

# SkySync: Video Conferencing Application

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# Description

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In this project, we have developed a video conferencing application leveraging the robust capabilities of the **ZegoCloud API**. Our app, aptly named **SkySync**, redefines the way users engage in remote communication and collaboration.

With SkySync Video Conferencing, users can seamlessly initiate and join video conferences with colleagues, clients, or friends from any corner of the world. Our primary focus was on delivering exceptional experiences to user who frequently uses video conferencing. Hence overall development was related to how can we made daily video conferencing task easy for an user.

# Key Features

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- **Easy Meeting Code Sharing:** Share meeting codes effortlessly, facilitating quick and convenient access for participants.
- **Privacy Protection:** By default, microphones and cameras are turned off, ensuring users' privacy is safeguarded from any unforeseen events.
- **Scheduled Meetings with Notifications:** Schedule meetings and receive timely notifications, helping users stay organized and prepared for upcoming discussions.
- **Database Integration for Efficient Meeting Joining:** Save meeting information in the database for swift access and seamless joining in the future, enhancing efficiency and convenience.
- **Secure Data Management with Firebase:** Utilize Firebase for secure and updated data storage, ensuring the confidentiality and integrity of user information.
- **Custom Profile Picture Selection:** Choose a custom profile picture to serve as an avatar, personalizing the user experience and enhancing engagement.

# Key Features

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- **Password Change with Email Authentication:** Change passwords securely through email-based authentication, strengthening account security and user authentication.
- **Room Lighting Conditions Warning:** Receive warnings about room lighting conditions before joining meetings, ensuring optimal visibility and video quality.
- **Optimized Performance with Lightweight UI:** Enjoy high performance with a lightweight user interface, delivering a smooth and responsive experience for users.
- **Minimalistic Design Inspired by Google Material Theme:** Experience a sleek and minimalist design aesthetic, inspired by Google's Material theme, for a modern and visually appealing interface.
- **Comprehensive Handling of Edge Cases:** Address all possible edge cases to enhance user experience, providing clear and informative toast messages and guidance for seamless navigation and usage.

# SignIn/SignUp Activity



## In this activity

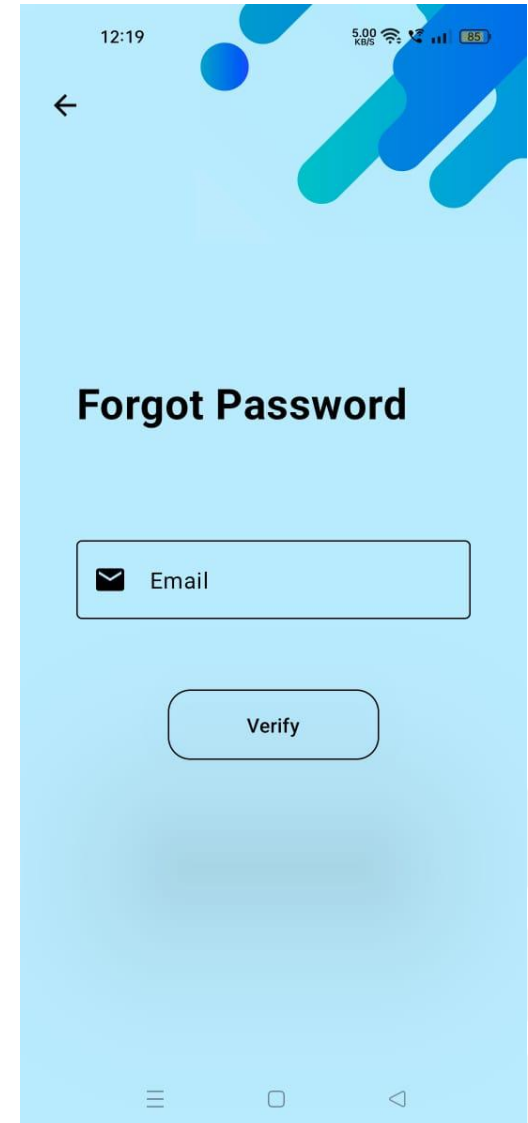
- User can sign In or create an account if not already signed to the app.
- User can request for reset password if they forgot password.
- If the user is already signed then Home Screen will be displayed
- The signup and create account is performed using Google Firebase.
- After signing out from the app this activity will again show up.

