EUPHONY (DISCORD-STYLE COMMUNICATIONS APP)

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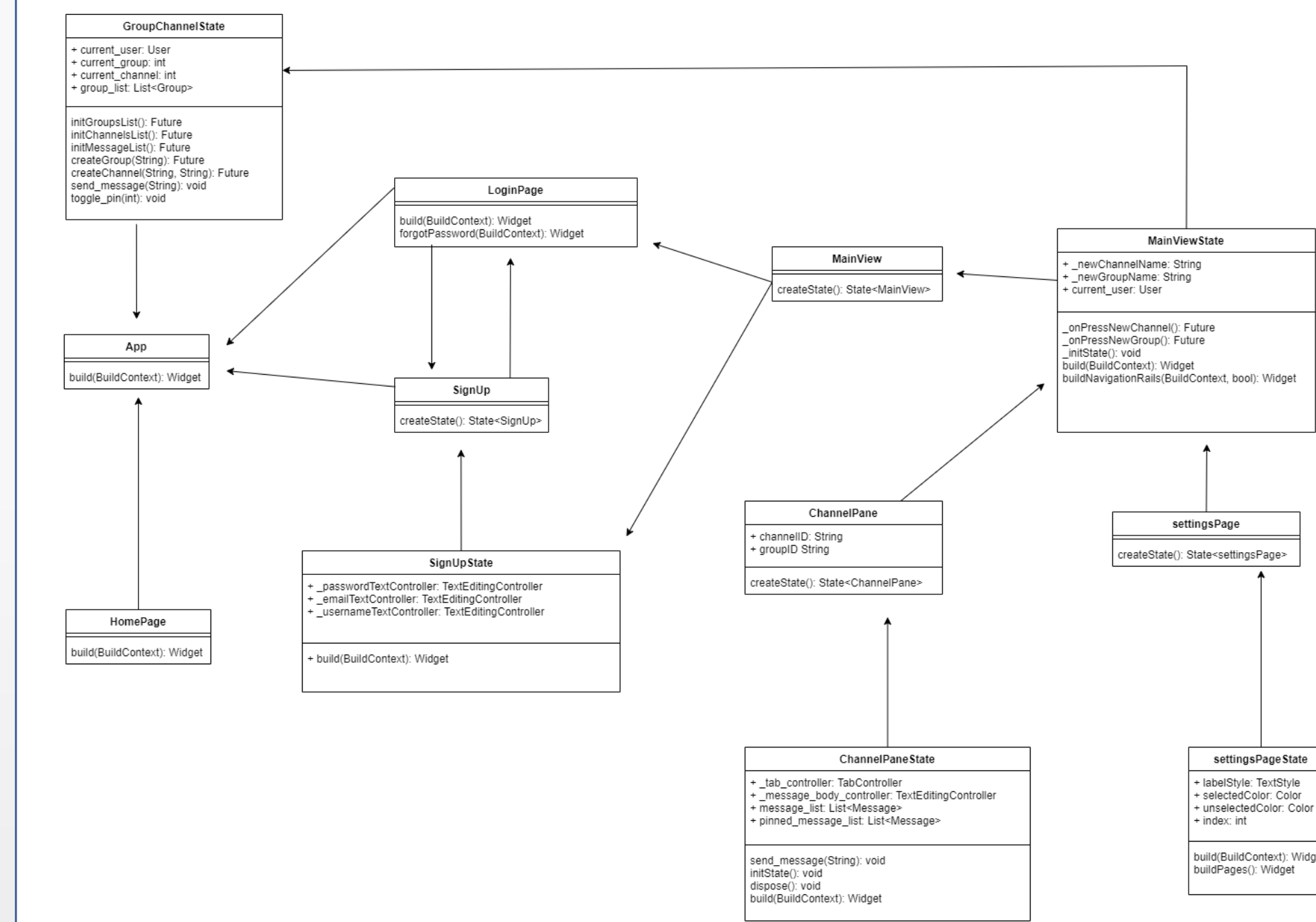Advisor: Sean Carroll

PROJECT DESCRIPTION

The quality of communication between teachers and students can vary widely depending on the group of people. This communication, as it is now, becomes worse when students miss class(es), professors cancel class(es), or when events are not written down. Communication, as it is now, has two or three methodologies from student to teacher: Email, Office Hours, or asking questions during class. Meanwhile, the only way students are communicating and helping each other is if they go specifically and contact one of the other students. A study in a Saudi Arabian university also found that 39% of students felt that poor communication was common between students and professors [1]. Euphony intends on rectifying that by having an open source of communication between those involved in the class.

Euphony is a free communication platform that allows users to easily connect and communicate with each other through voice and text. Euphony is designed to be user-friendly and easy to navigate, making it perfect for users of all ages and skill levels. Providing them with the ability to create and manage their own groups, as well as file sharing and user moderation tools. These moderation tools feature user permissions and customizable groups. Euphony is easy to use and offers a seamless experience across all devices including web, IOS, and Android. With Euphony, users can create and join groups, collaborate, and engage with other users in real-time, screen share, schedule events, pin messages, send private messages and send group messages. Our focus is to provide a quality and intuitive platform for our users.

APPLICATION DESIGN

- **Login/Signup**
  On startup, the user will see a landing page with a button to log in. If the user does not have an account with us, they will be given the option to create one.
- **Main Page**
  The main page of the system displays three columns (or a single column with a collapsible navigation pane, depending on the width of the available screen). The first column lists available 'groups', the second lists 'channels' within those groups, and the third and largest column displays messages, event data, and pinned messages.
- **Settings Page**

DATABASE DESIGN

- **Firebase**
  - Google Firebase is a hierarchical design database that offers data plans for customers based on how much data is used monthly utilizing the database. This was especially useful when designing the app to utilize this service

Figure 02: Final web application UI

CONCLUSION

While we were successful in creating a usable communications application, the product falls below our original design & wishes. Due to unexpected setbacks, struggles, and time requirements, we were unable to implement features that were originally intended such as a Friend and Block list for users, voice chatting and screen sharing. Despite these challenges though, we were able to persevere, and finish with this product that we are proud of, all things considered

FUTURE DEVELOPMENT

User Featues:
- Friend List
- Block List
- Voice Chat
- Screen Sharing

Admin Features:
- User moderation
- Channel Moderation