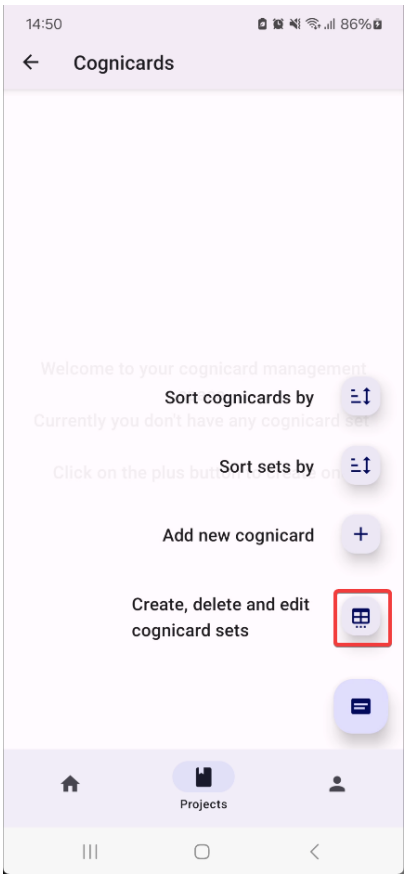
1) You can start creating/editing/deleting a Cognicards set by navigating to the *Projects* tab.
2) Move to *My projects*.
3) Tap on the project.



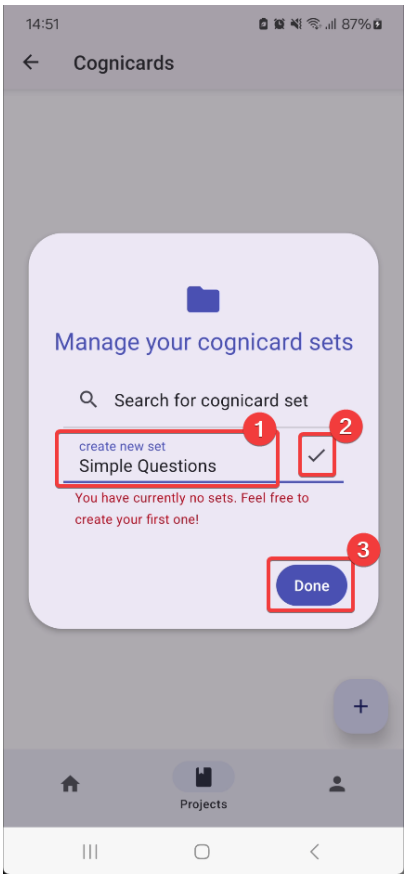
(b) Tap on the *Cognicards* button.



(a) Tap on the + icon on the bottom right.



(b) Tap on *Create, delete and edit Cognicards sets*.

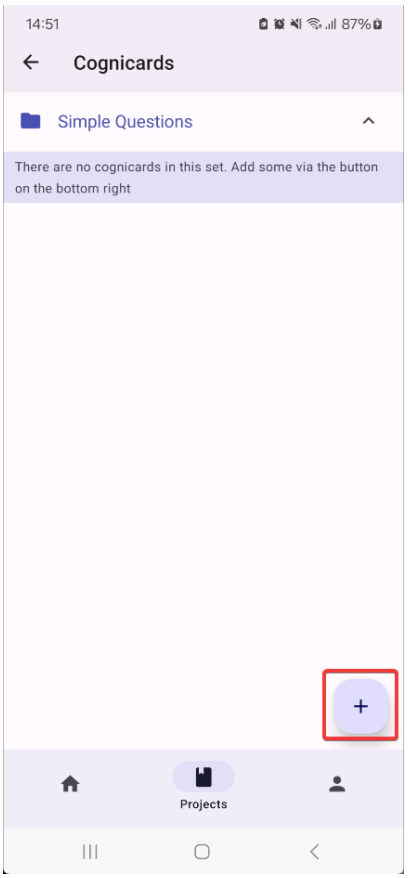


(a)

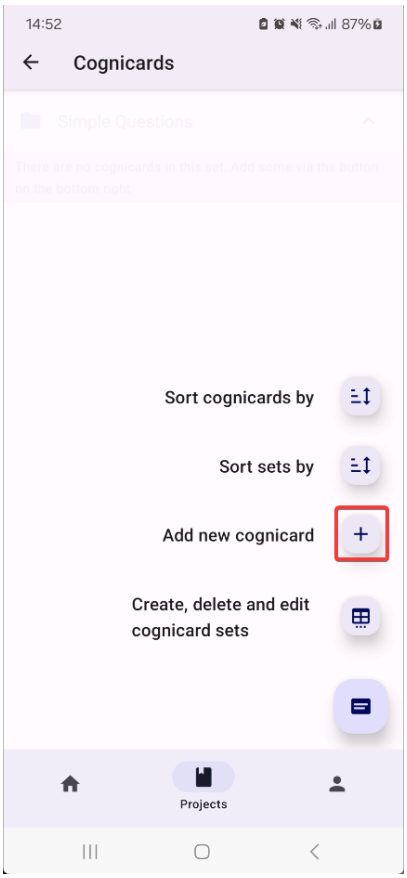
1) Type in the new name for your set.

2) Create the set by tapping on the ✓ icon.

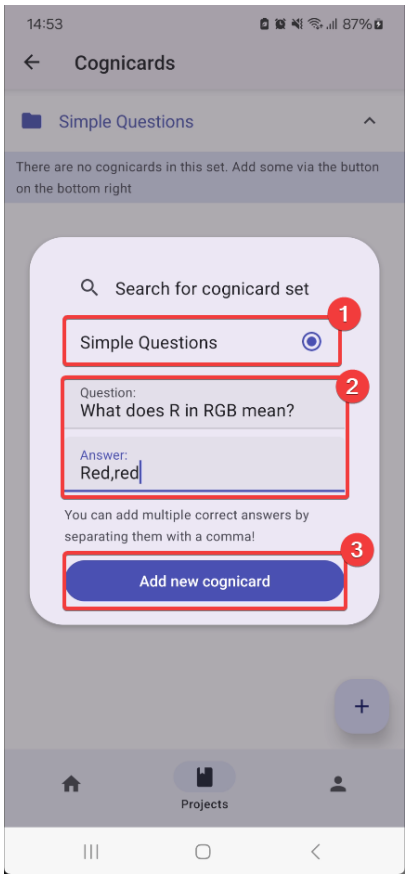
3) Close the dialogue by tapping on the *Done* button.



(b) To add a Cognicard to the set, tap on the + icon.



(a) Tap on *Add new cognicard*.

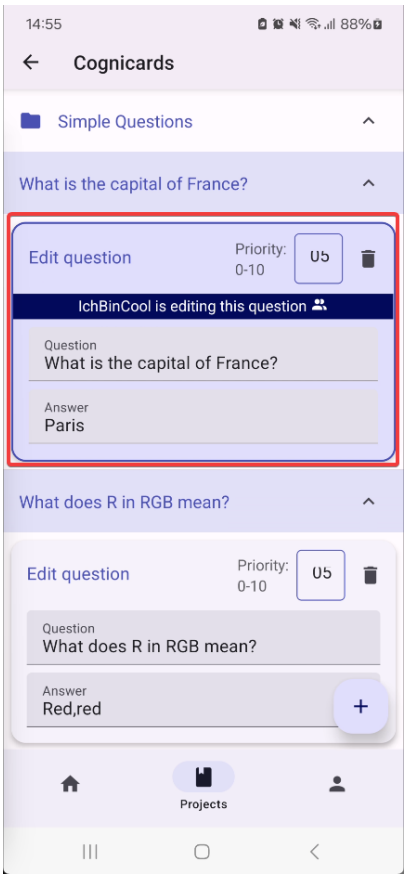


(b)

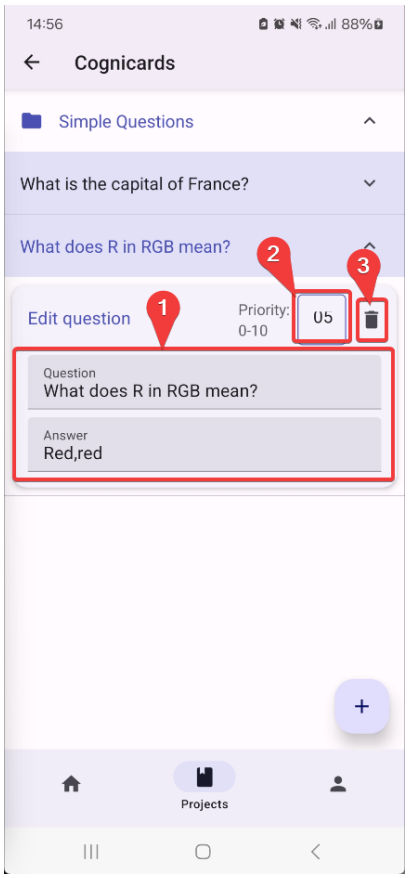
1) Choose the set to which the new Cognicard should be added.