# Forget Password Activity



## In this activity

- User can reset their password using firebase.
- A mail will be sent to user mail that he have enter, to reset the mail.
- From that mail, user can input new password, and their old password will be reset to this new password.

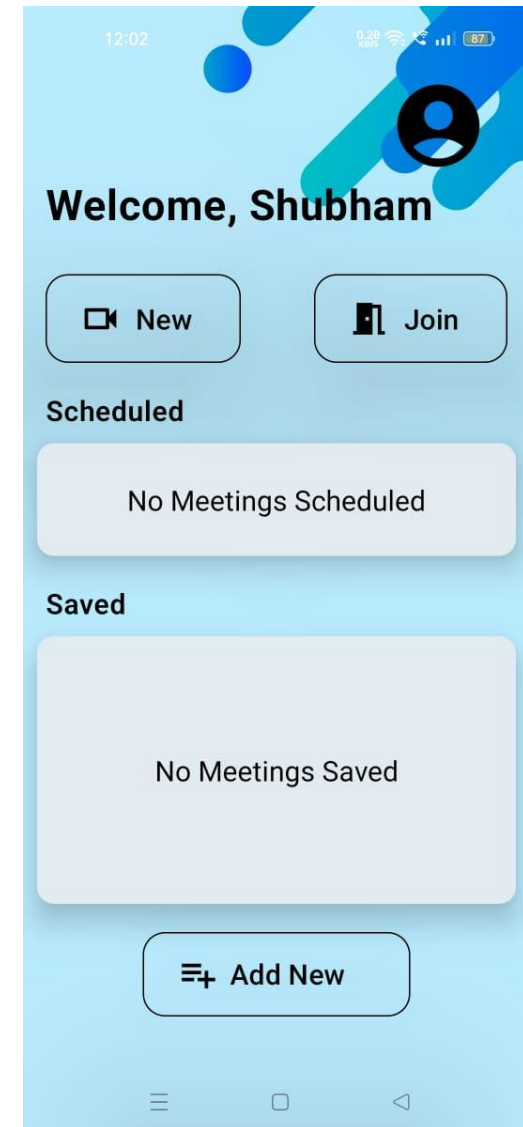


# Home Screen Activity



## In this activity:-

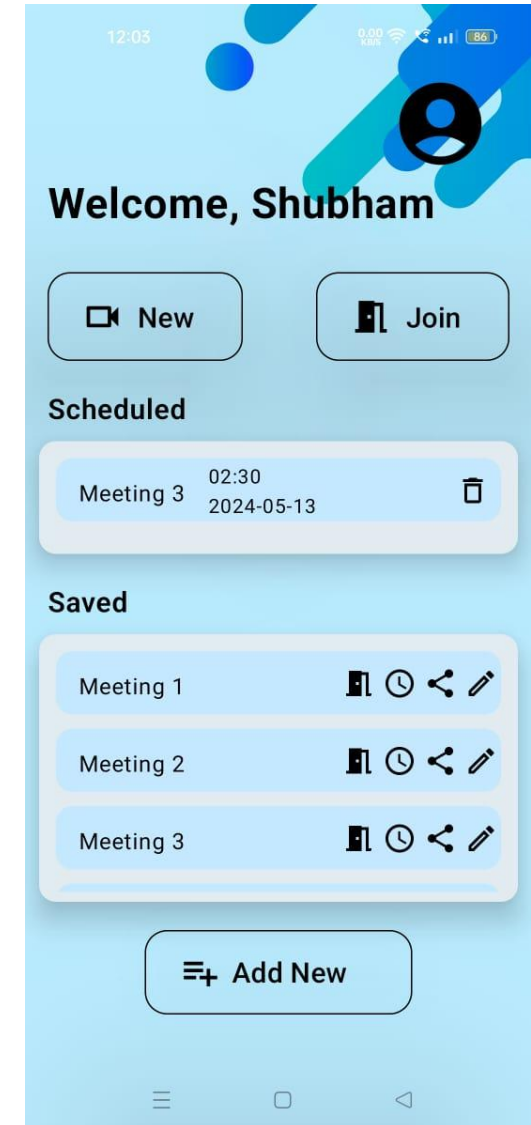
- There are different types of buttons and options available on this screen.
- There is a button to start new meeting, and code for meeting, is itself generated by app.
- There is a join button which prompts user to enter meeting code to join an ongoing meeting.
- There is a add new button using this user can save the details such as meeting title and its joining code.
- After saving the meeting user also have an option to schedule a meeting so that he will be able to get notification for the upcoming meeting.



