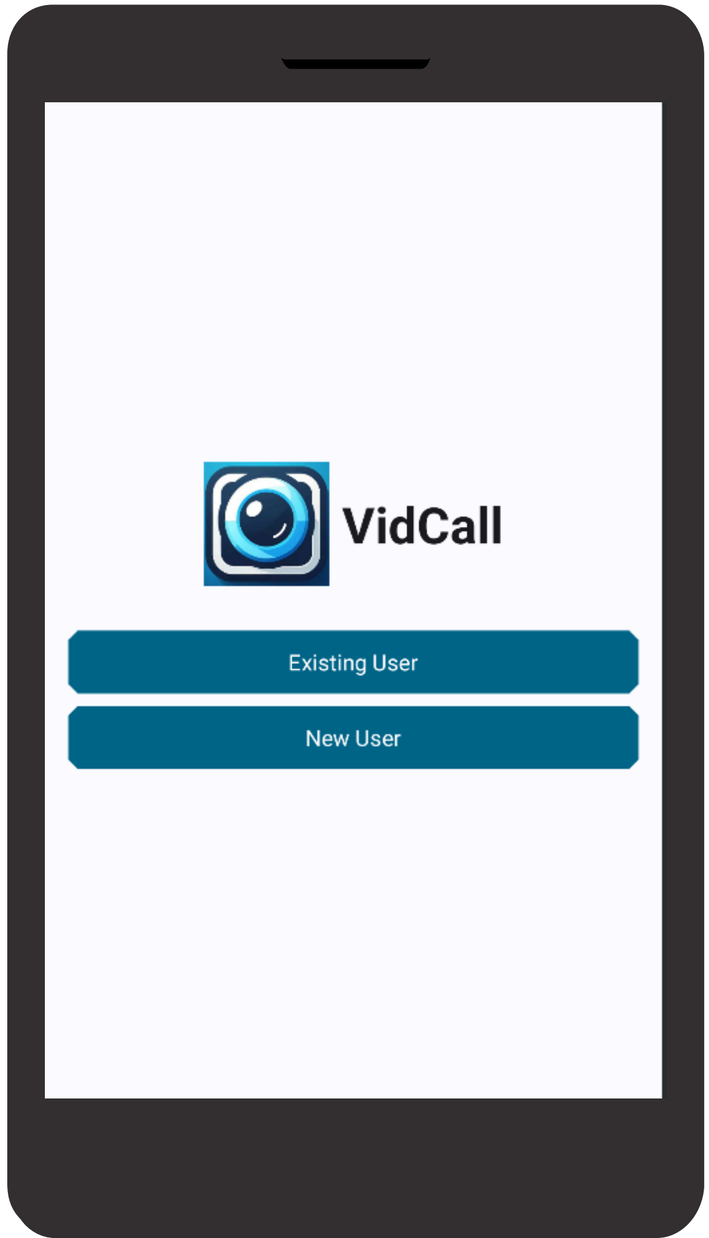
VidCall

Video Conferencing App

BY:
Sridhar Sodhi 2021104
Vinayak Goel 2021113
Vinayak Arora 2021112
Saksham Pandey 2021486



Welcome To Our Application

About Our Application

VidCall is a video conferencing app designed to bring people together, whether for personal chats or professional meetings. It allows users to easily create, join, and manage video calls with just a few taps.