2) Enter your question and answer.

3) Create the Cognicard by tapping on the *Add new cognicard* button.



(a) To edit a question, you can tap on the question to see details.

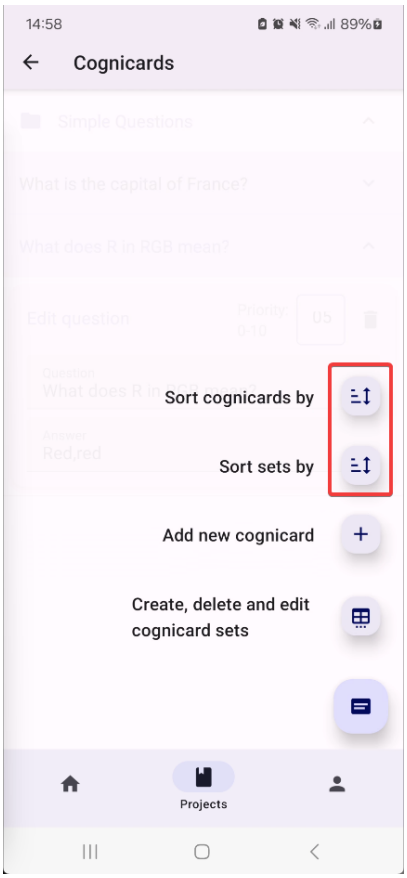


(b)

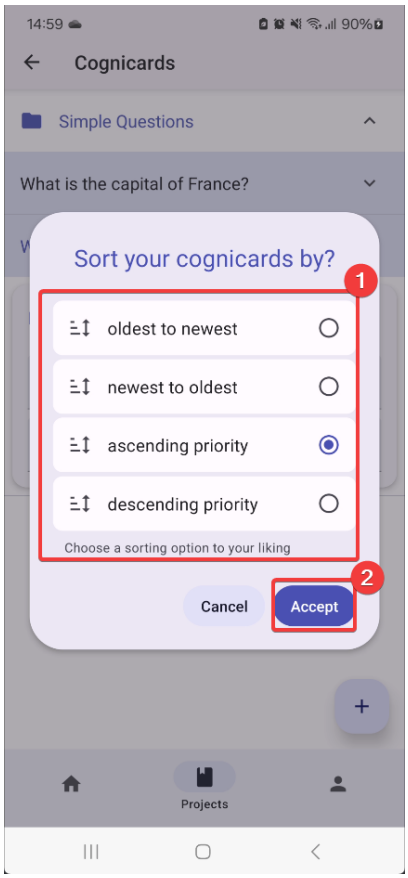
1) You can change the question and answer.

2) Give a priority value from 0-10 that decides how likely it will be for this Cognicard to appear in games.

3) Delete the question by tapping on the 🗑 icon.



(a) You can sort Cognicards and sets in different ways.

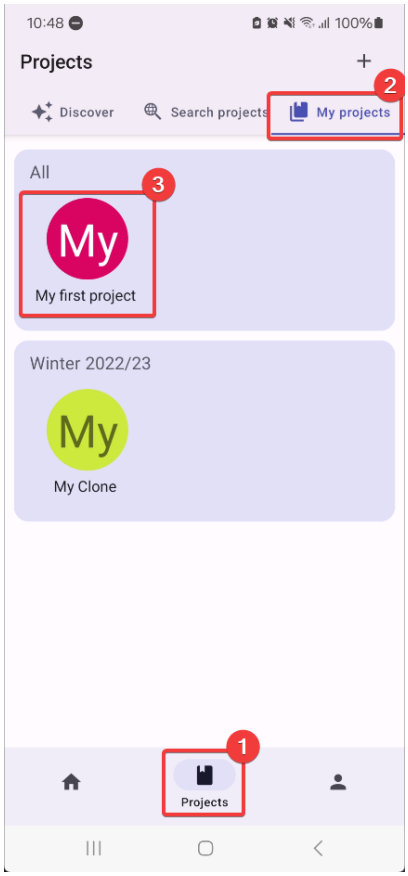


(b)

1) Choose a filter.

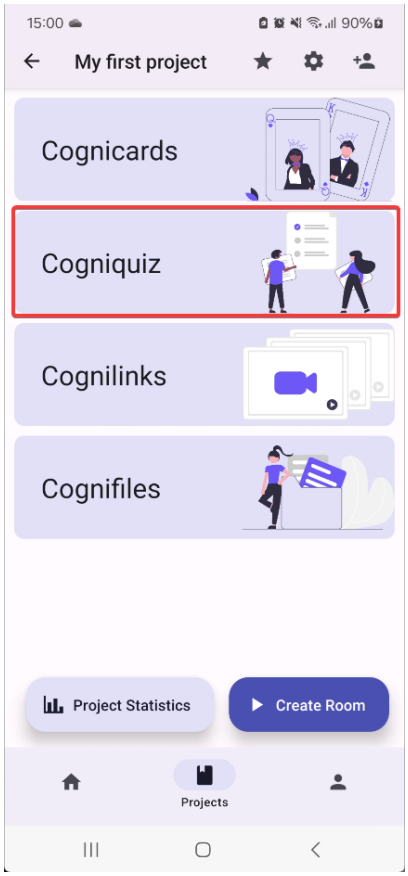
2) Apply the sorting by tapping on the *Accept* button.

5.8 Create, edit and delete Cogniquiz sets

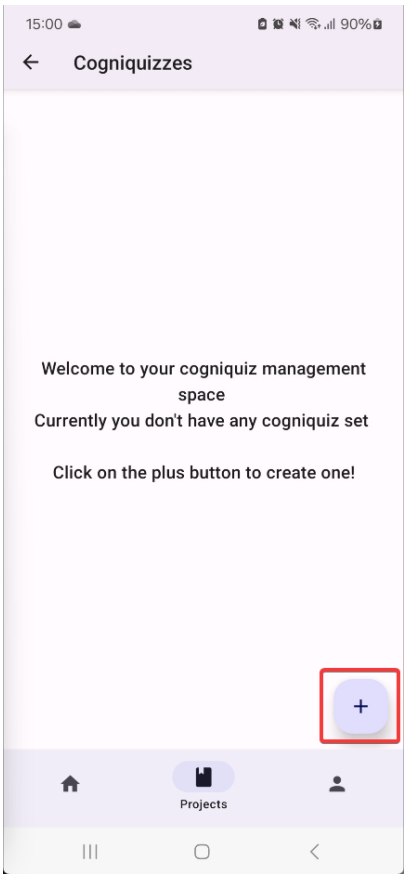


(a)

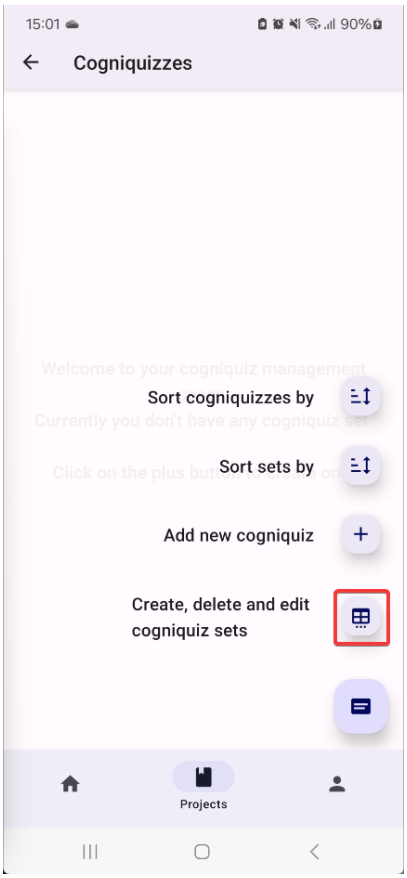
1) You can start creating/editing/deleting Cogniquiz sets by navigating to the *Projects* tab.
2) Move to *My projects*.
3) Tap on the project you want to add one to.



