

INTR team for Interactive Table

Student: Cristina Alonso

Product Owner: Hadi Alhaffar, Florida International University

Instructor: Dr. Masoud Sadjadi, Florida International University

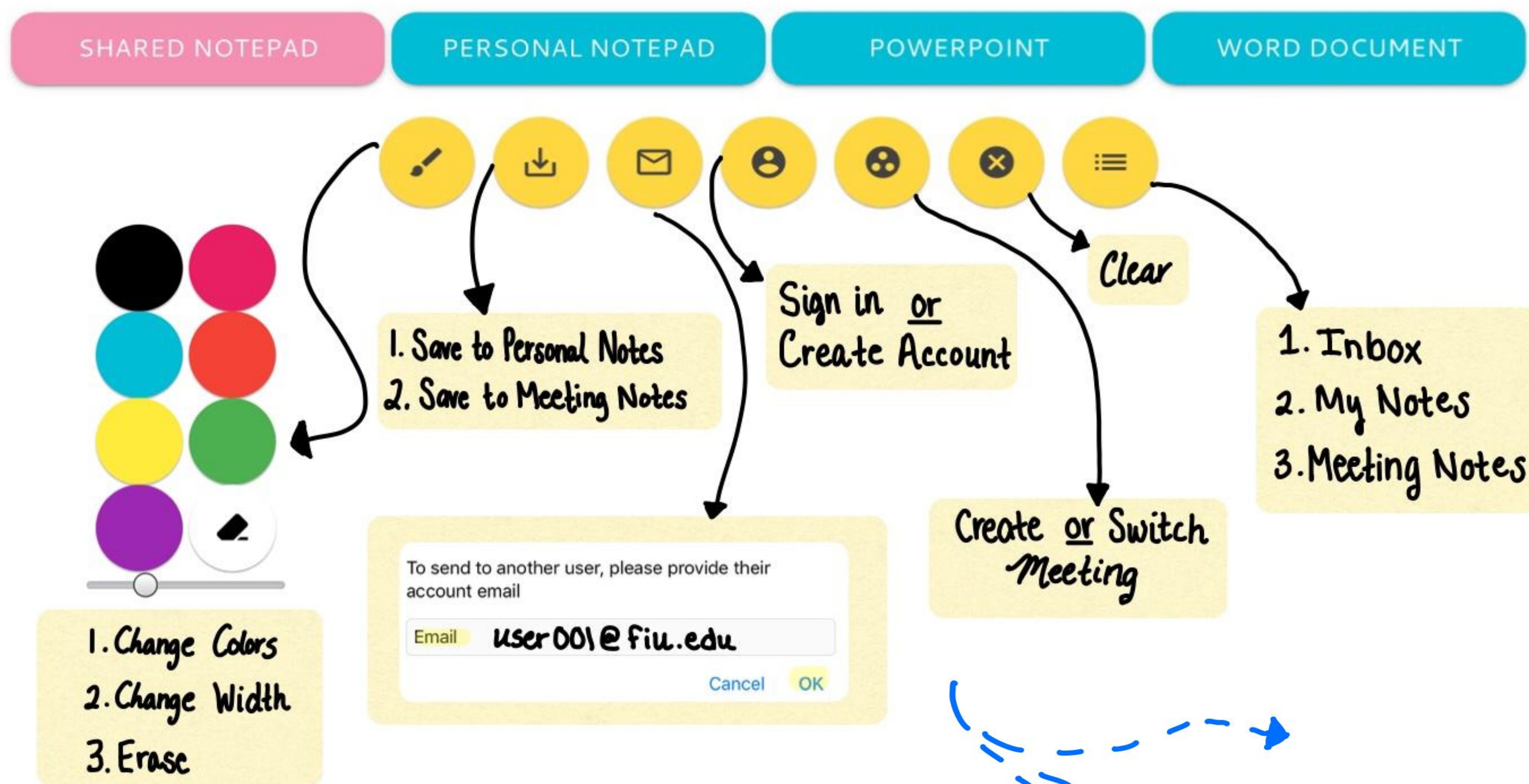
PROBLEM

Cumbersome and complex tech can make syncing over meetings and classrooms difficult. Needing to bring laptops and writing gear can be distracting and can disengage team members from the meeting.

