

ARvatar

Group 6 DIP

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INSPIRATION



- In conventional messaging apps (e.g., Whatsapp, Telegram) use text and 2D visuals in an attempt to express themselves
- This inspired us to explore new mediums for expression with the use of 3D avatars and augmented reality (AR)

OBJECTIVE



Base Application

- Messaging application based off WhatsApp

Special Feature

- Interactive Avatars
- Avatar customisation
- AR integration

PRODUCTIVITY TOOLS

Aravestia Merge pull request #547 from LiTianchu/aloysius ... 1f2de0f 16 hours ago 1,349 commits

File	Commit Message	Time
DIPAvatarChat	bugfix	16 hours ago
reports/individual	tianchu's indie report	18 hours ago
.gitignore	update firebase sdk	last month
LICENSE	Initial commit	3 months ago
README.md	Update README.md	
README.md		

Project Associated with NTU IEM

This is a unique Unity 3D chat app project integrated with AR and 3D

Trello and Github

DIP ⚡ Workspace visible Board ...

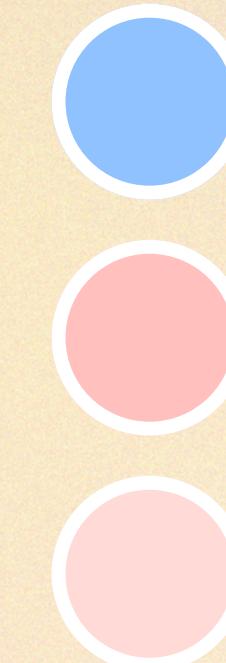
Power-Ups Automation Filters TL NY AW F M +4 Share ...

Category	Card Details
To do	+ Add a card
Doing	+ Add a card
Done	3D: Animation list (Plan only) 6/12 (F YK)
Bugs	+ Add a card
Bugs fixed	Bug#3 Avatar: Cannot save avatar (2)
Potential Improvements	+ Add a card
Improvements completed	Improve#7: Avatar default faces away from user in ARChat (1)
	Improve#6: Avatar view angles could be better (ChatUI Avatars to face each other, Customisation page to look straight at the character instead of from below) (2)
	Improve#5: Chat input bar should change to the pink theme (1)
	Create Your Avatar! + Add a card

THEME

Colour

Serenity & Rose Quartz:



Font

Comfortaa:

Minimalist, sans-serif font

Comfortaa

Light • Regular • Medium • SemiBold • Bold

Latin • Cyrillic • Ελληνικά

Кириллица • Кирилица • Τυριλιζα

THEME



Logo

- Merge of chat bubble icon with minimalist animal ears
- Symbolise the Avatar functionality in our application

Theme/Concept

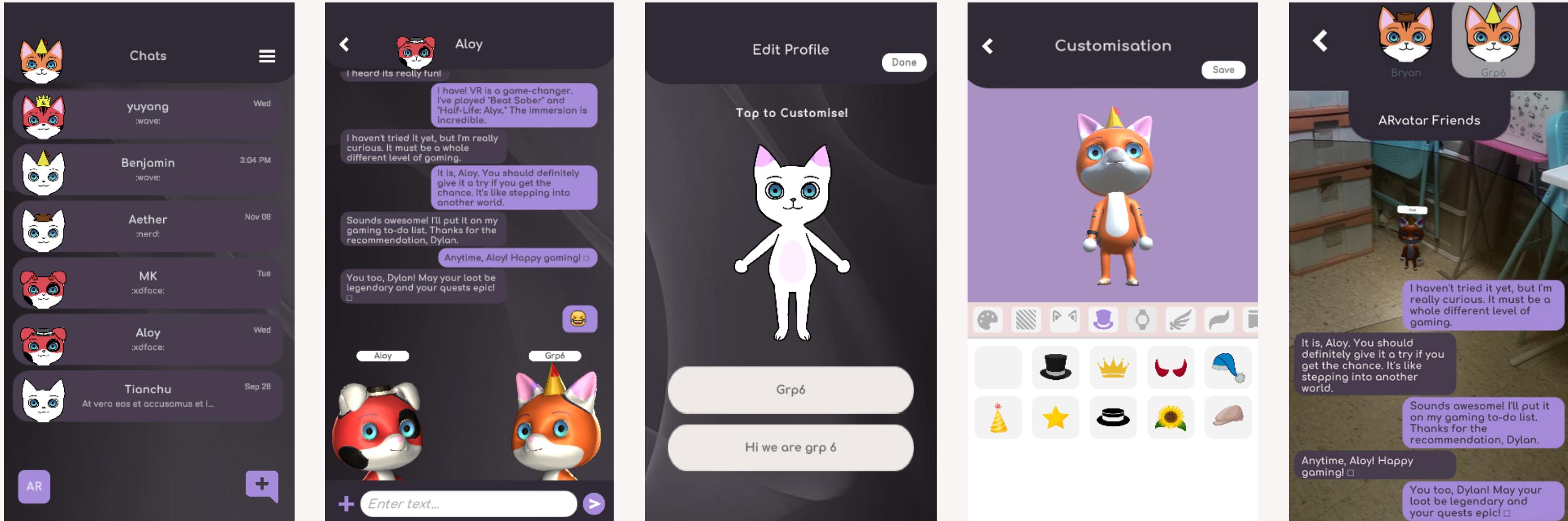
- Avatars as cute cartoon animals
- Provides more options for customisation and self-expression

