CS 370
10/5/20
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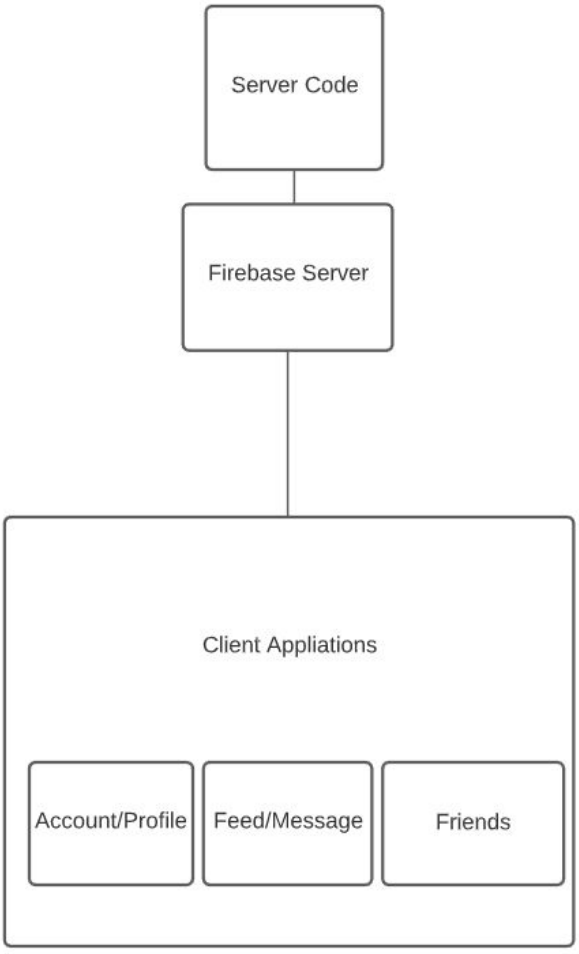
SendR