HomeScreen Activity

01

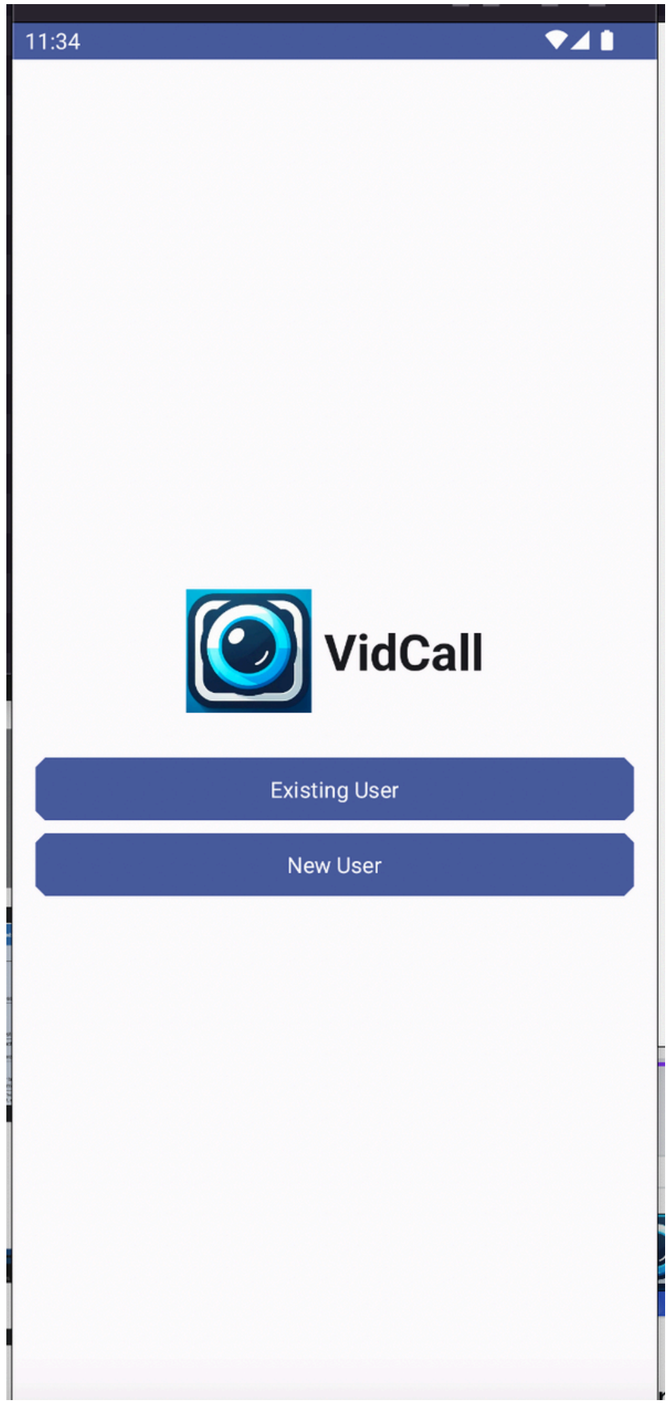
HomeScreen Activity is the initial activity of the app i.e. the starting point. of the app.

02

UI - To display the HomeScreen Activity, a column composable was used and 2 button composable in the column scope. The onclick methods of button starts a new activity called user login

03

Functionality - On clicking either of the 2 buttons,UserLogin activity is started and the action is passed as a parameter through the intent. If Existing User is clicked, then action = “login” is passed through intent. If New User is clicked, then action = “newuser” is passed through intent and a new activity is started.



UserLogin Activity

01

User Login Activity is the second activity in the flow which is started by the HomeScreen Activity..

02

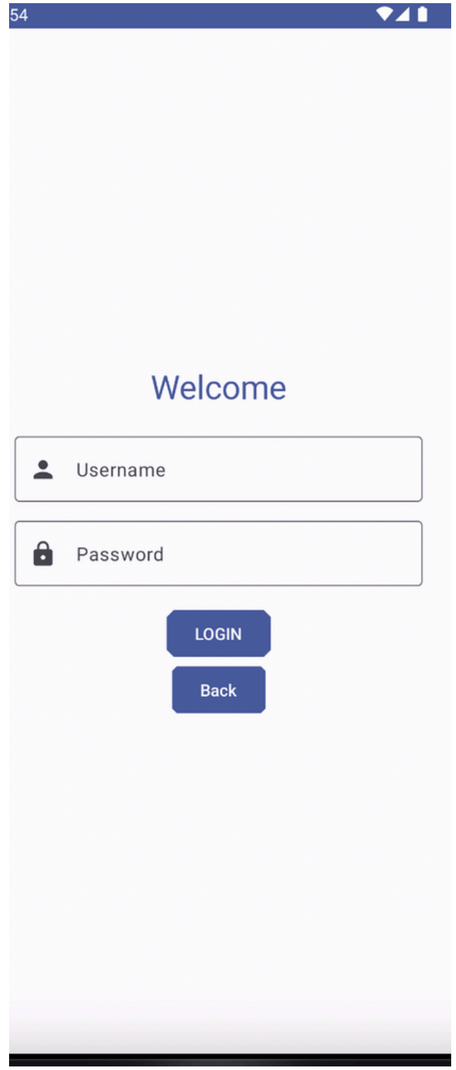
UI - To display the User Login Activity, a column composable was used. TextFields and 2 button composable were created in the column scope. The onclick methods of Login / SignIn button starts a new activity i.e. the MainActivity.

