Twitch Application

A simple android application that consumes the data from the TWITCH API and plays live streams.

There are four modules in the application.

1. Login
2. Video player
3. Chat Bot

To use the Twitch API application, we need to first create a client id from the TWITCH dev portal (<https://dev.twitch.tv/>).

Login:

Login page is a web view with the URL (<https://api.twitch.tv/kraken/oauth2/authorize?response_type=token&client_id>=) that provides user to login to the twitch api. Once the user successfully login, the token is retrieved and redirected to the search streams page.

Search:

User is provided with a search streams options where they can search for the live streams using the keywords. Using the keywords, the streams are retrieved using the API call((https://api.twitch.tv/kraken/search/streams?query=).

Video Player:

After the live stream is selected, the live stream is displayed using the ExoPlayer. The live stream file is retrieved using the URL (http://usher.twitch.tv/api/channel/hls/%s.m3u8" +"?player=twitchweb&" +"&token=%s" +"&sig=%s" +"&allow\_audio\_only=true" + "&allow\_source=true" + "&type=any" +"&p=%s").

Chat Bot:

When the user starts streaming, the application automatically connects to the chat server and receives the message. But when the user logins into the twitch api, he is provided with a send message textbox to communicate with the chat room.

Twitch follows IRC protocol. To communicate with the chat server and to keep the connection alive, we need to create a Socket connection to the twitch chat irc endpoint. The server name is “irc.chat.twitch.tv: 6667”. The chat servers for the channel is retrieved using “/api/channels/{CHANNEL\_NAME}/chat\_properties” and based on the id of the chatrooms, the chat stream is connected. The following are commands used to communicate with the server for receiving, sending the messages.

After connecting to the chat room, the user is authenticated by sending the following messages,

< PASS oauth:twitch\_oauth\_token

< NICK twitch\_username

The channel room is joined by

JOIN #channelname

TO send a message to a channel.

PRIVMSG: Someone sent a message to a channel.

Resources:

[1]: <https://help.twitch.tv/customer/en/portal/articles/1302780-twitch-irc#KVIRC>

[2]: <https://blog.decicus.com/twitch-api-endpoints/#/api/channels/%7BCHANNEL_NAME%7D/chat_properties>

[3]: <https://dev.twitch.tv/>