# contd..



- User have a option to edit, delete its saved meeting.
- User have an option to share the meeting with its joining code with others.
- Profile button is provided on the top right corner of the screen, so that user can edit its profile information using that feature.
- In this activity all the details of saved and scheduled meeting is saved to and retrieved from Google Firestore for seamless user experience across multiple devices.

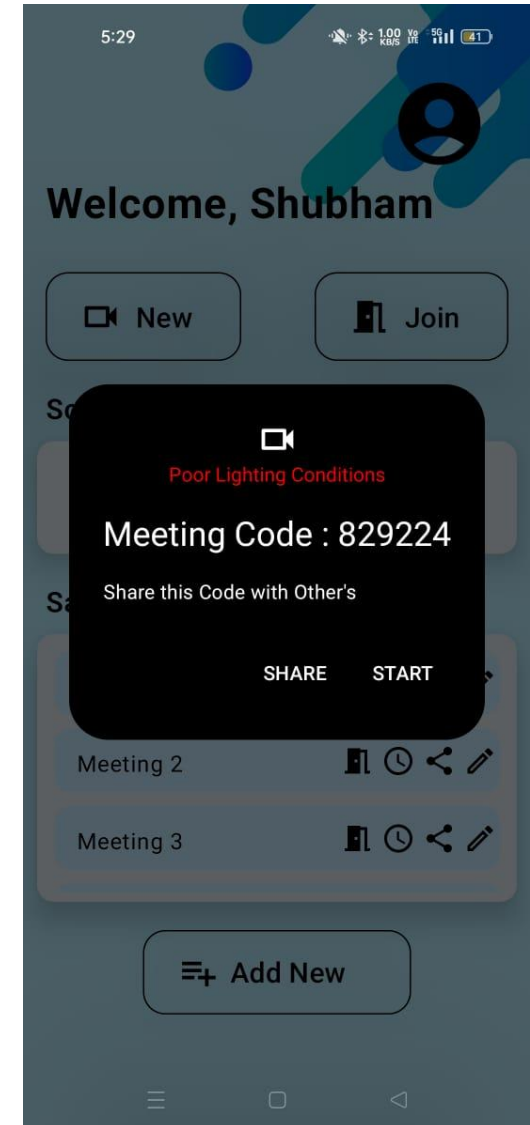




# Light Sensor used in HomeScreen



- This activity also uses **light sensor** for checking the current environment lighting condition.
- Whenever a user is joining or creating a new meeting the environment lighting condition will be checked by the light sensor.
- If there is poor lighting condition then a pop up is showed to the user notifying him/her that the current environment have poor lighting condition.