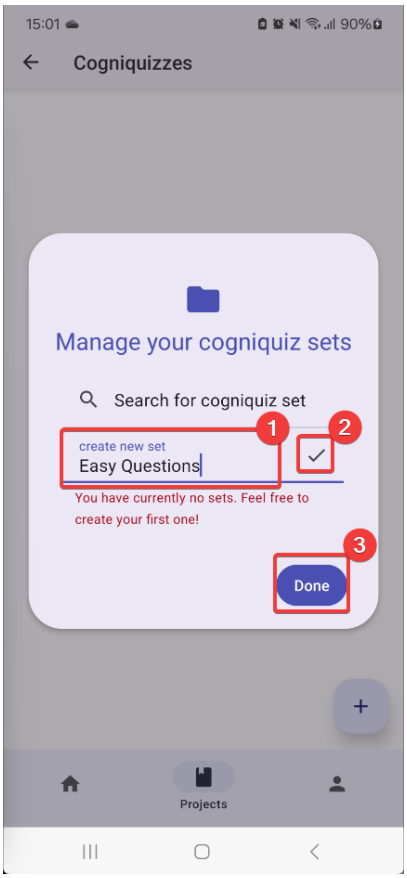
(b) Tap on the *Cogniquiz* button.



(a) Tap on the + icon on the bottom right.



(b) Tap on *Create, delete and edit cogniquiz sets*.

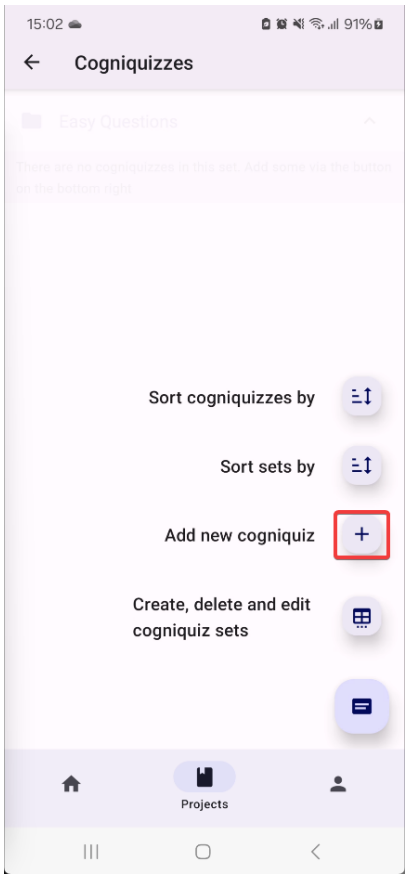


(a)

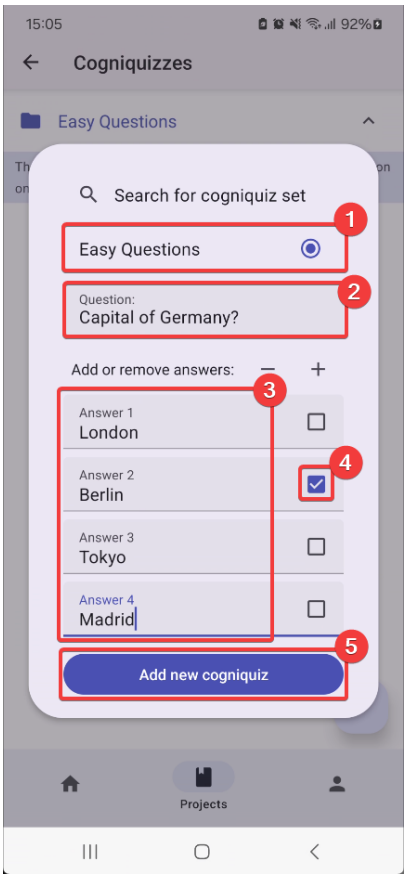
1) Type in the name of your new set.

2) Create the set by tapping on the ✓ icon.

3) Close the dialogue by tapping on the *Done* button.



(b) To add a new Cogniquiz, tap on *Add new cogniquiz*.



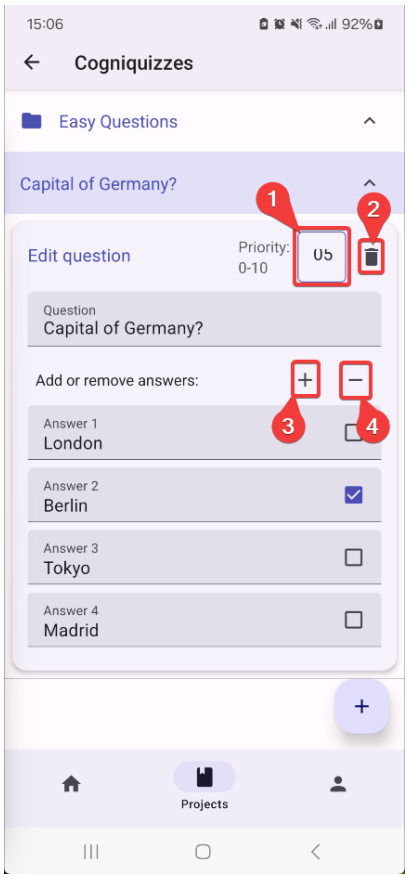
(a)

1) Choose the set to which you want to add the new Cogniquiz.

2) Enter questions and answers.

3) Tap on a box for the correct answers.

4) Create the Cogniquiz by tapping on the *Add new cogniquiz* button.



(b)

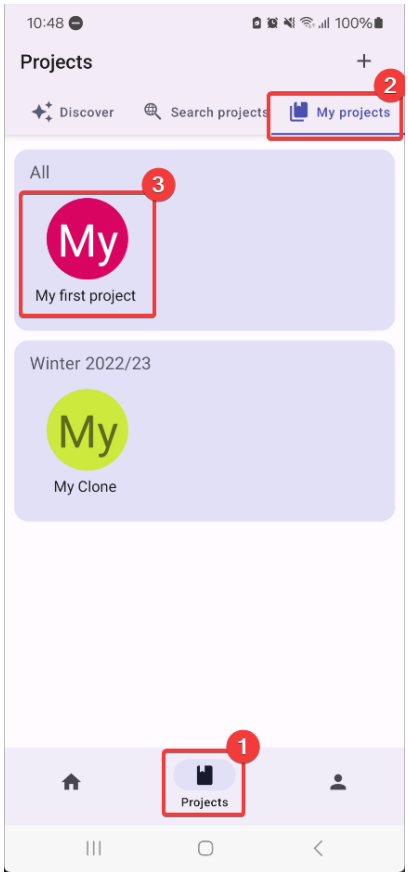
1) Give a priority value ranging from 0-10 that decides how likely it will be for this Cogniquiz to appear in games.

2) Delete the question by tapping on the 🗑 icon.

3) Add an answer by tapping on the + icon.

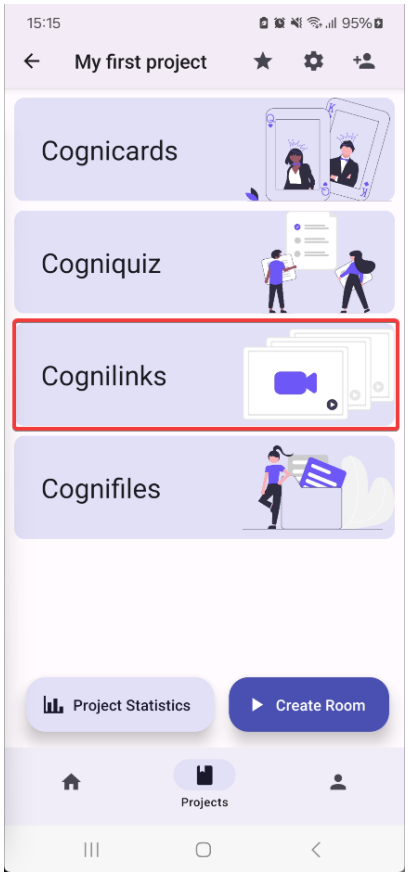
4) Delete the answer by tapping on the - icon.