UI DAY MODE

The screenshots illustrate the ARvatar Chat application's user interface across five main screens:

- Welcome Screen:** Displays a large, stylized cat head icon with various icons (guitar, rocket, pizza, camera) floating around it. The text "Welcome to ARvatar Chat" is centered, along with a link to "Read our Privacy Policy." A prominent "Agree & Continue" button is at the bottom.
- Registration Screen:** Titled "Register your email". It shows fields for "Singapore", "your email", and "your password". A note states: "ARvatar will need to verify your account. Carrier charges may apply." A "Done" button is in the top right, and a "Next" button is at the bottom.
- Edit Profile Screen:** Titled "Edit Profile". It features a "Tap to Customise!" button above a white cat character. Below are fields for "Enter Your Name" and "Whats". A "Done" button is in the top right.
- Customisation Screen:** Shows a detailed orange and white cat ARvatar standing against a brown background. Below the ARvatar are several rows of icons for customizing appearance, including hats, crowns, and accessories. A "Save" button is in the top right.
- Chats Screen:** Titled "Chats". It lists messages from other users: "yuyang :wave: Wed", "Benjamin :wave: 3:04 PM", "Aether :nerd: Nov 08", "MK :xface: Tue", "Aloy :xface: Wed", and "Tianchu At vero eos et accusamus et i... Sep 28". A "Chats" button is in the top left, and a "+" button is in the bottom right.
- Message Detail Screen:** Shows a conversation with "Aloy". The messages are:
 - "Me too! It's a great time to be a gamer. By the way, have you ever tried virtual reality gaming?"
 - "I heard it's really fun!"
 - "I haven't tried it yet, but I'm really curious. It must be a whole different level of gaming."
 - "It is, Aloy. You should definitely give it a try if you get the chance. It's like stepping into another world."
 - "Sounds awesome! I'll put it on my gaming to-do list. Thanks for the recommendation, Dylan."
 - "Anytime, Aloy! Happy gaming! ☺"A "Grp6" button is in the top right, and a "Enter text..." input field is at the bottom.