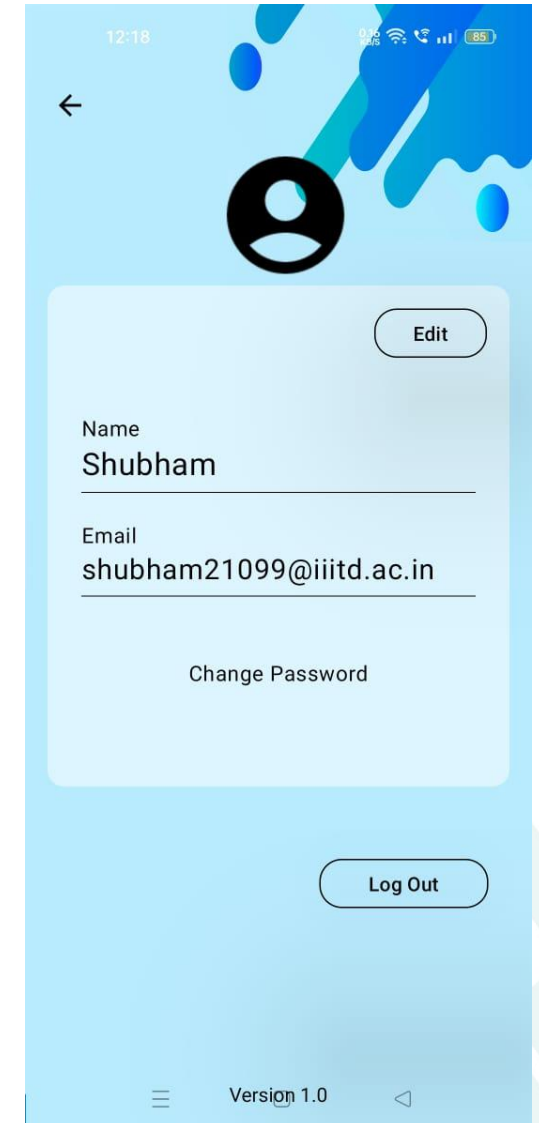


# Profile Screen Activity



## In this activity :

- User name & email is displayed.
- There is an edit button through which user can change his details.
- There is profile icon button to select a profile picture from local device storage, using this user can change his profile picture which will be used in video conference.
- User can change his account password by tapping on the change password option.
- There is a logout button through which user can log out his account from the app.

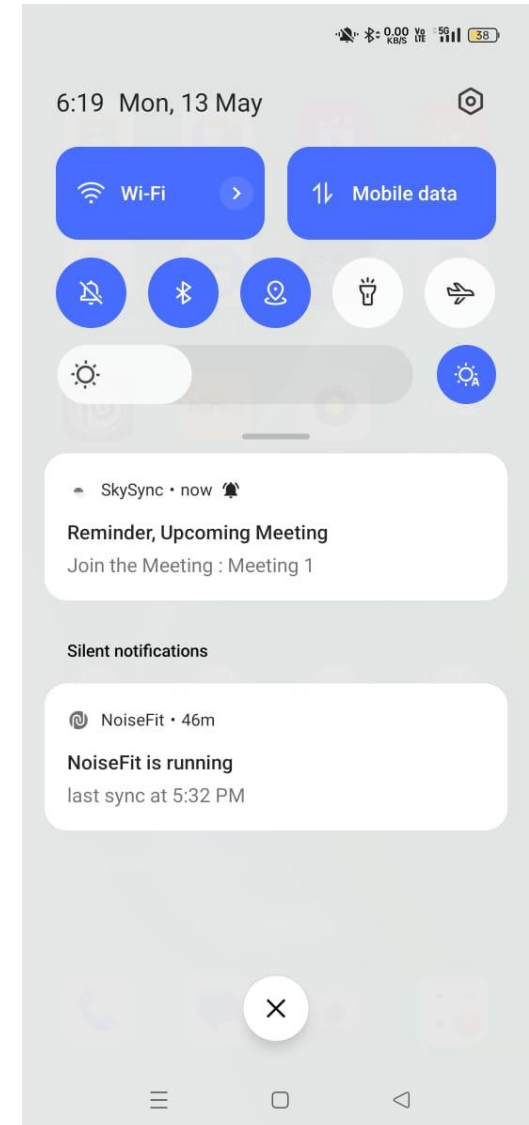


# Notification Activity



**This activity is used to fulfill the notification scheduling request from main UI.**

- A Notification channel is created for our app with default priorities.
- Checking & Fulfilling the required permissions for notification both for older & newer devices.
- Scheduling the notification based on the time provided by user.
- Notification is scheduled with custom message, icon, title & priority.
- After scheduling the notification this activity is then finished to manage performance & efficiency.
- Clicking on notification opens the home screen of App.