5.9 Create, edit and delete a Cognilink

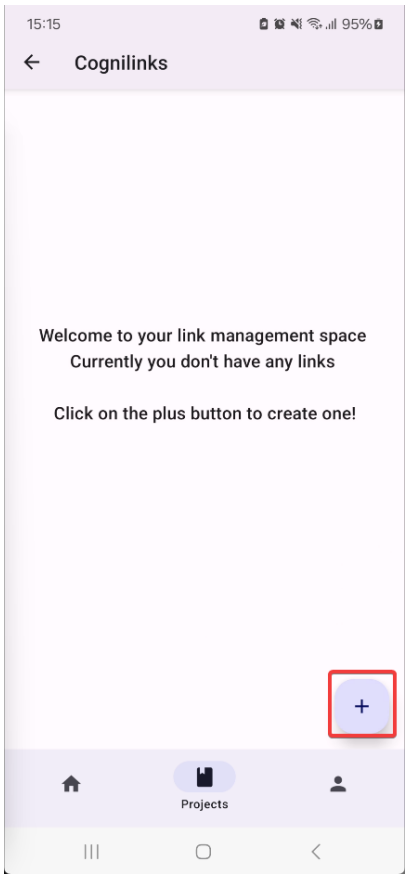


(a)

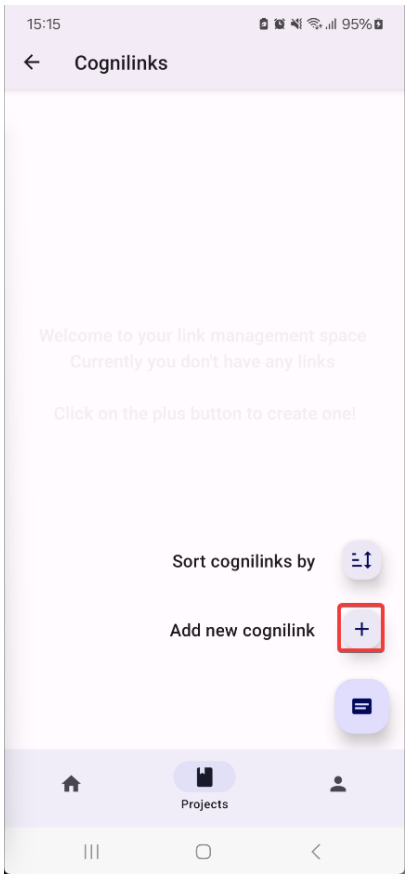
1) You can start creating/editing/deleting a Cognilink by navigating to the *Projects* tab.
2) Move to *My projects*.
3) Tap on the project.



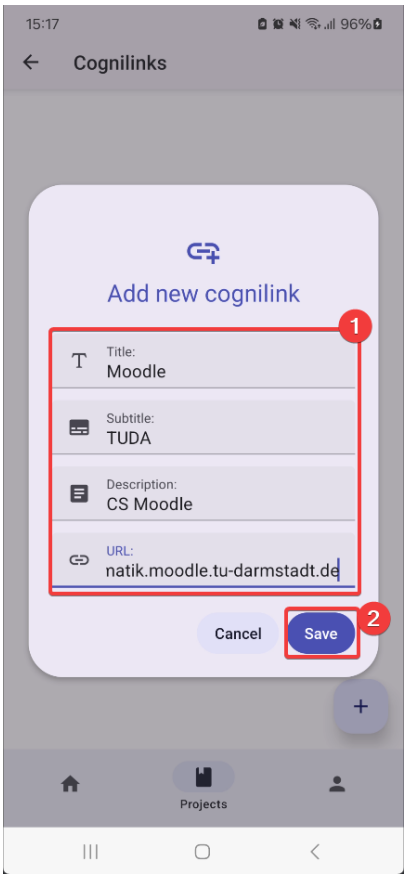
(b) Tap on the *Cognilinks* button.



(a) Tap on the + icon on the bottom right.



(b) Create a new Cognilink by tapping on *Add new cognilink*.



(a)

1) Enter your link information.

2) Create the link by tapping on the *Save* button.

(b)

1) Tap on the Cognilink URL to follow the link.

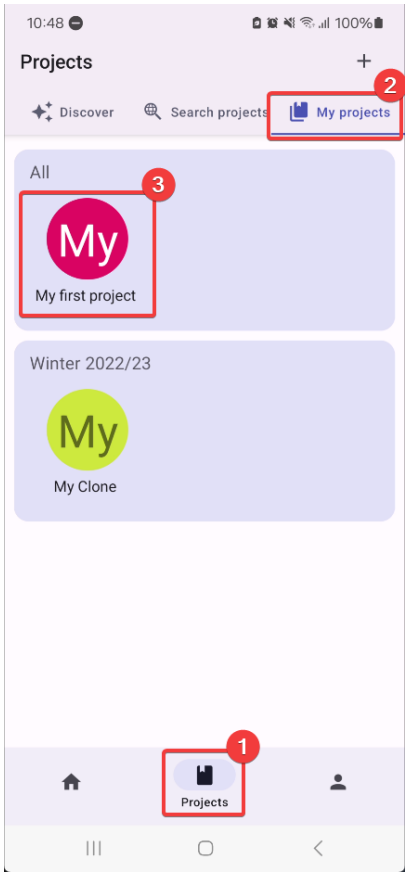
2) Tap on the ^ icon to show/hide details.

3) Tap on the ↱ icon to share the link.

4) Tap on the *Delete* button to delete the Cognilink.

5) Tap on the *Edit* button to edit the Cognilink.

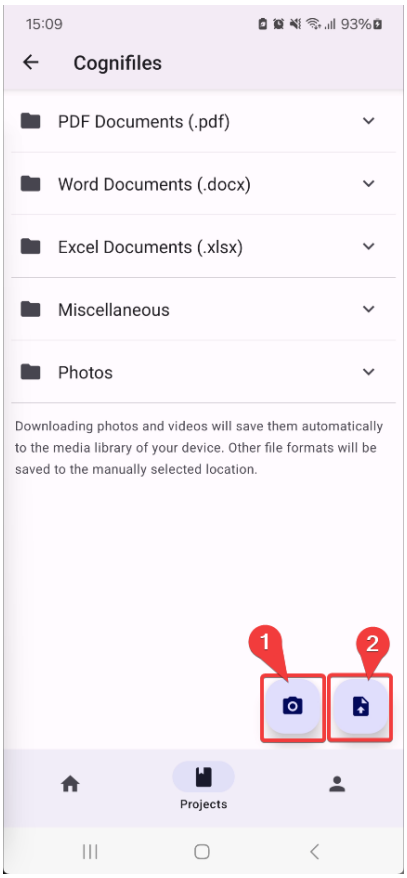
5.10 Create, edit and delete a Cognifile



(a)

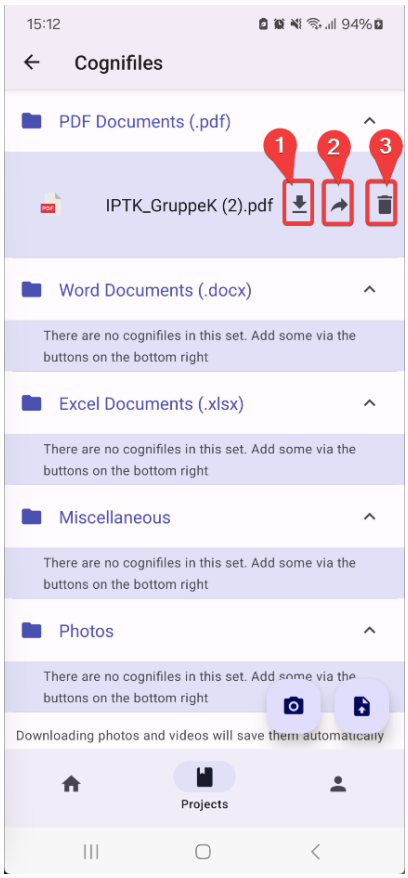
1) You can start creating/editing/deleting Cognifiles by navigating to the *Projects* tab.
2) Move to *My projects*.
3) Tap on the project.

(b) Tap on the *Cognifiles* button.



(a)

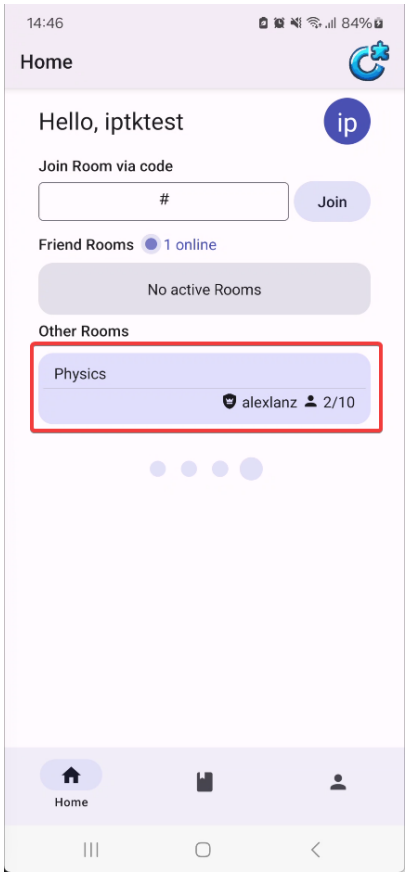
1) To upload a photo, tap on the icon.
2) To upload a file, tap on the icon.