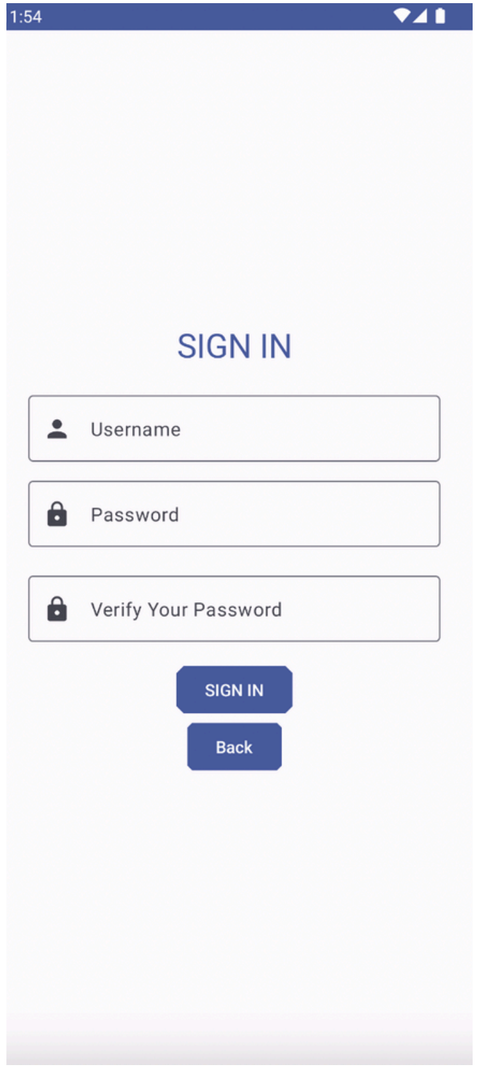
03

Functionality -
Sign In :- The UserName, password taken as user inputs. The values are then stored in user database. Repeated usernames or when passwords do not match, throws an error.

Log In :- The username and password are verified from the user database and then if correct details are found user is able to log in.

The username is sent as parameter through intent to start the MainActivity.