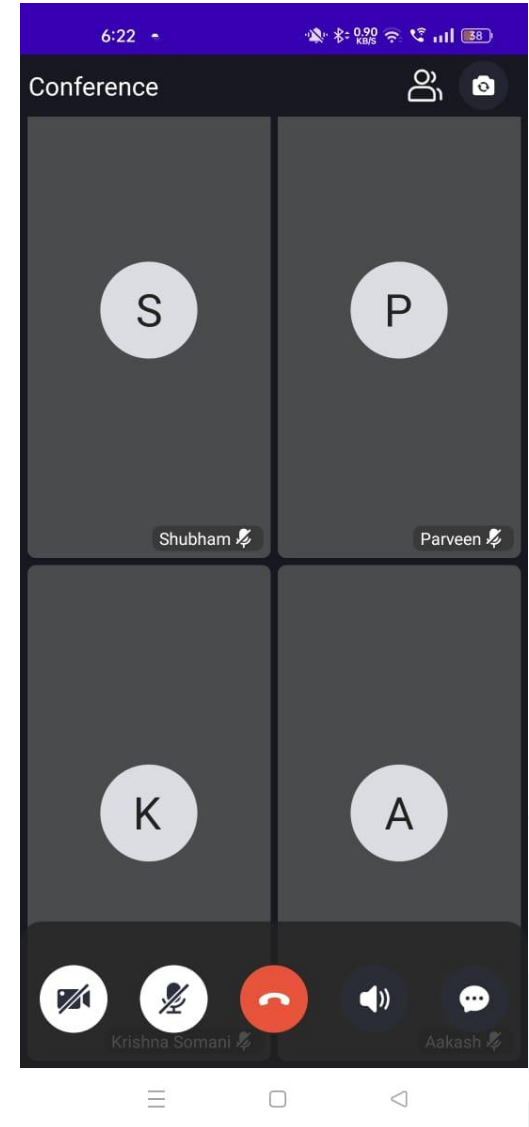
# Conference Activity



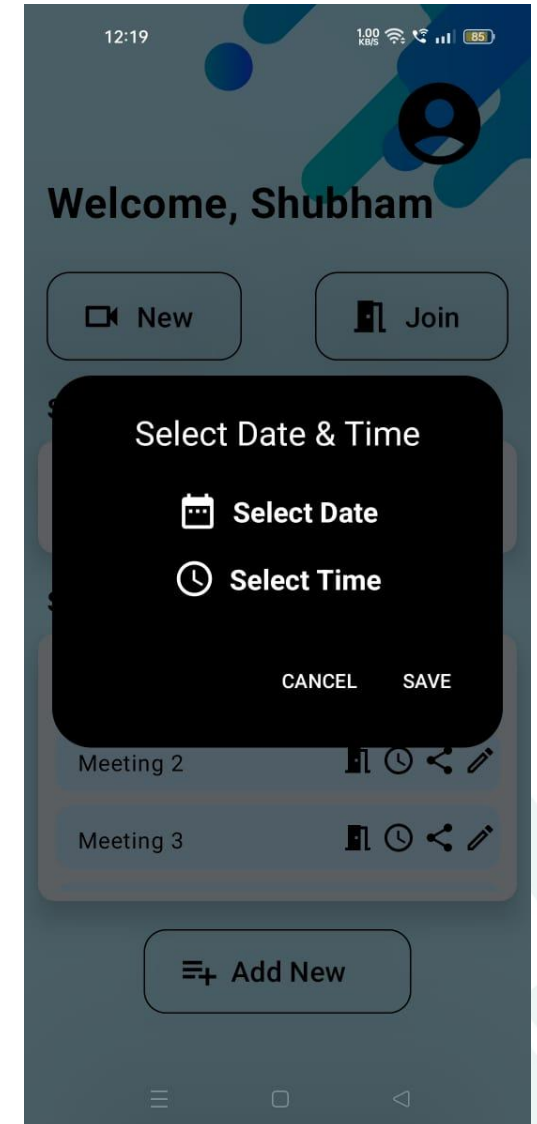
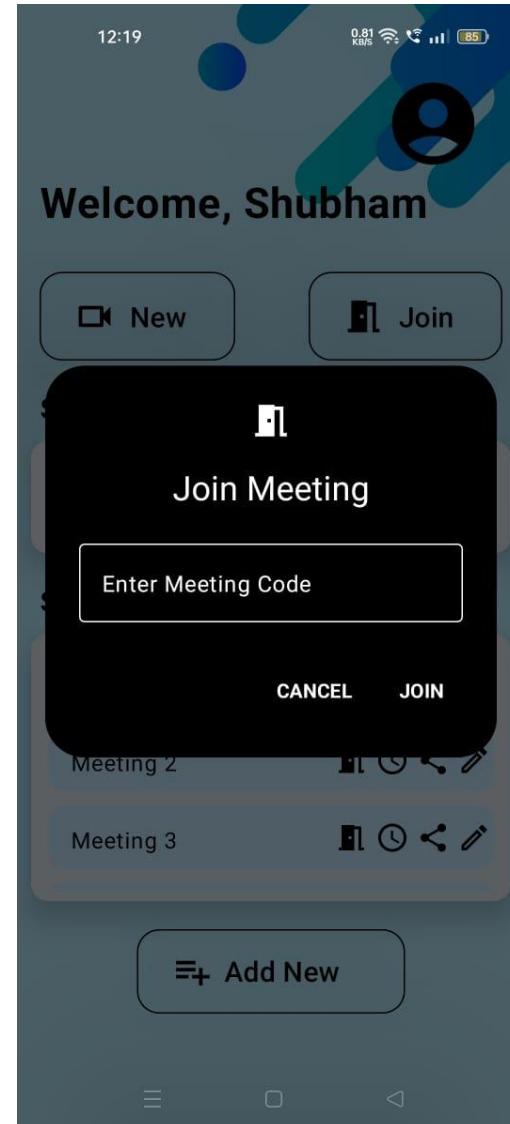
