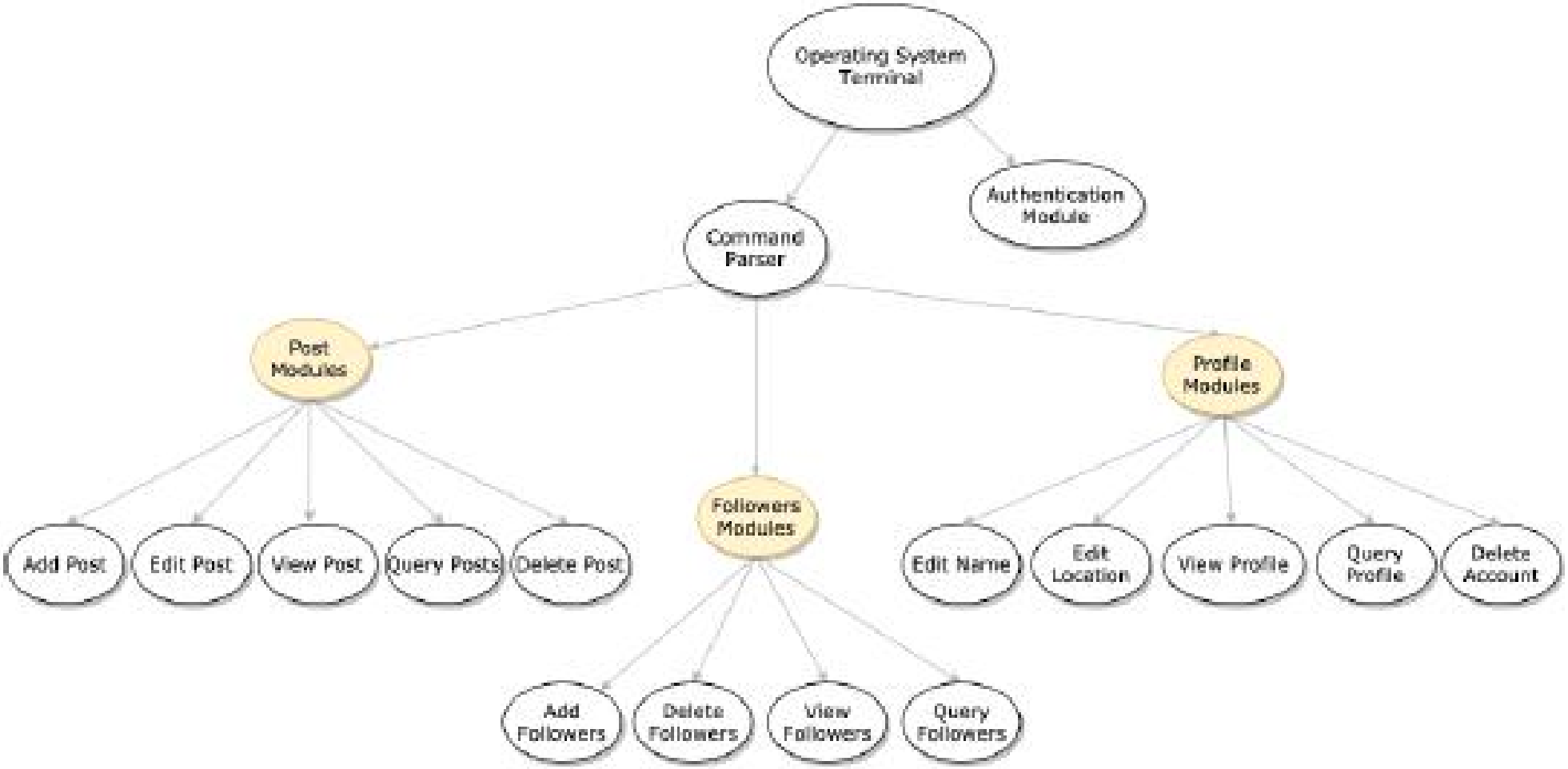
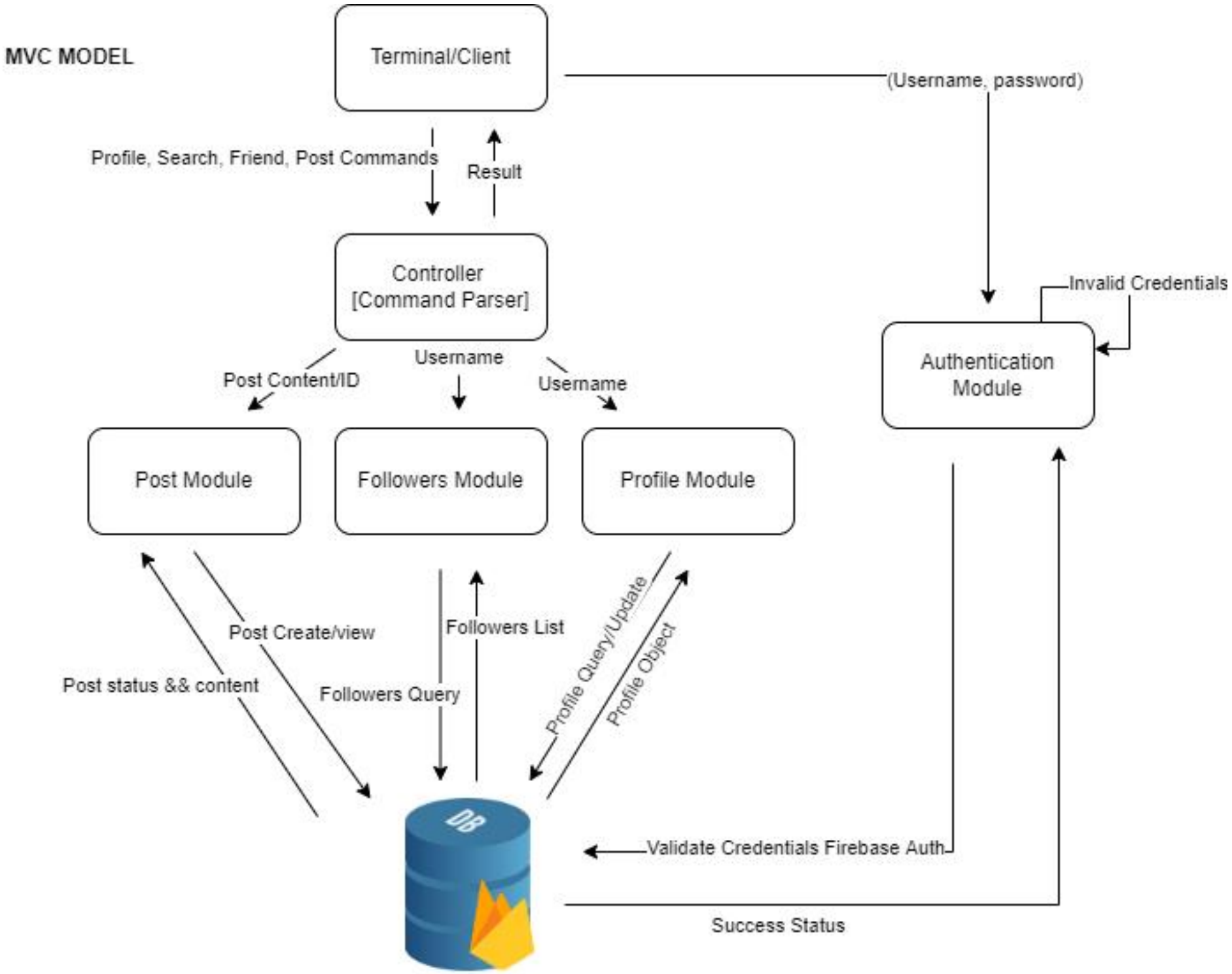
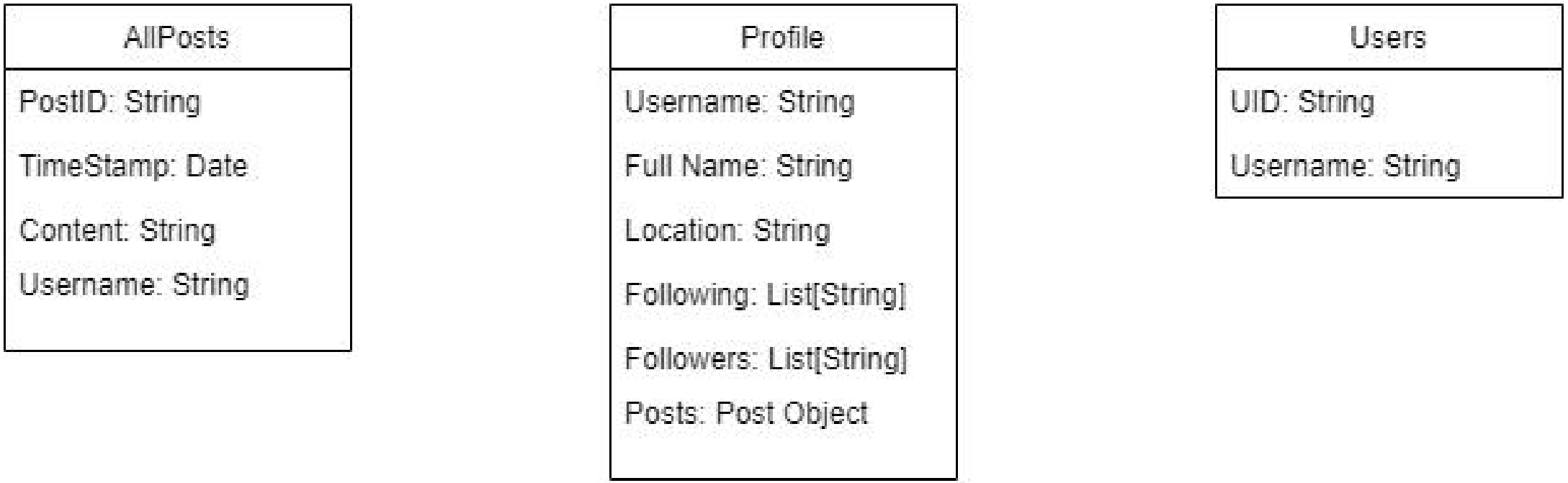


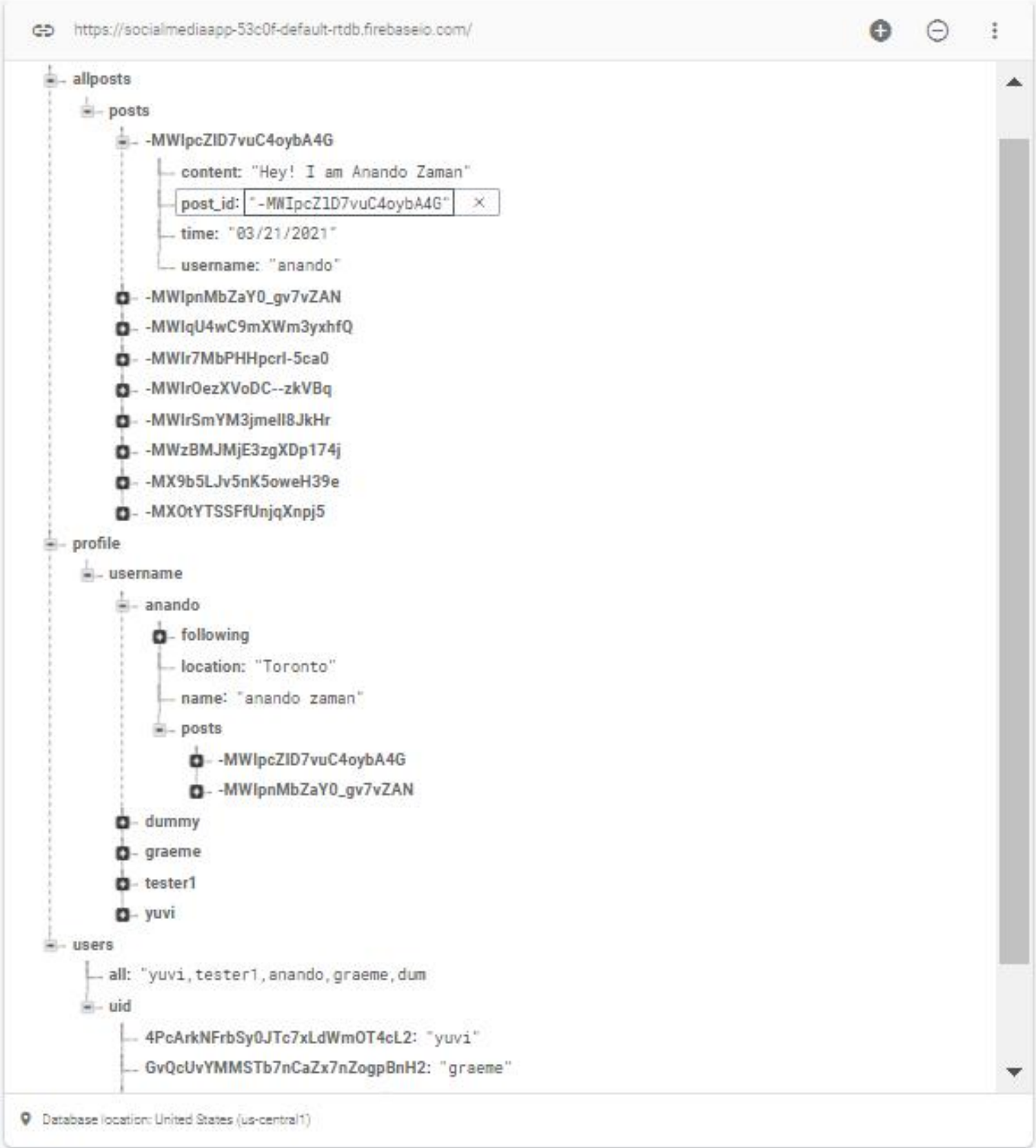
Figure 1: Use hierarchy among modules


MVC MODEL
Terminal/Client
(Username, password)
Profile, Search, Friend, Post Commands
Result
Controller
[Command Parser]
Invalid Credentials