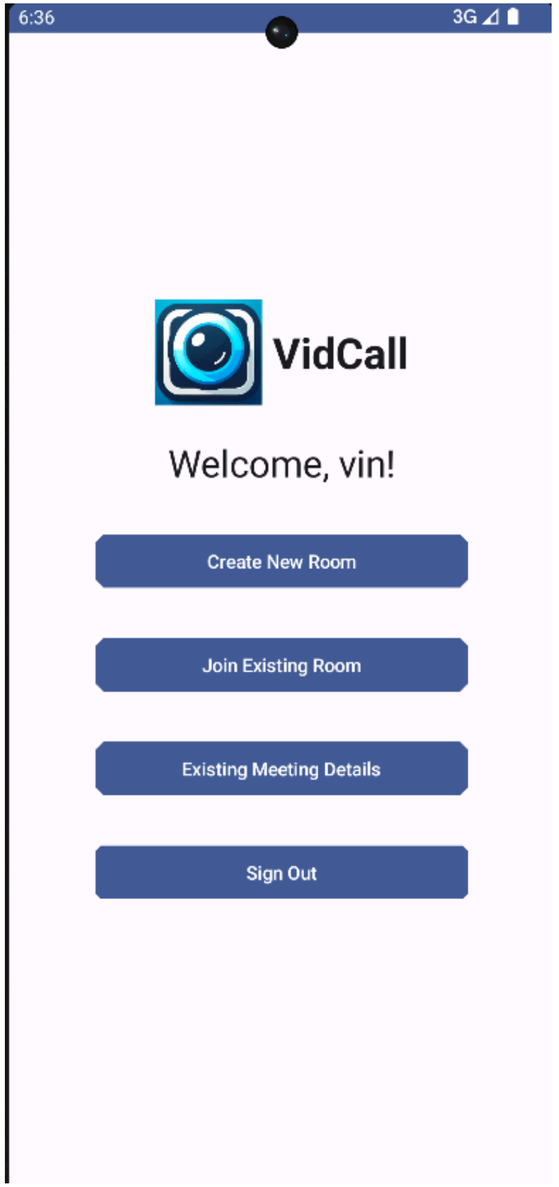


MainActivity

01 This is the screen which contains the core functionality of the app, that is providing the user with the ability to create video call rooms or join already existing rooms. This functionality is built using Jitsi meet SDK for kotlin.

02 UI- To display the MainActivity of the app, a column was used inside a composable function. There are 4 composable buttons, which allow the user to Create a new room, join an existing room, Check details of past meetings and Sign out respectively

03 Functionality- The default options of a Jitsi meet are set for every user like setting up a server, and other relevant flags. The user can click on “Create new room” and enter a roomname to join a new room, or click on “Join Existing room” to join a room which already exists with same name. “Meeting Details” give user the information about past meetings and “Sign out” takes the user back to home screen