A lightweight Social Media Application. Architecture and Design

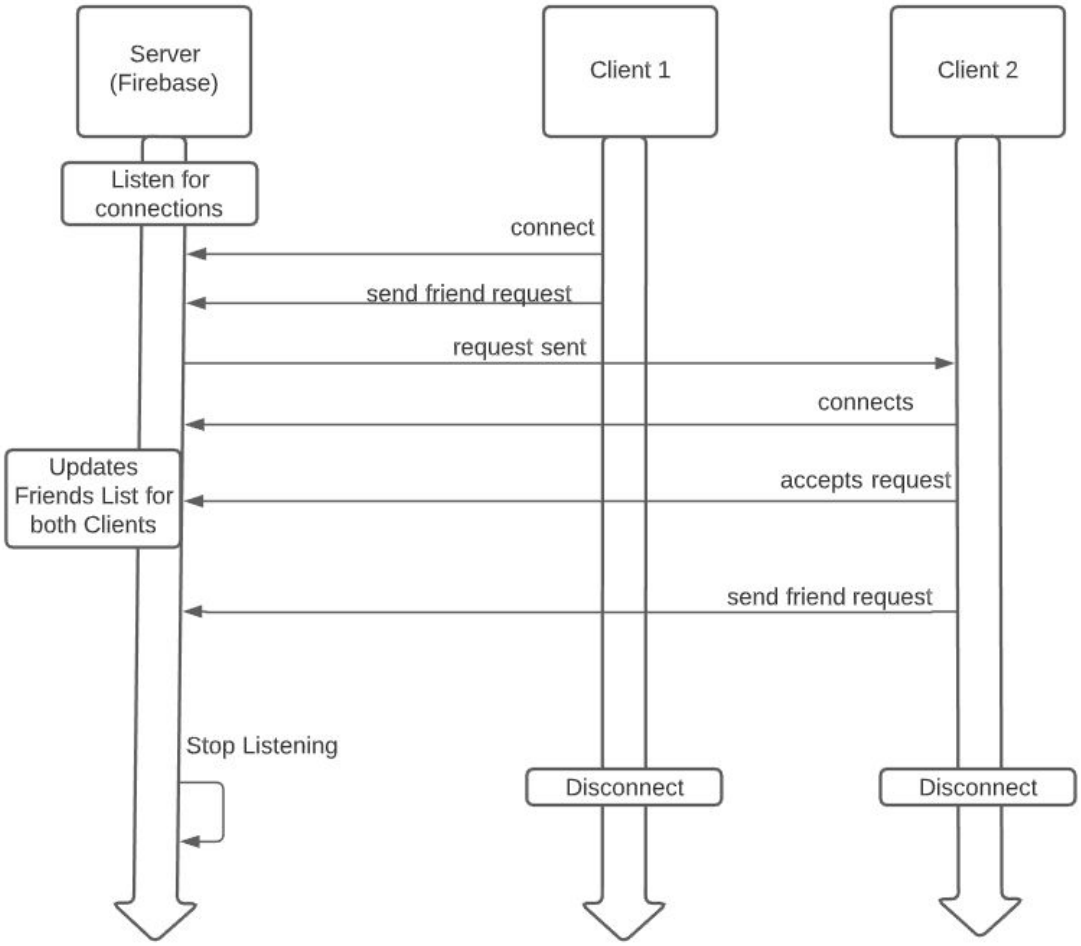
Architecture

- Advantages, such as the client can access the server's functionality from a distance, the client and server can be designed separately, and the data can be distributed among many different geographically distributed clients or servers, are some of the reasons why SendR will adopt the client-server architecture. The advantages of this architecture fit best with our use cases. Our server firebase will act as our API and Data Store.



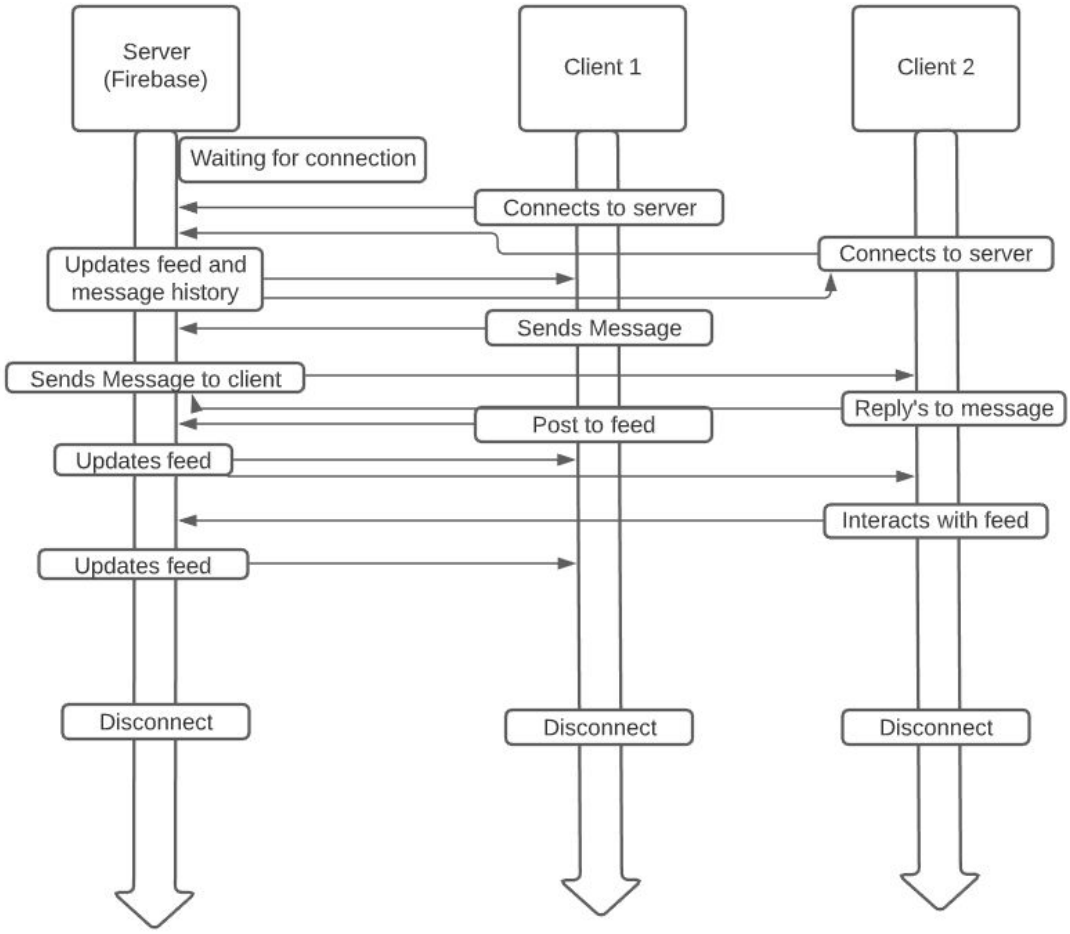
Friend System subsystem diagram

-Our friend's system uses a client server architecture that consists of one server, and two clients. The server will be sent a "friend request" from either of the clients, process it, and send the request to the other client. This collection of data is responsible for the one to one relationship amongst clients.



