SWaP(Social Watch Party)

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Executive Summary

The android app is designed to connect people online to stream online videos from platforms like Netflix, YouTube, and more, together with connected friends. The main purpose of the project is that one party will broadcast and the rest of the party within the app can watch that broadcast in real-time. The broadcast allows users to go live and share streaming content with friends.

Background

Users must sign up for an account using their email. All the account information is stored in the Firebase. Users can update their account information such as user photo, email, password in the profile fragment. The app allows the users to search and play YouTube videos within the app. It uses YouTube APIs to do that. The app also provides broadcasting features where users can go live, and others watch the stream. For this, the app uses Ant Media Server to access and perform cloud services from Linode.

Conceptual Design Phase
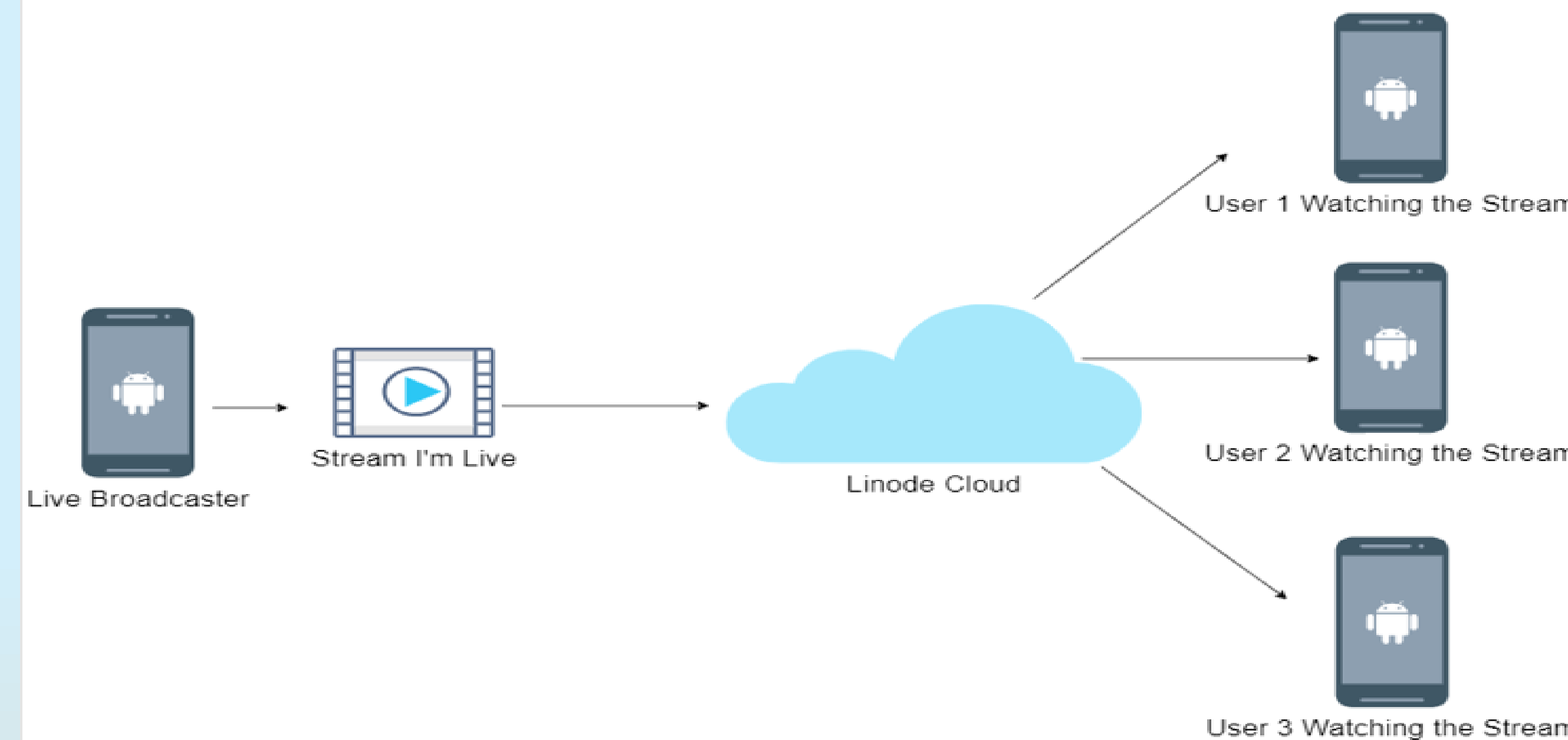
Detailed Design Phase

USER-END LAYER

It is displayed to the user in the app, and they can view and interact with others. Users will be able to provide the necessary inputs and interact with the user interface in this layer, which will be redirected to the back-end layers and database to provide the necessary output to the screen.

BACK-END LAYER

It is where all the processes take place but are not displayed to the user. This layer gets inputs from the user-end layer and processes the data and requests from the database if necessary, and then displays the output to the user-end layer.