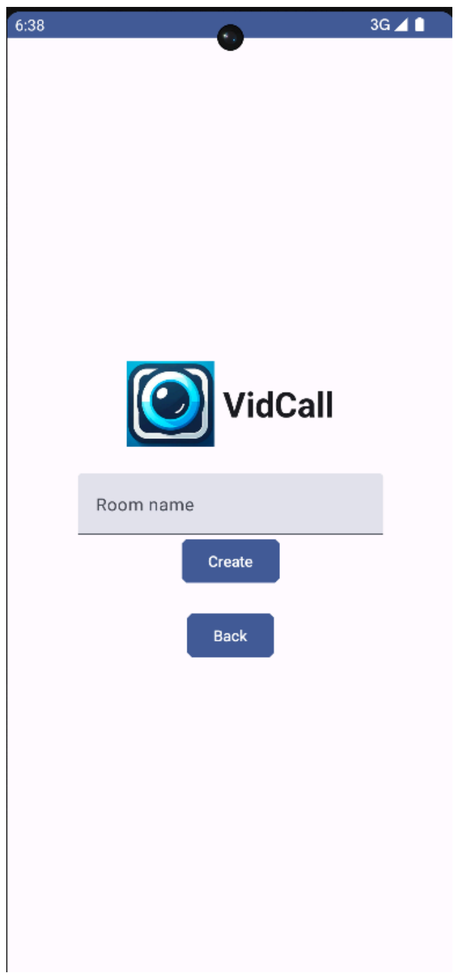


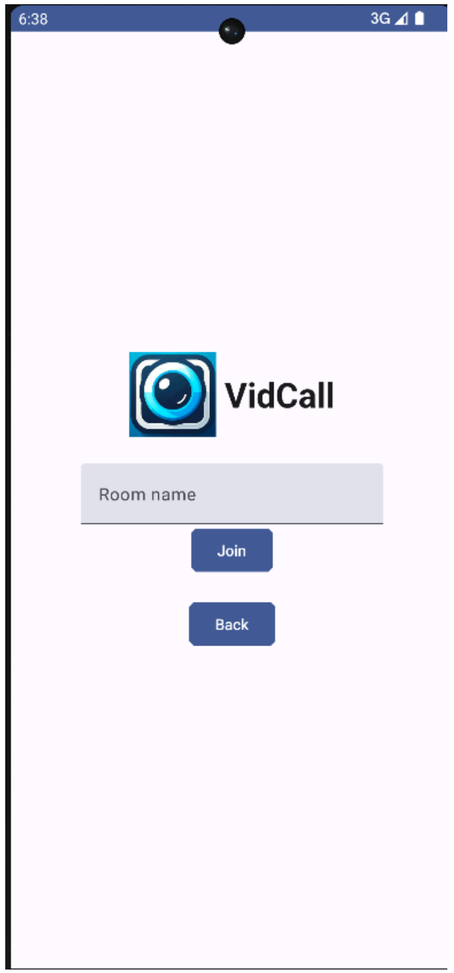
MainActivity

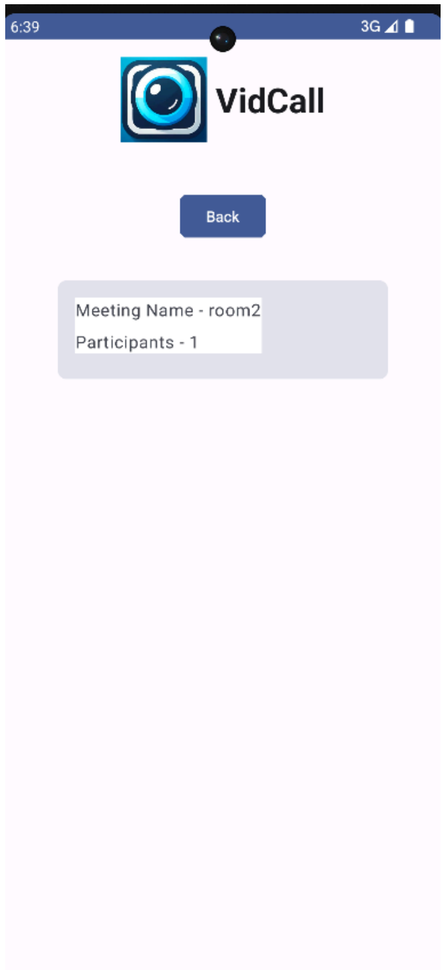
01 The User can create a new room using Jitsi meet SDK, i.e enter a room name and create a fresh video meet over the server. Other users can join the meet by using the same room name

02 The User can join an already existing meet created in (1) or over the Jitsi website by entering the room name

03 The User can check the details of his past meetings such as meeting name, the number of participants.





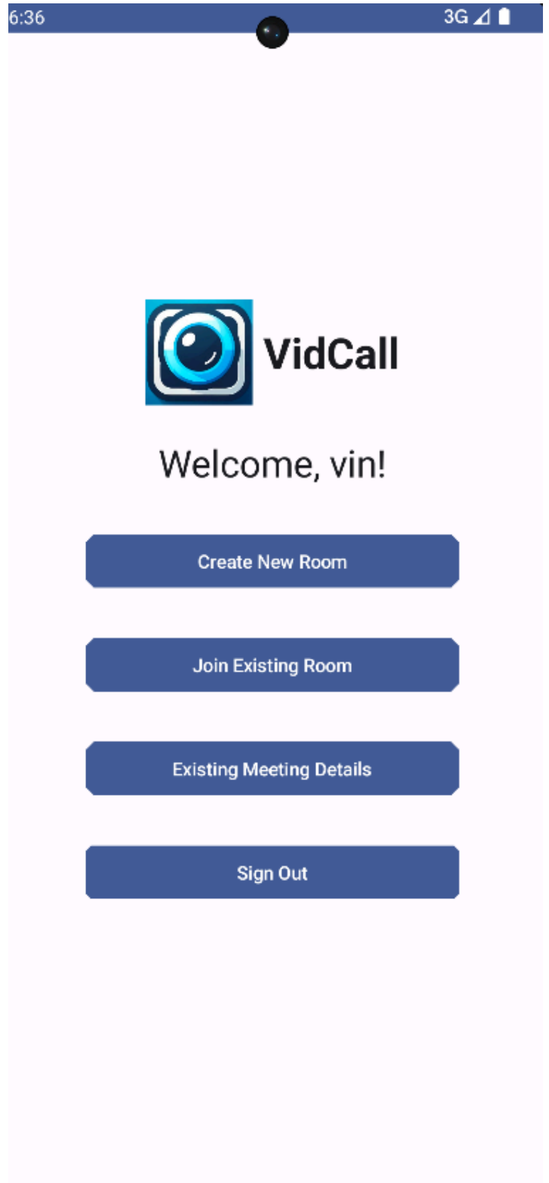


Accessibility

01 VidCall is committed to ensuring that our video conferencing tool is accessible to all users, including those with disabilities. This commitment is reflected in our dedicated accessibility features designed to make the app more user-friendly and inclusive.