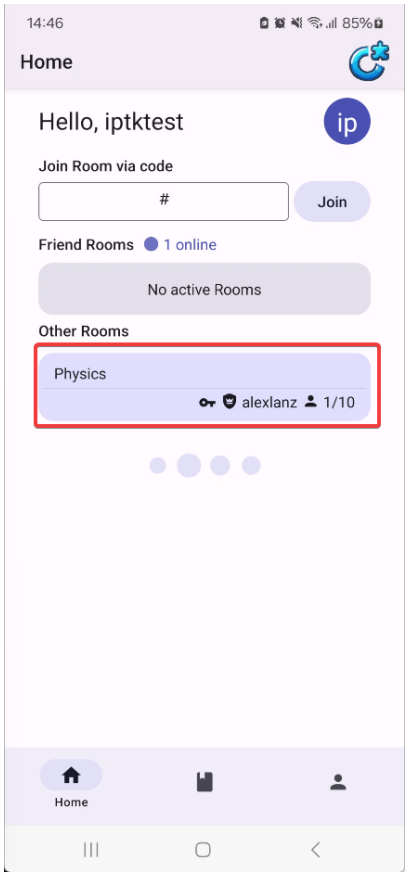
(b)

1) To download a file, tap on the icon.
2) To share a file, tap on the icon.
3) To delete a file, tap on the icon.

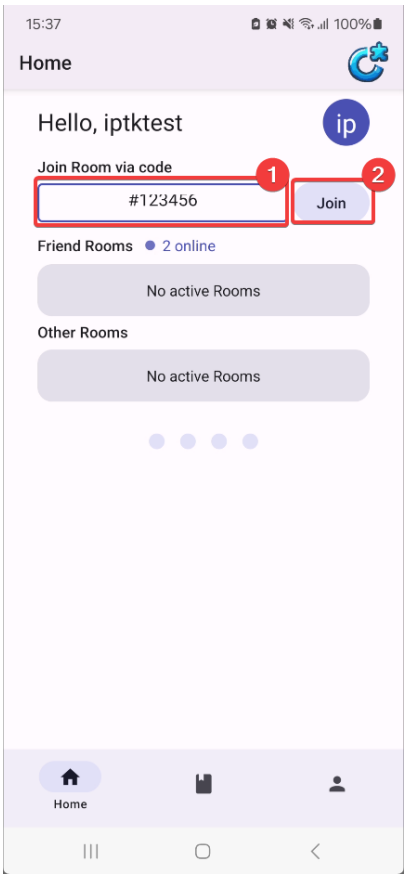
5.11 Join a room



(a) To join a room, move to *Home*.



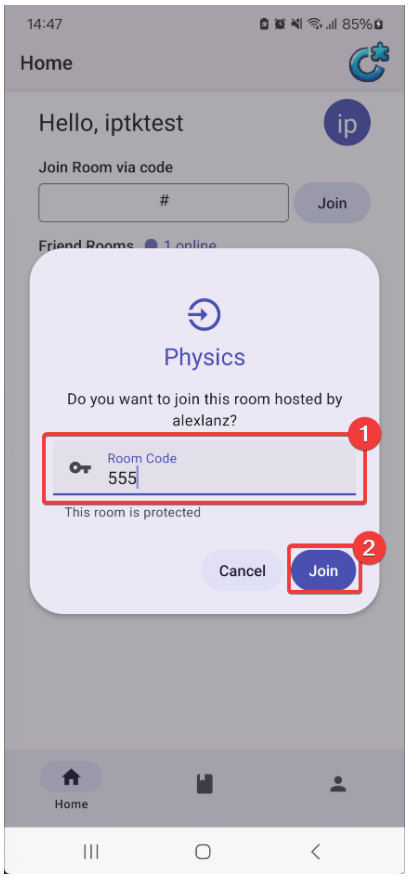
(b) Private room needs a password to enter, which is signalised by the 🔑 icon.



(a)

1) To join via code, enter your code on the Home tab.

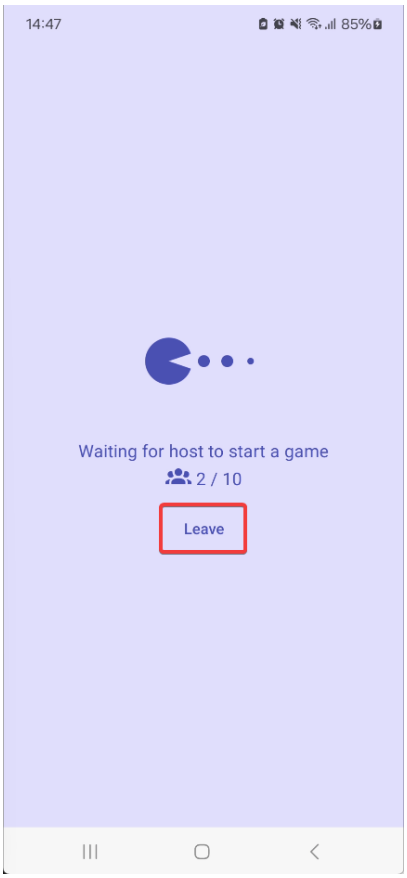
2) Tap on *Join*.



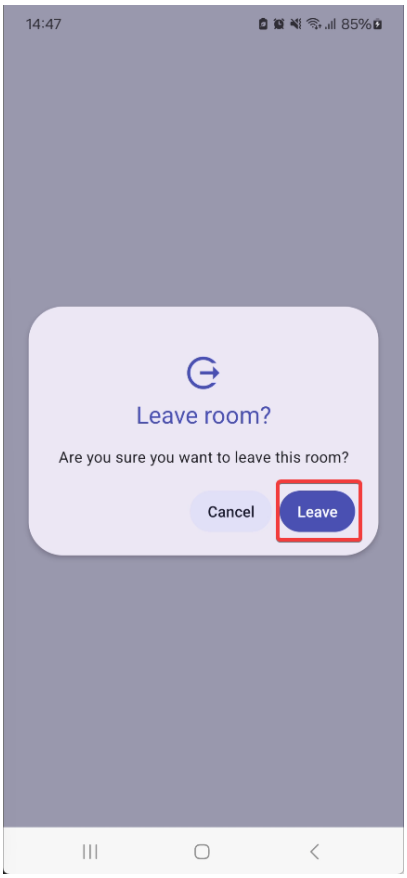
(b)

1) To join a private room, enter the Security Code.

2) Enter by tapping on the *Join* button.

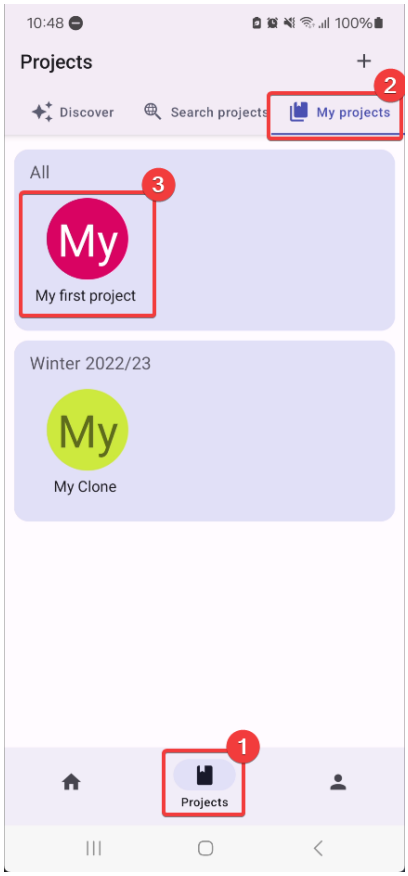


(a) The host decides when the game starts. You can always go back by tapping on the *Leave* button.