DATABASE LAYER

The database layer stores the user information and returns it back to the user through the back-end layer when requested. This layer is also responsible for keeping a record of and returning it back to the back-end layer such as; groups of friends, their chats either private or a group chat, list of videos.

Prototype & Test
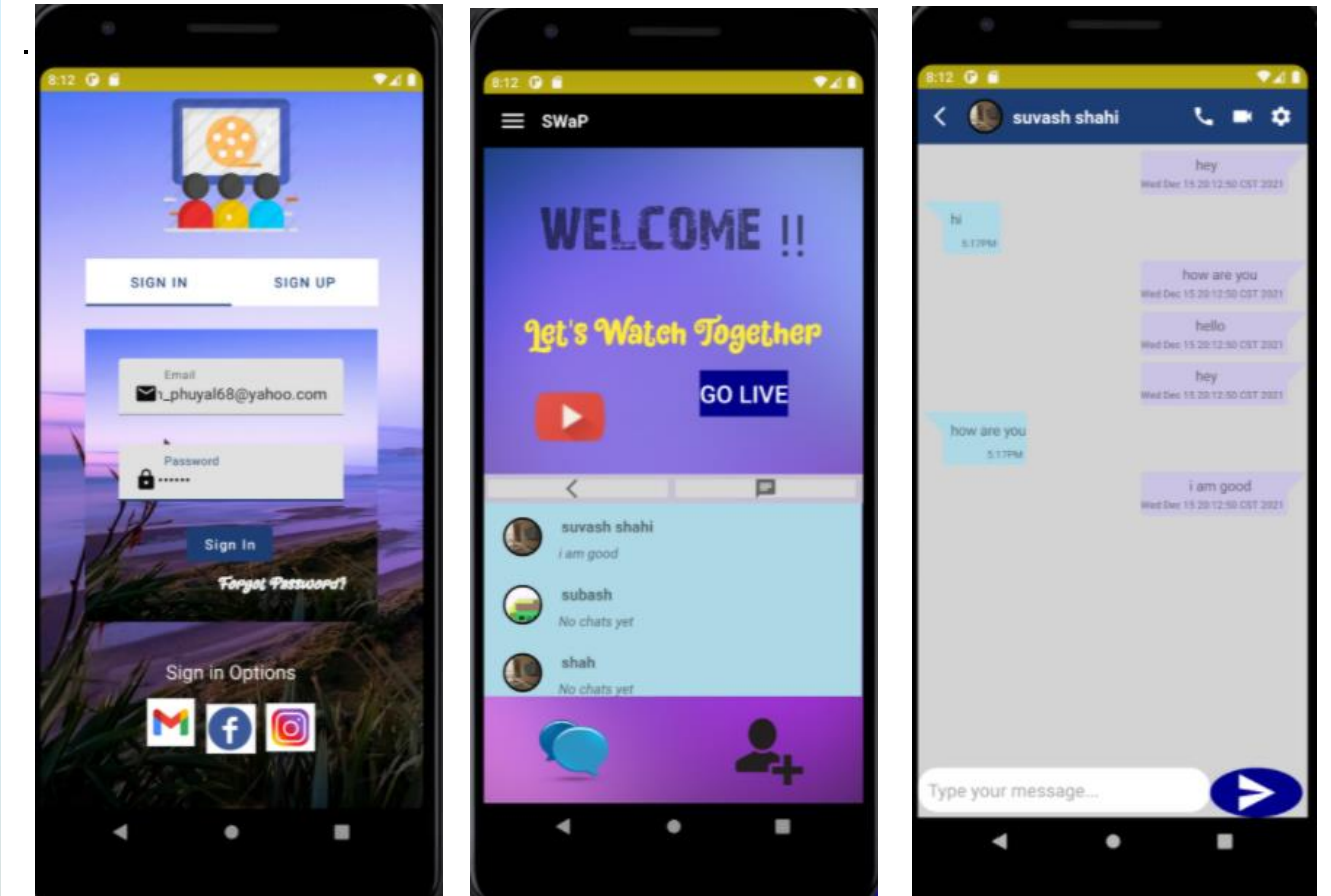
Conclusions

Social Watch Party (SWaP) is a completely software-based project which can be used on an android device. It is created with JAVA language in the Android studio platform. It is one of the difficult projects that each of our team members had to work on. There was a tough time during the project where we thought we will not be able to do it. However, Professor Chris Conly was helpful and motivated us throughout the project. Despite being a class project, we learned a lot about working with teams, collaboration, and communication. Thus, our team would like to thank Professor Conly for providing us with this opportunity and knowledge.

References

https://github.com/ant-media/Ant-Media-Server/wiki/WebRTC-Android-SDK-Documentation?fbclid=IwAR1HvrzKmv_AAytfvOFEnbC0A8PFbWQ0R-5lpS21oThJPiWSLEVroVP7rPE