02 All interactive UI elements, such as buttons and links, are equipped with clear content descriptions. These descriptions are used by screen readers to help visually impaired users understand what each element does.

03 The app utilizes the Android Accessibility API to integrate these features seamlessly. This includes using the contentDescription property for screen readers and adhering to the Material Design guidelines for high contrast and legible typography.

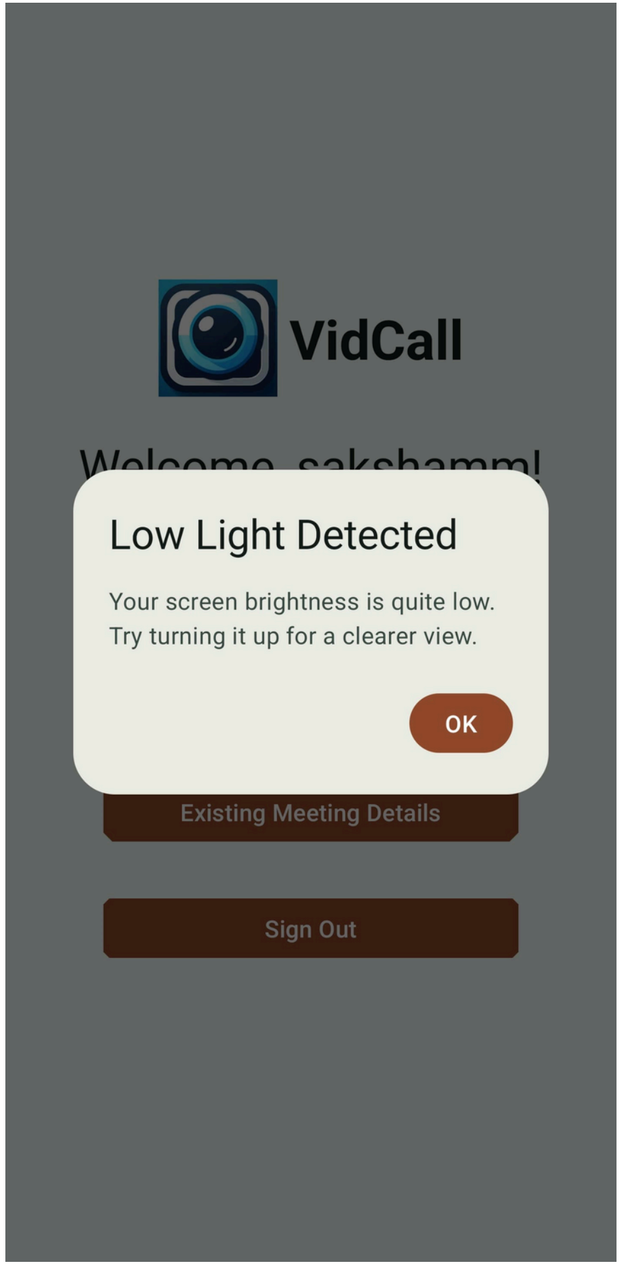


Sensors

01 Functionality: The application uses the device's light sensor to monitor ambient light levels. If the light level falls below a predetermined threshold (e.g., 10 lx), a warning dialog is displayed to the user.

02 Low Light Detection: Continuously monitors the ambient light. If the ambient light is too low, it triggers a warning dialog suggesting the user move to a better-lit area.

03 Warning Dialog: A modal dialog alerts the user with the message: "Your screen brightness is quite low, which might make it hard to see what's on the screen. Try turning it up for a clearer view." This ensures that video calls and other screen-related activities are conducted under optimal lighting conditions for better visibility and user experience.



Thank You