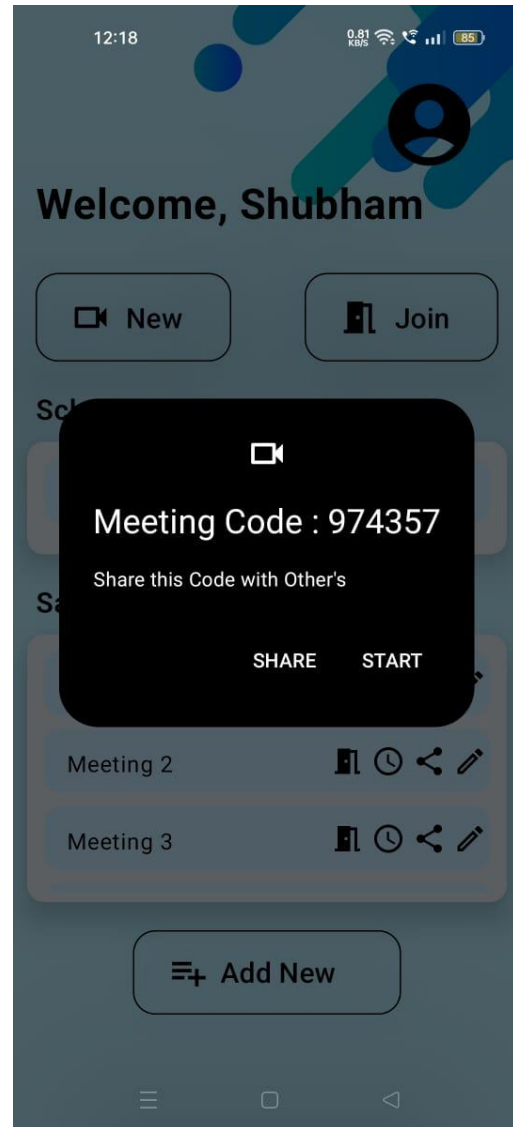
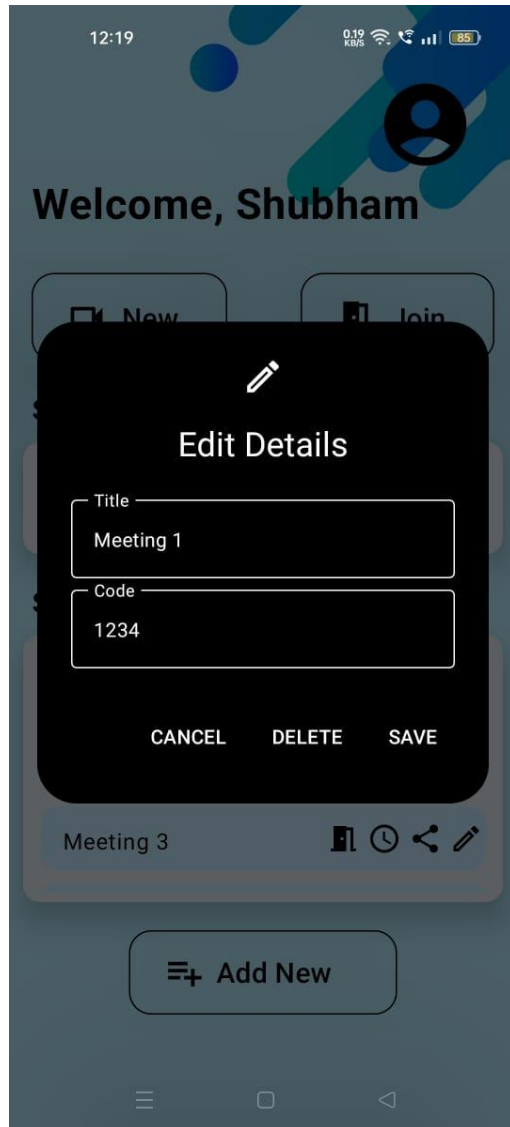
**This activity is used to call the Video Conferencing UI.**