UI NIGHT MODE



FUNCTIONS OF ARvatar

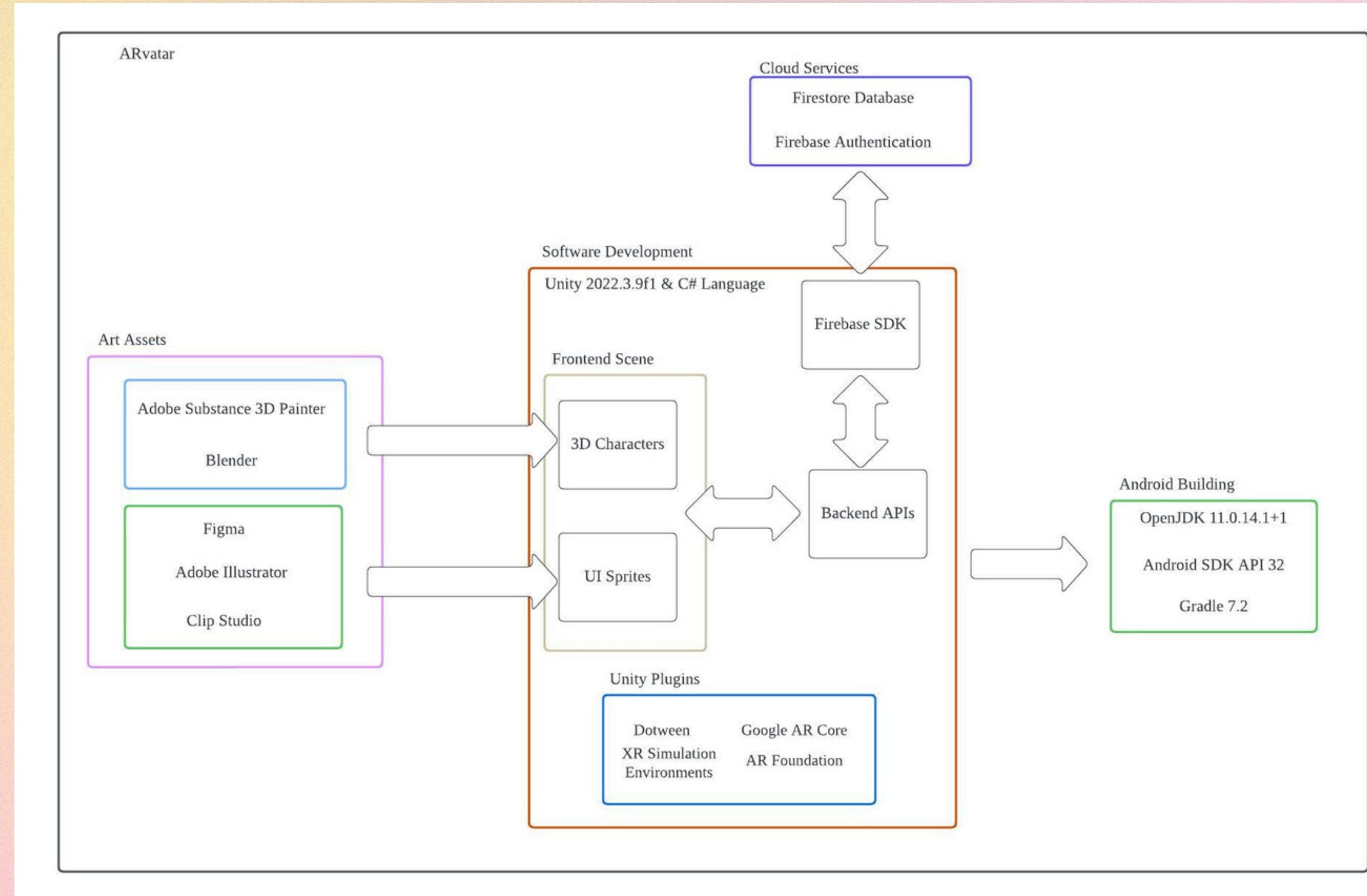
Base Chat Application

- Authentication
- Messaging with friends
- Create new chat
- Friend request management
- User profile editing
- Dark mode/Light mode
- UI Transitions
- Input validations

Special Feature

- Unique customizable 3D Avatars
- AR Chat Function with Avatars
- Avatar Customisation
- Avatar Animated Emotes

IMPLEMENTATIONS



Architecture Diagram



DATABASE

More in Google Cloud

(default) user dipgrp6@gmail.com

+ Start collection

- avatar
- conversation
- friendRequest
- message
- user**

+ Add document

- aaaa@gmail.com
- aether@gmail.com
- aloysiusgohkw@gmail.com
- babytehduk@gmail.com
- bbbb@gmail.com
- dipgrp6@gmail.com
- huatyi@gmail.com
- kekmonish6@gmail.com
- litianchu12345@126.com
- qiuty05@gmail.com
- saaw31002@gmail.com
- tianchu0522@gmail.com
- tianchu052@gmail.com
- tianchu12345678@gmail.com