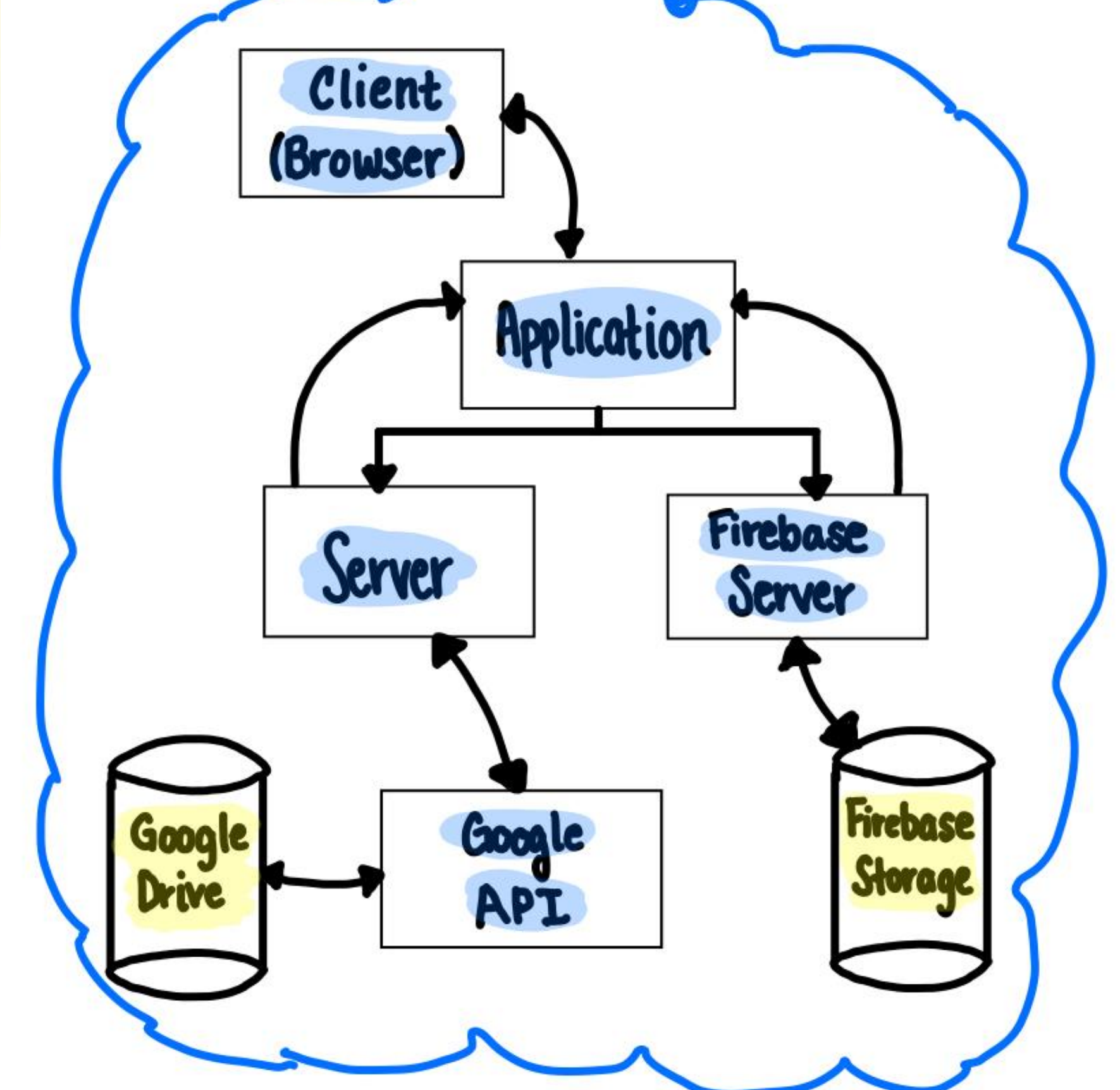
SOLUTION

The Interactive Meeting Space – All the necessary tech for effective and collaborative meetings right at your fingertips, any time, anywhere. Designed to be implemented within classrooms, where each desk can have a screen that hooks into the teacher's. Synchronous white board, note taking, image sharing, document sharing and more!