Authentication
Module
Username
Post Content/ID
Username
Post Module
Followers Module
Profile Module
Post Create/view
Followers List
Profile Query/Update
Profile Object
Post status && content
Followers Query
DB
Validate Credentials Firebase Auth
Success Status

DB NoSQL - Refer to FireBase ScreenShot for Example



DB Layout


https://socialmediaapp-53c0f-default-rtdb.firebaseio.com/
allposts
posts
-MWIpcZID7vuC4oybA4G
content: "Hey! I am Anando Zaman"
post_id: "-MWIpcZID7vuC4oybA4G"
time: "03/21/2021"
username: "anando"
-MWIpnMbZaY0_gv7vZAN
-MWIqU4wC9mXWm3yxhfQ
-MWIr7MbPHHpcrI-5ca0
-MWIrOezXVoDC--zkVBq
-MWIrSmYM3jmeII8JkHr
-MWzBMJMjE3zgXDp174j
-MX9b5LJv5nK5oweH39e
-MXOtYTSSFfUnjqXnpj5
profile
username
anando
following
location: "Toronto"
name: "anando zaman"
posts
-MWIpcZID7vuC4oybA4G
-MWIpnMbZaY0_gv7vZAN
dummy
graeme
tester1
yuvi
users
all: "yuvi,tester1,anando,graeme,dum
uid
4PcArkNFrbSy0JTc7xLdWmOT4cL2: "yuvi"
GvQcUvYMMSTb7nCaZx7nZogpBnH2: "graeme"
Database location: United States (us-central1)