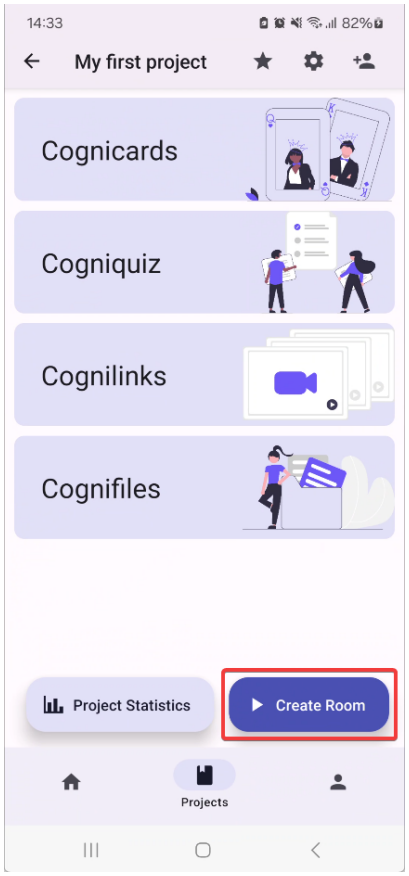


(b) Leave the room by tapping on the *Leave* button again.

5.12 Create a room



(a)

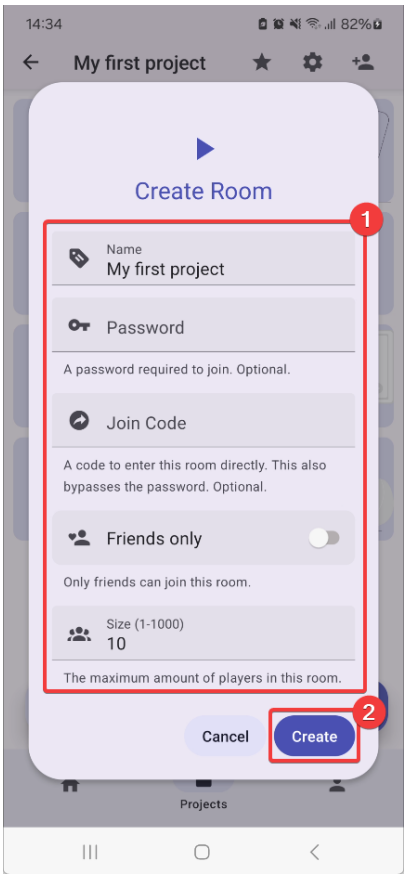


(b) Tap on the *Create Room* button.

1) Create a room by navigating to the *Projects* tab.

2) Move to *My projects*.

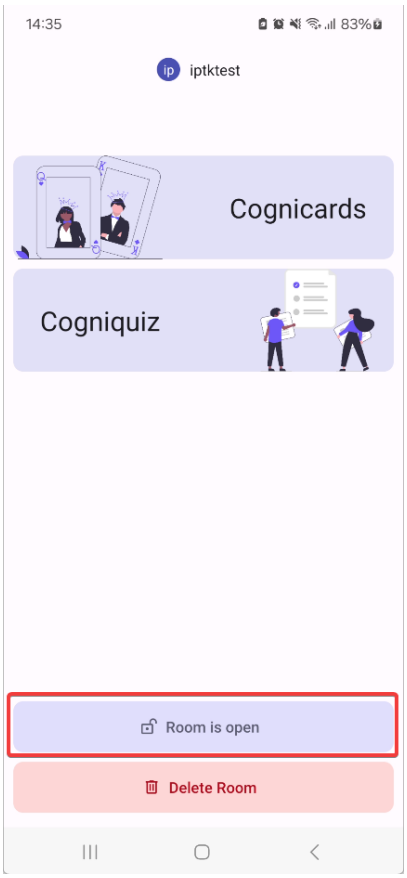
3) Tap on the project.



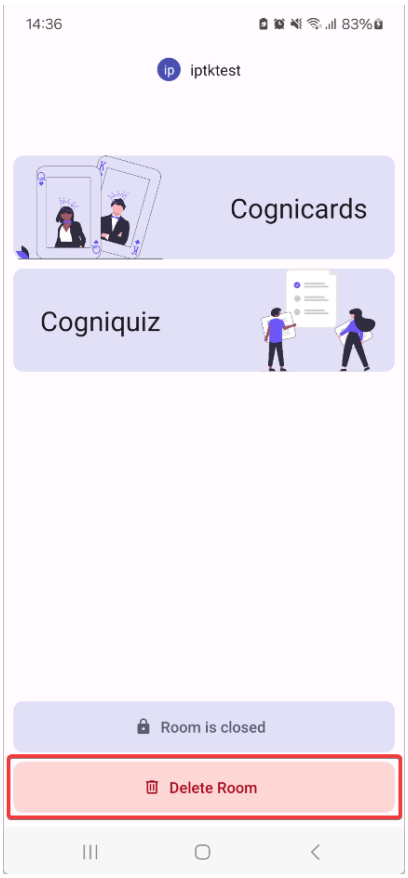
(a)

1) Enter your room information.

2) Tap on the *Create* button.

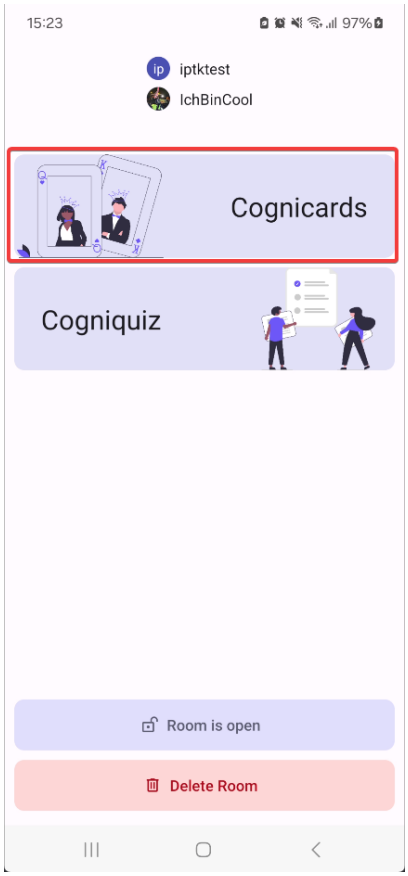


(b) You can open the room for others to join. You can see the members that joined the room below your username at the top of the screen.

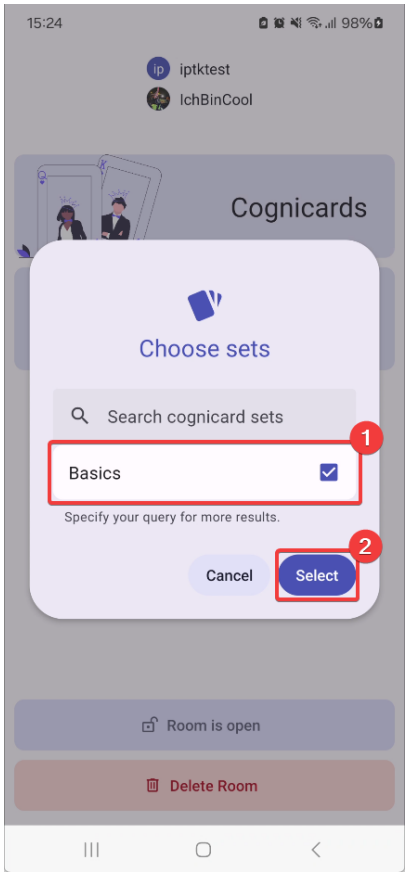


(a) You can close the room by tapping on *Delete Room*.

5.13 Play a cognicard game



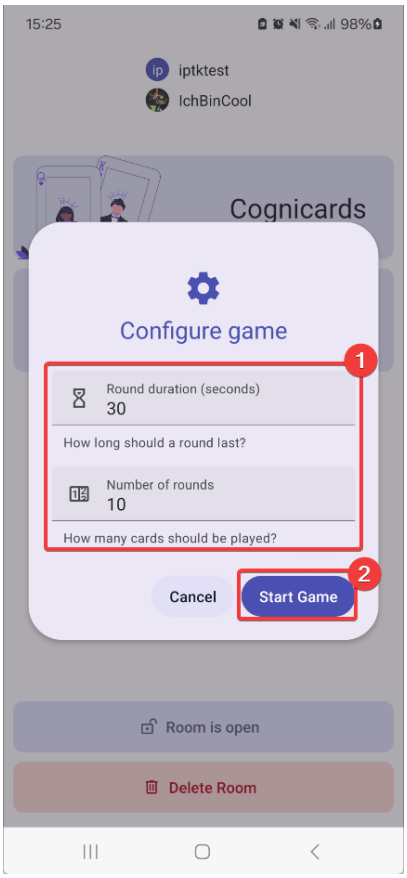
(a) Tap on Cognicards to play a flashcard game. All members who are currently in the room are automatically added to the game.



(b)

1) Select the sets you want to play with by tapping on their respective checkboxes.