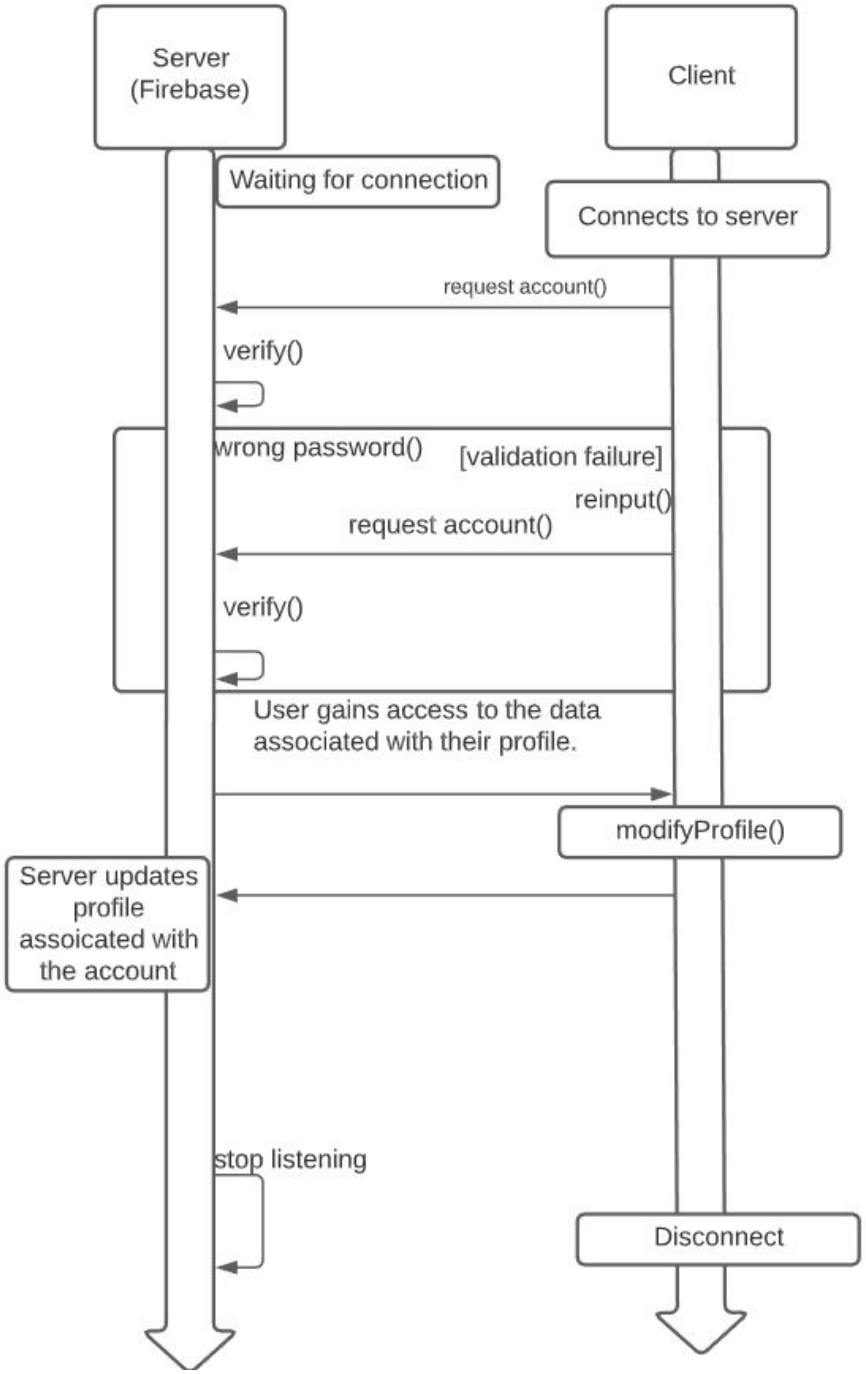
Feed and Messaging System subsystem diagram

Our messaging system uses the client server architecture with two clients. This allows the clients to communicate seamlessly with each other. The client can post to the feed which will be updated by the server for both clients.