+ Start collection

+ Add field

conversations

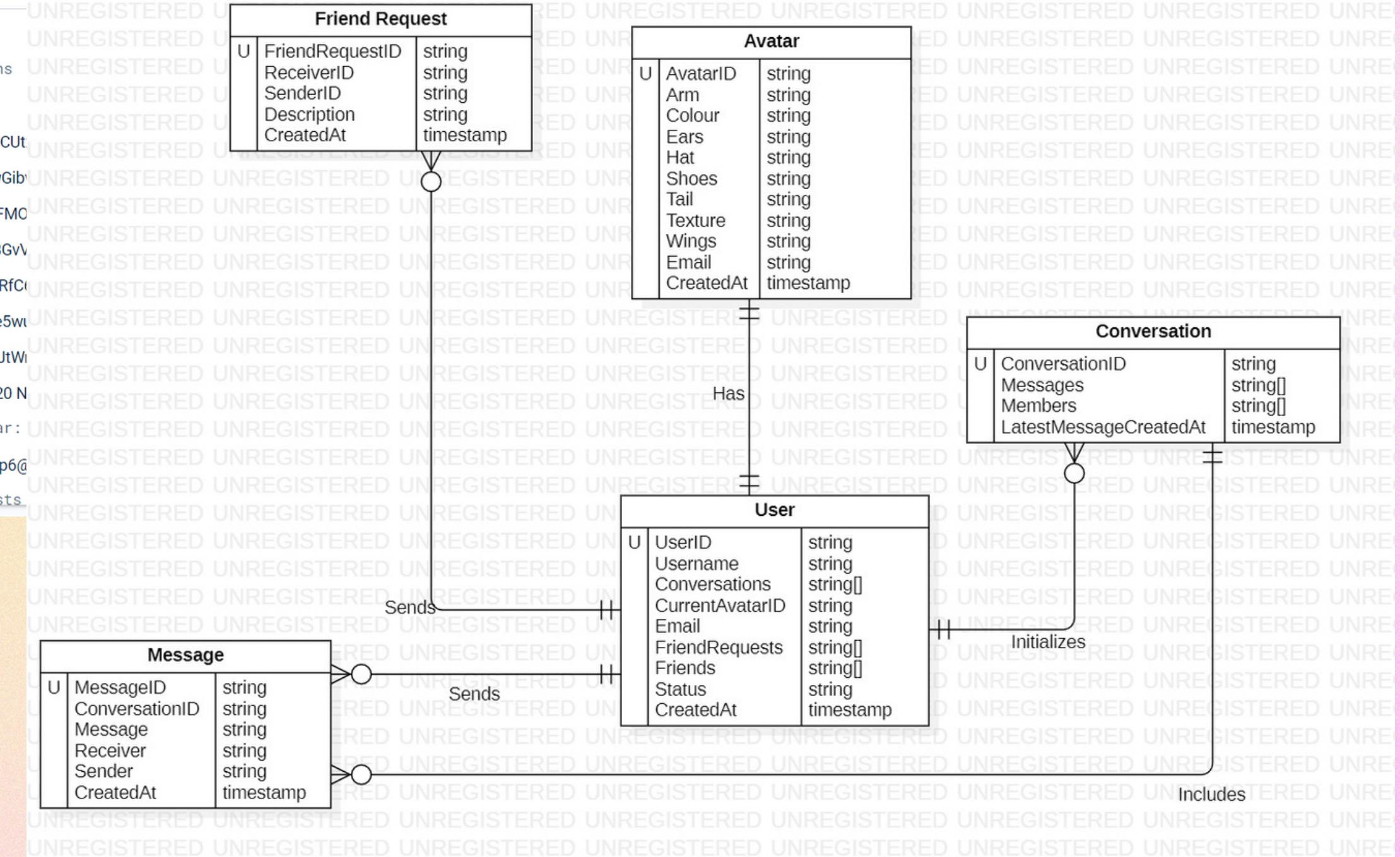
- 0 null
- 1 "b8AeCUT
- 2 "avUwGib
- 3 "wQ3FM0
- 4 "9dABGVV
- 5 "J3zTRfCo
- 6 "J1Ele5wl
- 7 "lcw2JtWi