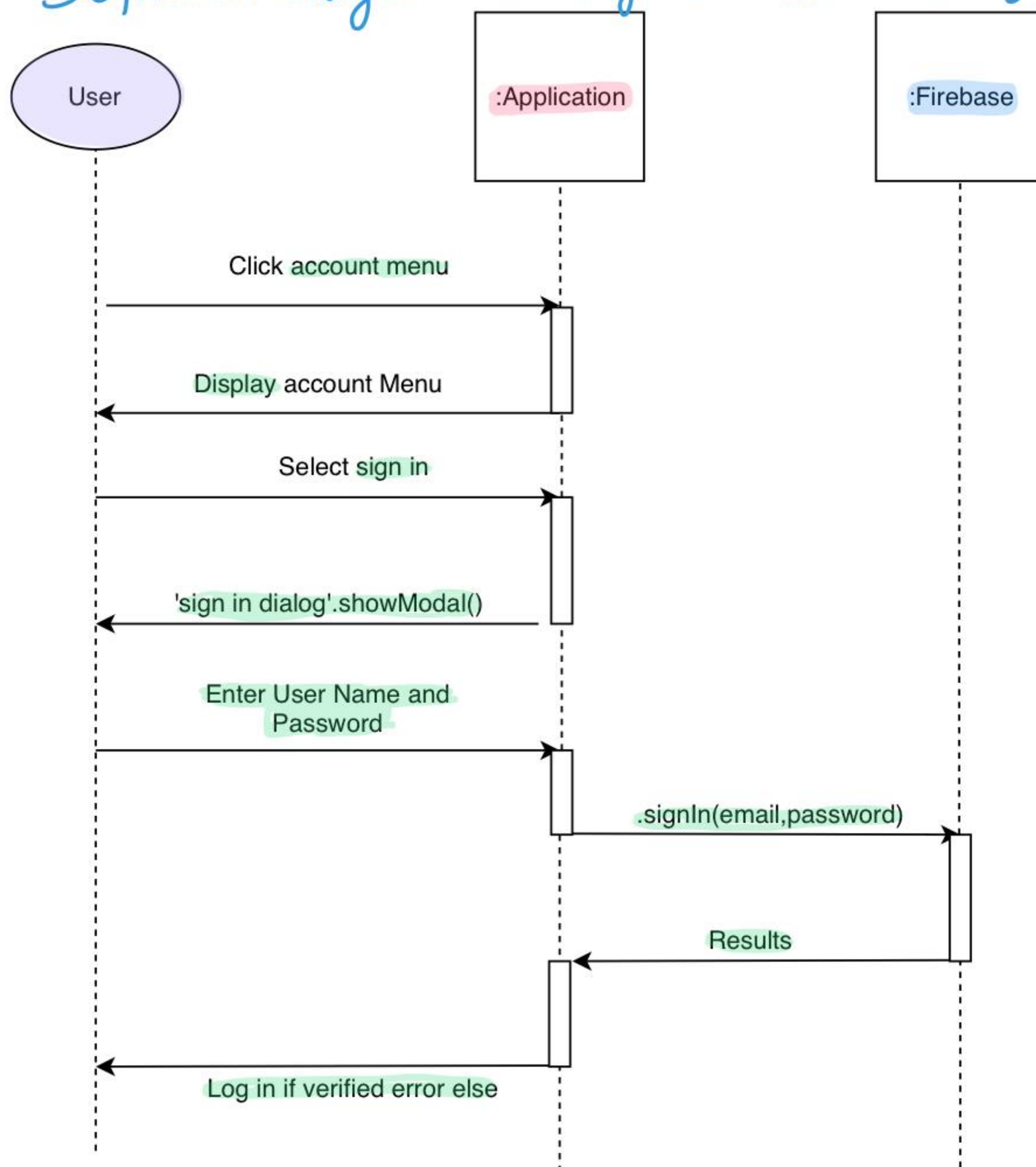
Interactive Meeting Space



System Diagram



Sequence Diagram for Sign-in User Story



Implementation

We mainly used these different technologies to accomplish our project:

- HTML/JavaScript/Material Design lite/CSS for user interface/styling/canvas
- Firebase database for account sign in/up, inbox and personal storage
- Google Drive Rest v3 API for saving meetings and meeting wide images
- Socket.io for server communication and having all users share a canvas

My contribution focused mainly on...

HTML/JavaScript/Material Design lite/CSS

- Initially constructed the skeleton for the user interface (Created shared notepad page, personal notepad page, powerpoint page, and word doc page including tab links to all of them.)
- Created and styled all tabs, fonts, buttons, special effects, and menus
- Created the personal notepad canvas functionality for drawing, changing pen color, changing pen width, erasing, and clearing
- Created interactive pen color and width palette

Firebase

- Linked Firebase project to our application
- Added authentication methods with firebase for users to be able to create an account, sign in, and sign out
- Created documents within firebase for users to have an email, inbox list, and saved notes list associated with their account.
- Added ability to download and upload files into Firebase storage
- Added methods to save files to account and send them to other user accounts
- Added a method to view all user saved files and upload them to the canvas
- Added a method to view all files that have been sent to the user in their inbox and upload them to the canvas

Socket.io

- Utilized socket.io to allow for users to utilize the shared notepad canvas
- When any user draws or erases on the shared canvas all other users will see this instantly
- When any user changes the color or pen width of their drawing pen all users will see this change
- When a user selects clear all in the shared canvas, all users will see the shared canvas clear out

Acknowledgement

I would like to thank Robert Panoff and Aaron Feng for assistance, cooperation and mentorship that I received throughout this process