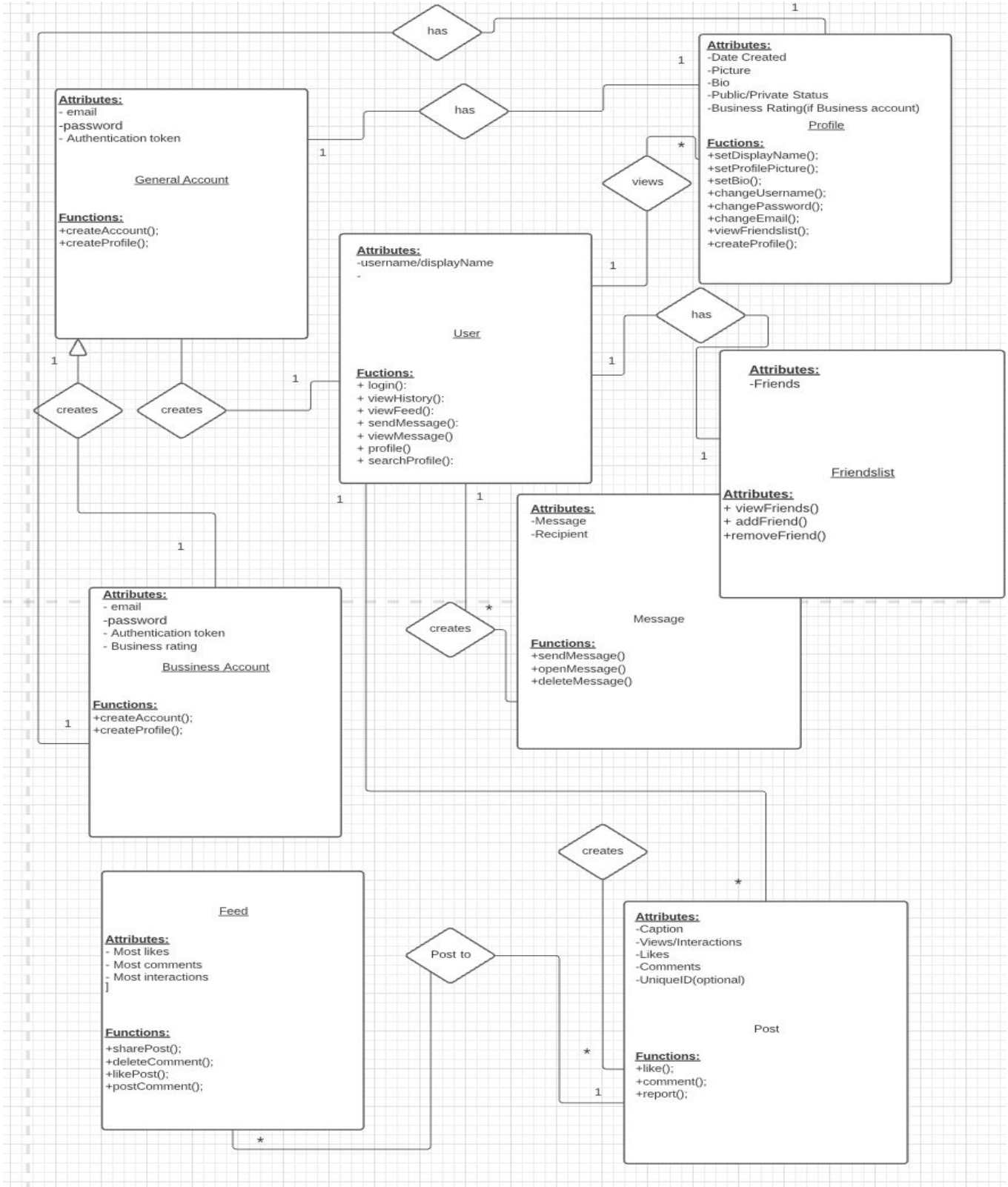


Login System subsystem diagram

Our login system uses a traditional client server architecture. This allows the client to log into his account from any device that supports the SendR mobile application.



Design


has
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Attributes:
-Date Created
-Picture
-Bio
-Public/Private Status
-Business Rating(if Business account)
Profile
Fuctions:
+setDisplayName();
+setProfilePicture();
+setBio();
+changeUsername();
+changePassword();
+changeEmail();
+viewFriendslist();
+createProfile();
has
1
Attributes:
- email
-password
- Authentication token
General Account
Functions:
+createAccount();
+createProfile();
views
*
1
Attributes:
-username/displayName
-
User
Fuctions:
+ login():
+ viewHistory():
+ viewFeed():
+ sendMessage():
+ viewMessage()
+ profile()
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has
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Attributes:
-Message
-Recipient
Message
Functions:
+sendMessage()
+openMessage()
+deleteMessage()
creates
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Attributes:
- email
-password
- Authentication token
- Business rating
Bussiness Account
Functions:
+createAccount();
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Feed
Attributes:
- Most likes
- Most comments
- Most interactions
]
Functions:
+sharePost();
+deleteComment();
+likePost();
+postComment();
Post to
*
1
Attributes:
-Caption
-Views/Interactions
-Likes
-Comments
-UniqueID(optional)
Post
Functions:
+like();
+comment();
+report();
*

Associations and Multiplicity diagram