createdAt: 20 N

currentAvatar:

email: "dipgrp6@

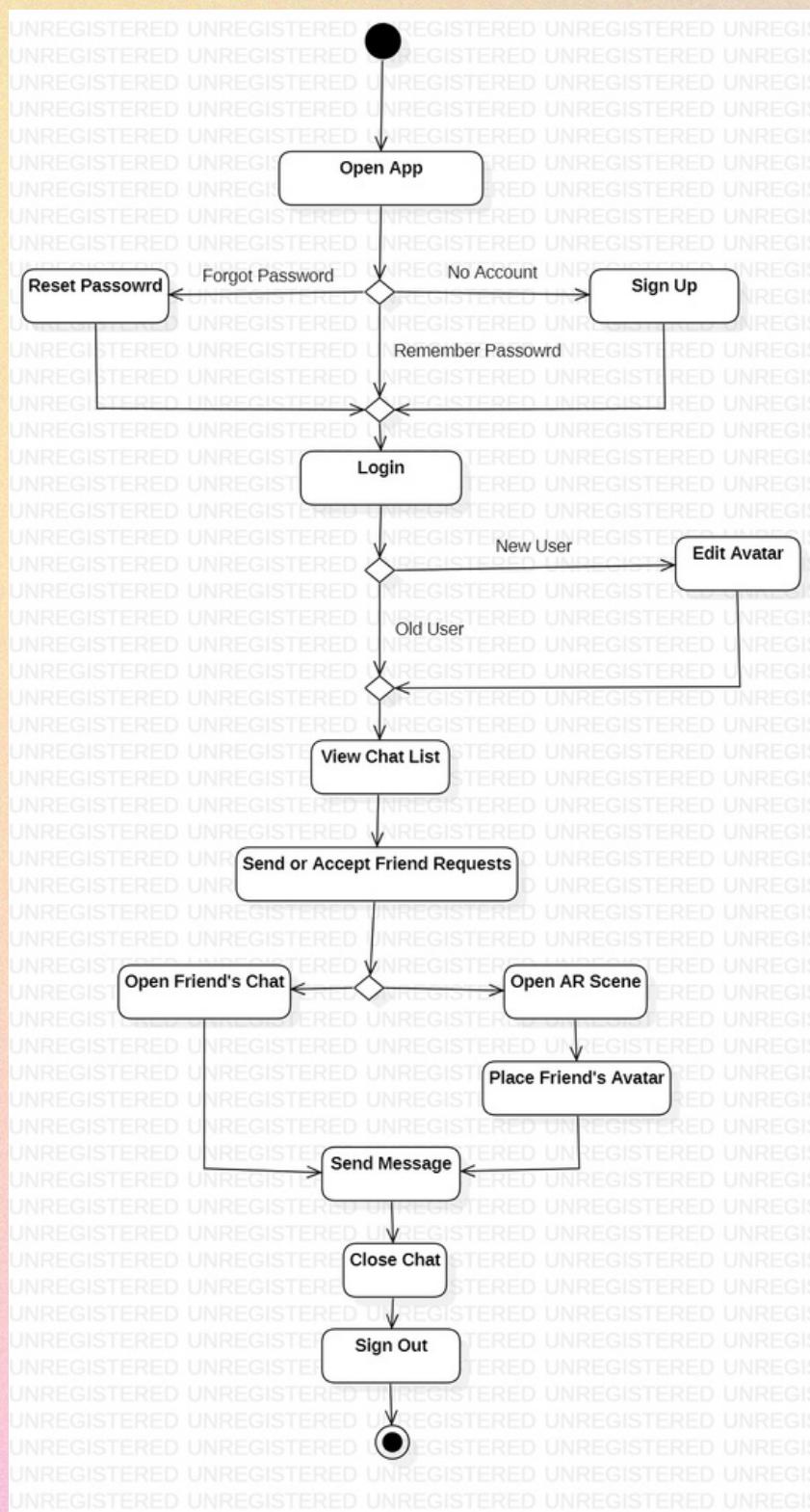
friendRequests



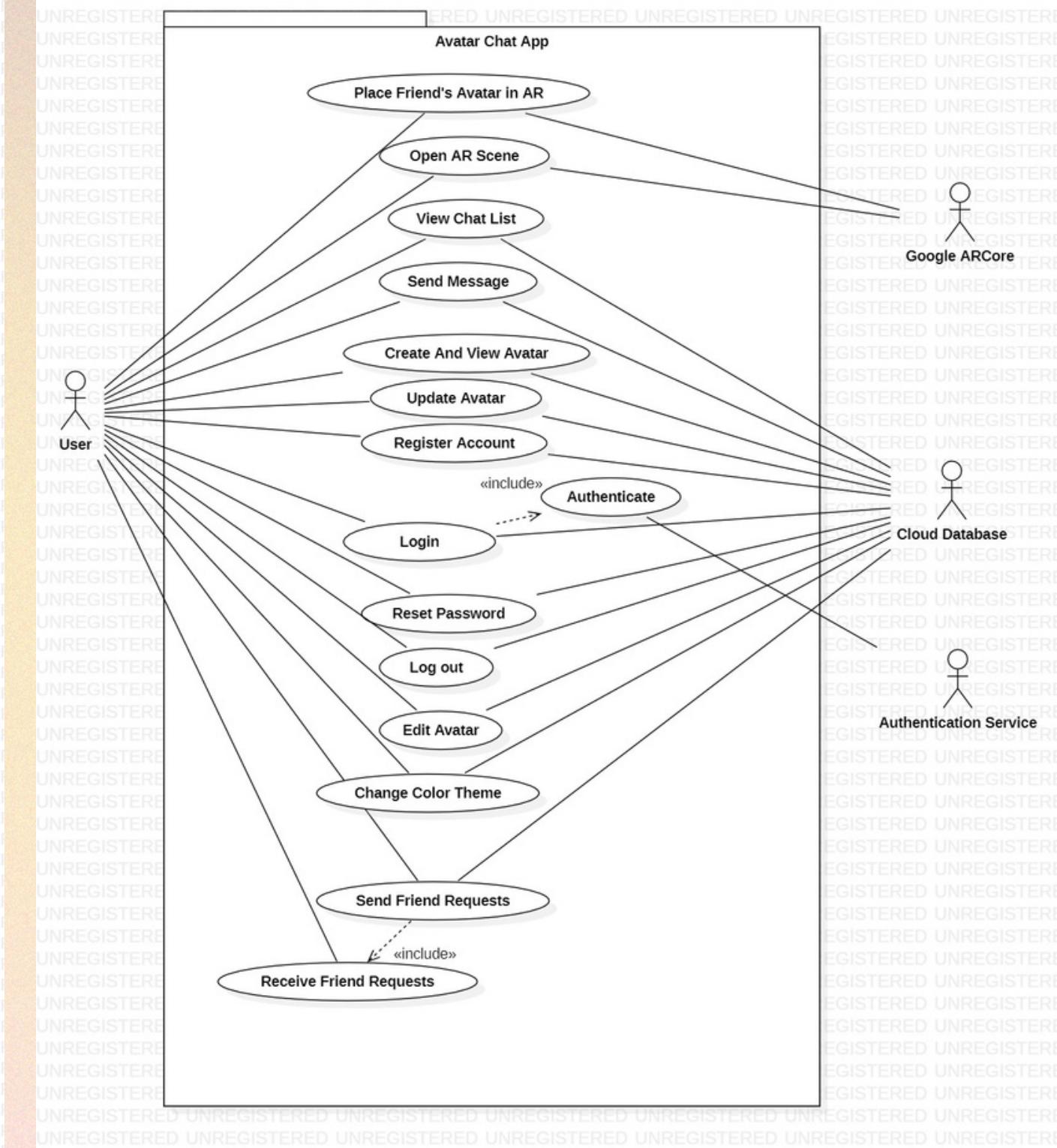
Cloud Firestore from Firebase

ER Diagram

ACTIVITY & USECASE



Activity Diagram



Usecase Diagram

DEMO

Backup :<https://youtu.be/XBwcHCsoWGo>

THANK YOU