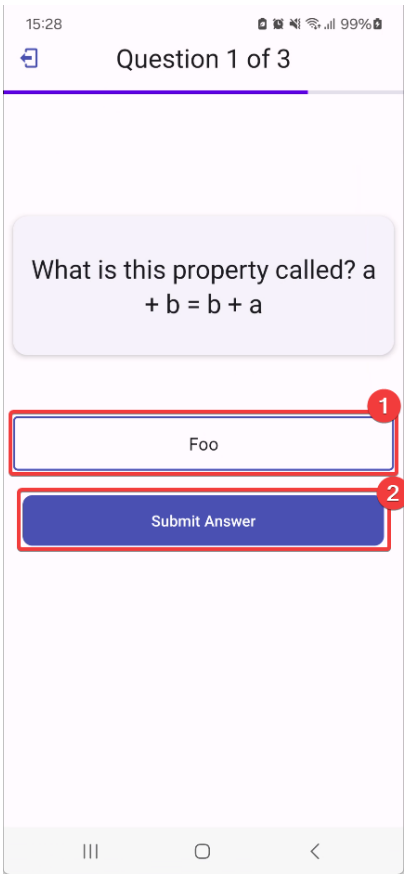
2) Confirm by tapping on the *Select* button.



(a)

1) Set the duration and the number of rounds.

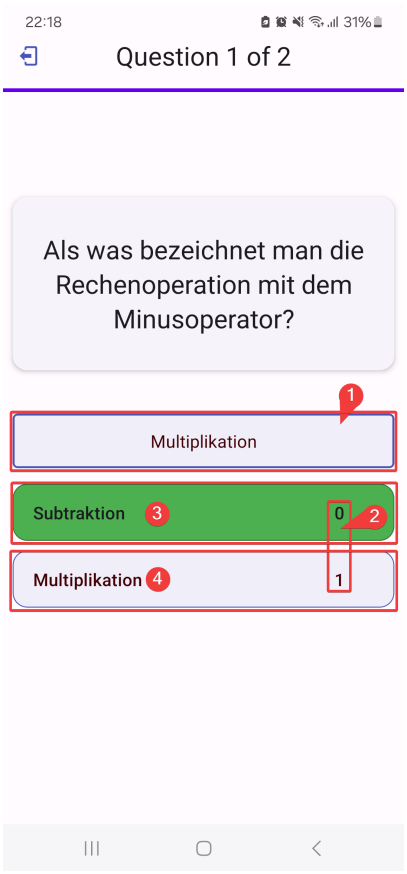
2) Tap on *Start Game* to begin.



(b)

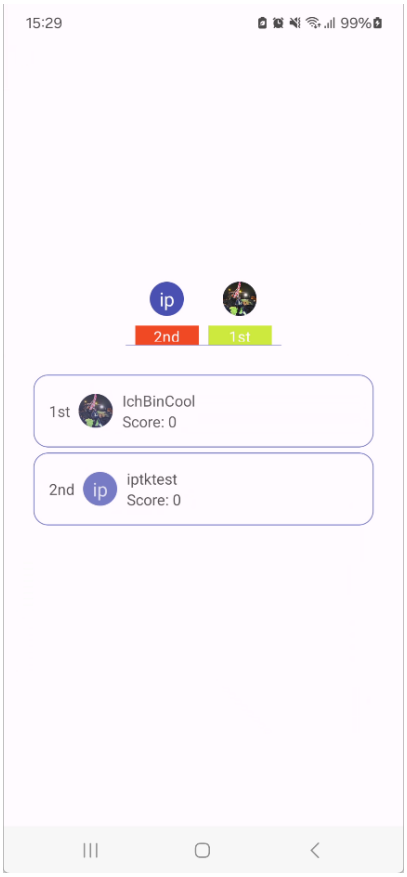
1) Type in your answer.

2) Tap on *Submit Answer* below.

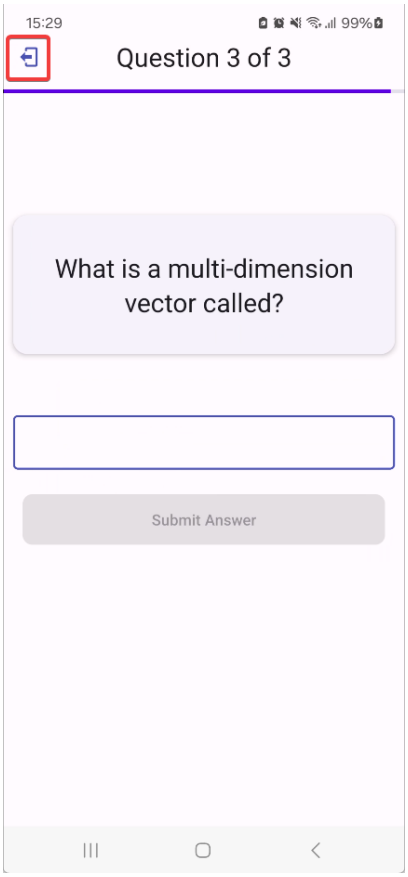


(a)

1) After the round this field showcases your answer.
2) You can see the answers from the players.
3) The correct answer is shown in green.
4) The wrong answers are not highlighted.

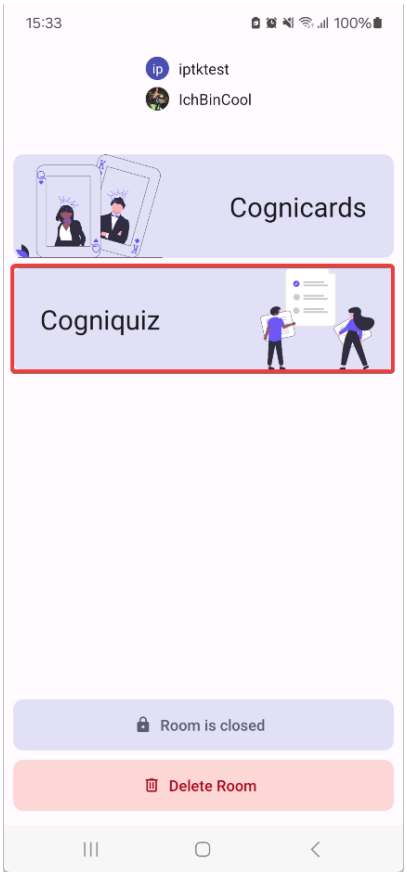


(b) After each round, you can see your score compared to the other players.

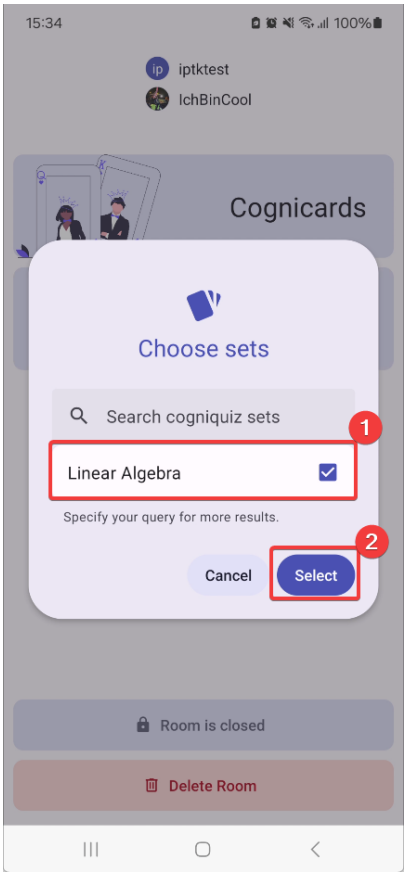


(a) Leave the game by tapping on the icon on the top left.

5.14 Play a cogniquiz game



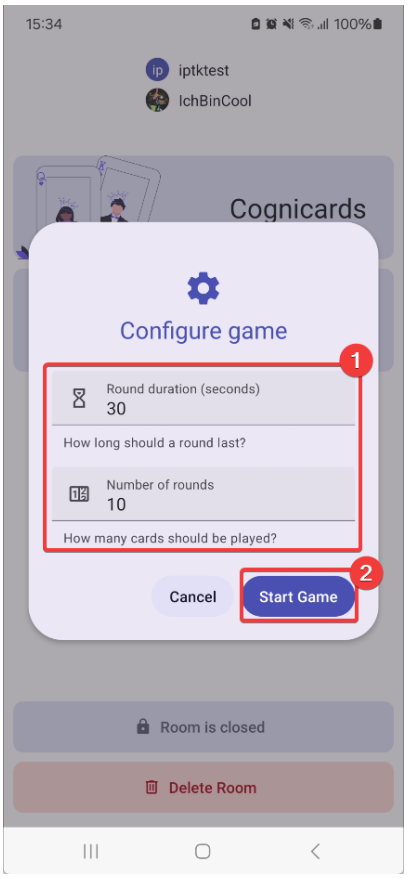
(a) Tap on Cogniquiz to play a quiz game. All the members that are currently in the room get automatically added to the game.