**In this activity:**

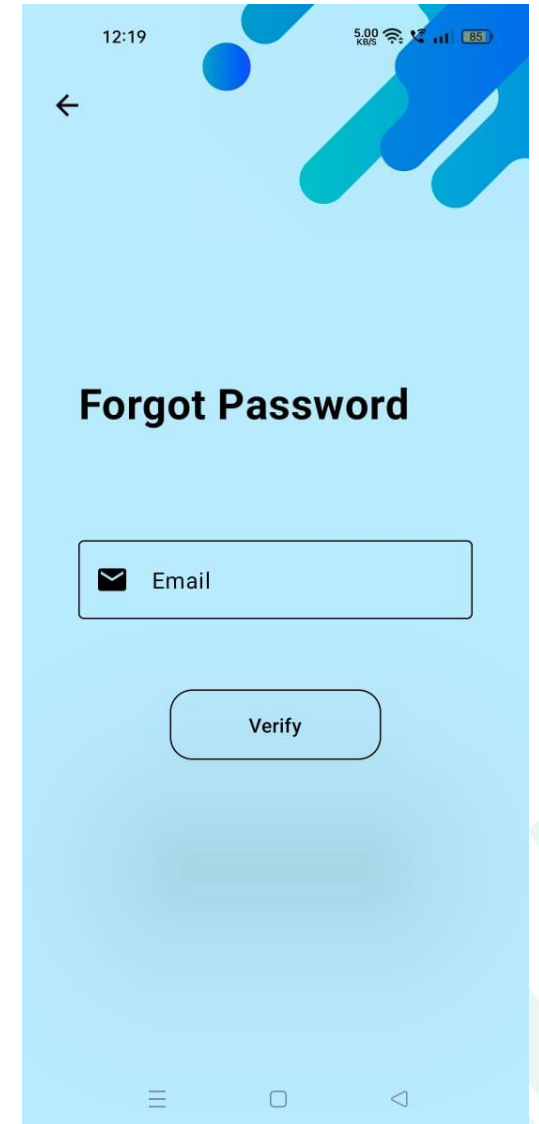
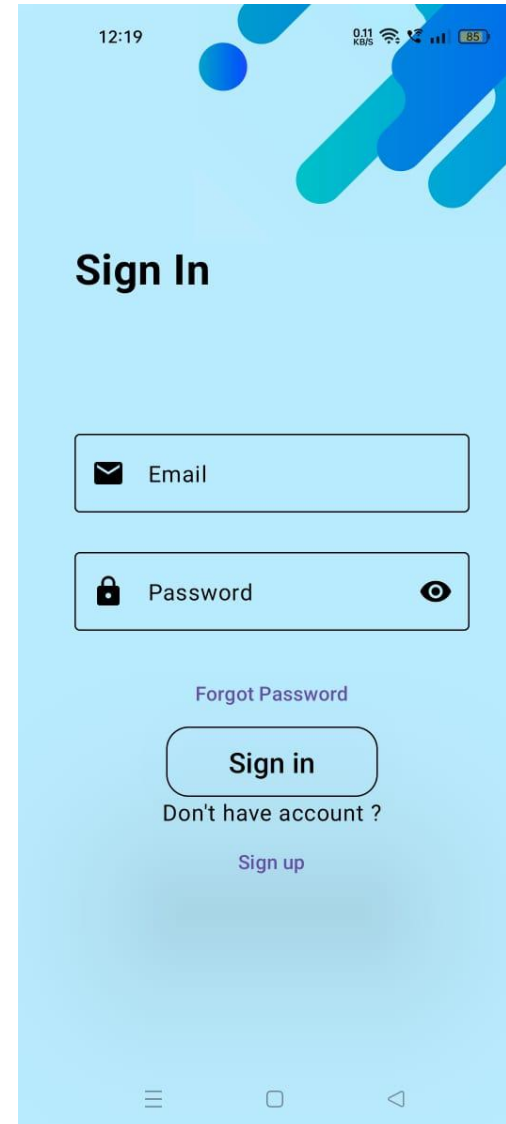
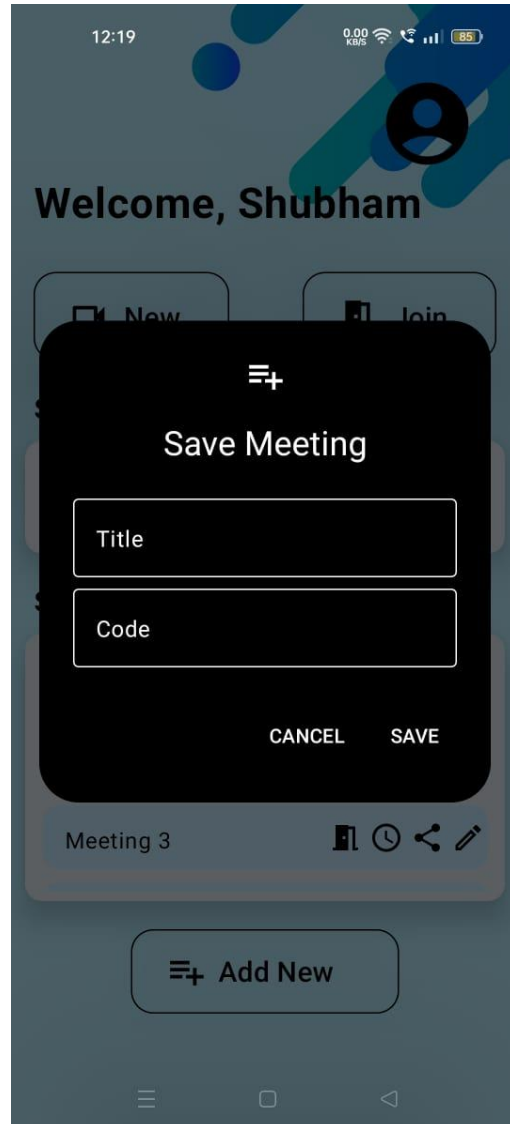
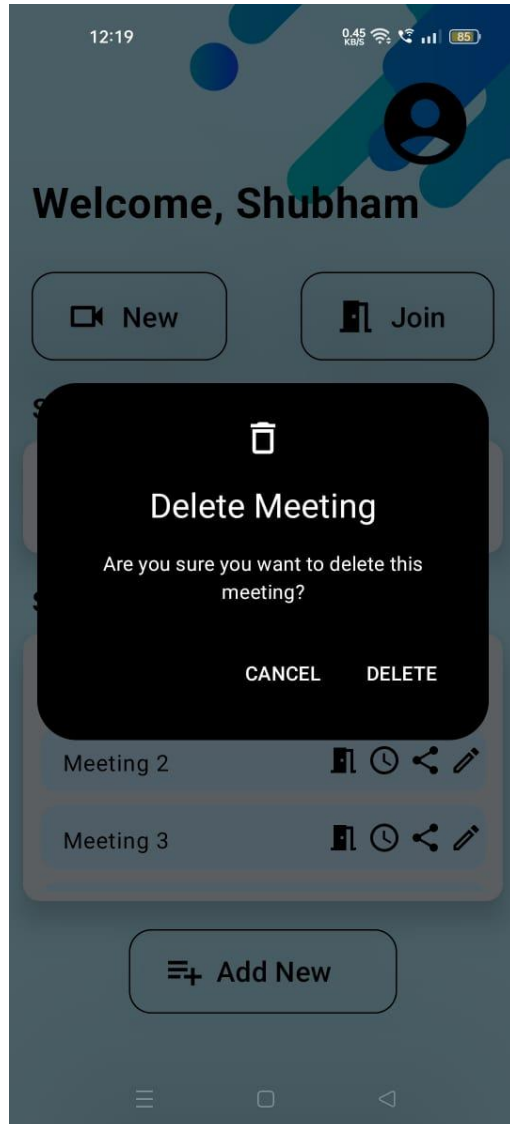
- A custom user name & avatar is set for user.
- Default microphone & camera configuration is set for user.
- A unique User Id is created for user identification in video conference.
- Zego Cloud Api is used to enter into the conference UI.



# Working App ScreenShots



# Working App ScreenShots



# Working App ScreenShots



12:19 0.00 KB/s 85%

## Create Account

**Sign Up**

[Sign in](#)

Navigation icons: menu, home, back

12:18 0.00 KB/s 85%

**Edit**

Name  
Shubham

Email  
shubham21099@iiitd.ac.in

[Change Password](#)

**Log Out**

Version 1.0

Navigation icons: menu, home, back