(b)

1) Select the quiz sets that you want to play the game with by clicking on the respective checkboxes.

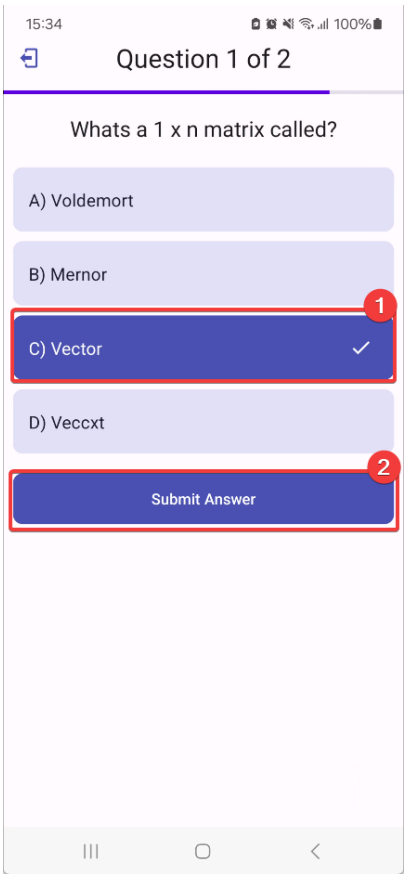
2) Confirm your choice by pressing *Select*.



(a)

1) Set the duration and the number of rounds.

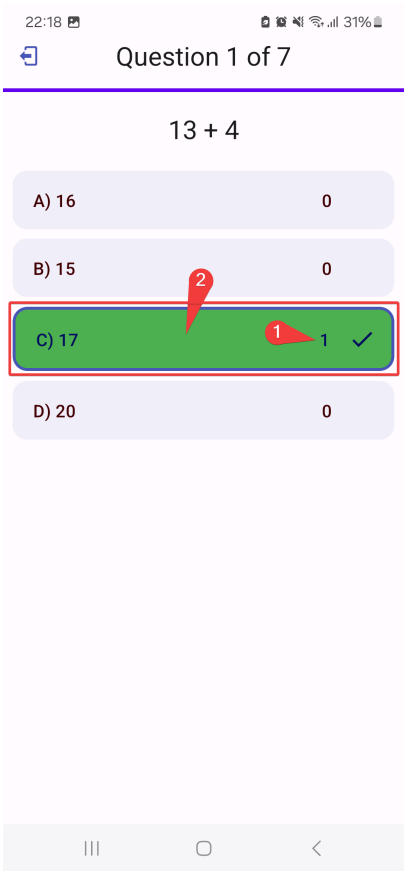
2) Tap on *Start Game* to begin.



(b)

1) Choose an answer from the multiple choice options.

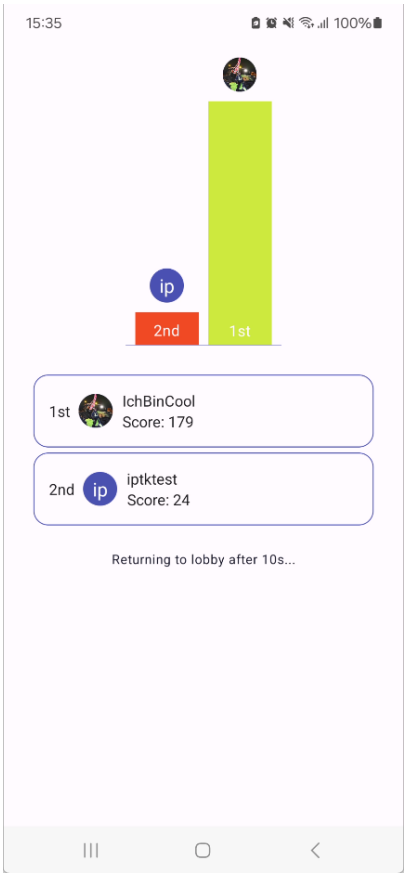
2) Tap on *Submit Answer* below.



(a)

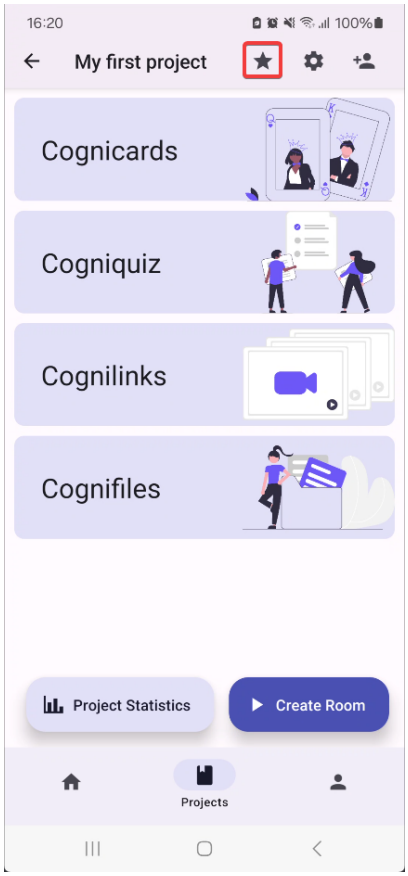
1) The number shown next to the choices is the number of votes.

2) After a certain amount of time has passed, the answer will be shown in green.

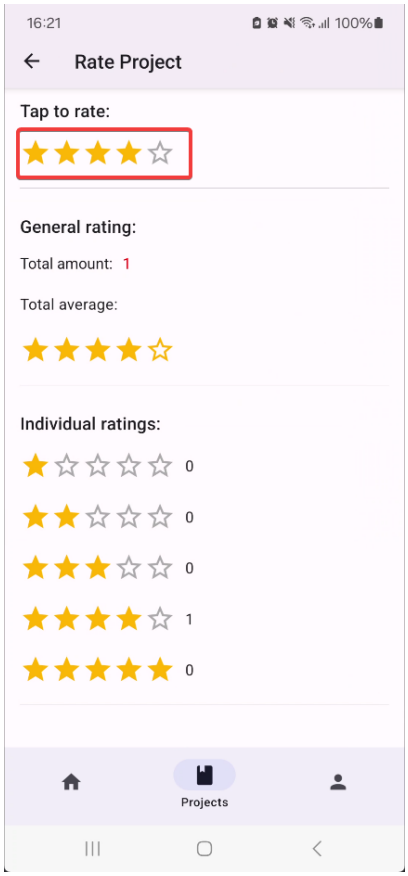


(b) After the game is over, you can see your score compared to the other players. Soon you will be redirected to the room lobby.

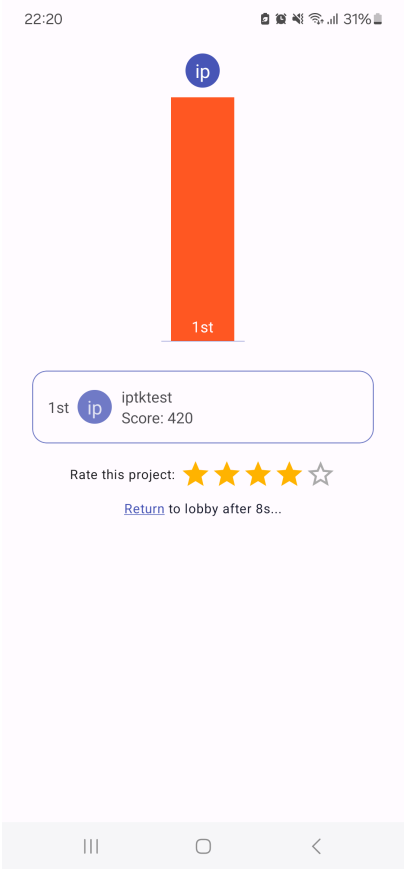
5.15 Rate a project



(a) To rate a project, navigate to the project under *Projects*. Tap on the ★ icon at the top right corner.



(b) Rate the project and you can see the overview of all the ratings below. In this sample screenshot, one has rated the project 4 out of 5 stars.



(a) After playing a Cogni-cards/Cogniquiz game, the players can rate the project on the end screen, before being redirected to the lobby.