Software Requirements Specification

for

Twitch.tv

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1. Introduction

1.1 Purpose

This app is a way for content creators to stream themselves live to others to provide entertainment and build a community. The streamers or content creators can use this user-friendly app to stream whatever they want. While live users will be allowed to either view others stream or start their own. It will allow users to create their own brand and find others with similar interests.

1.2 Intended Audience

The intended audience for this app is mainly directed towards gamers to allow them to stream their gameplay and or just chat with others that enjoy the same content. This app will not only direct towards video games but will allow others to stream about whatever they want. This can range from nature documentaries, music production, or even just chatting with others. All different types of people can create or tune in to a stream.
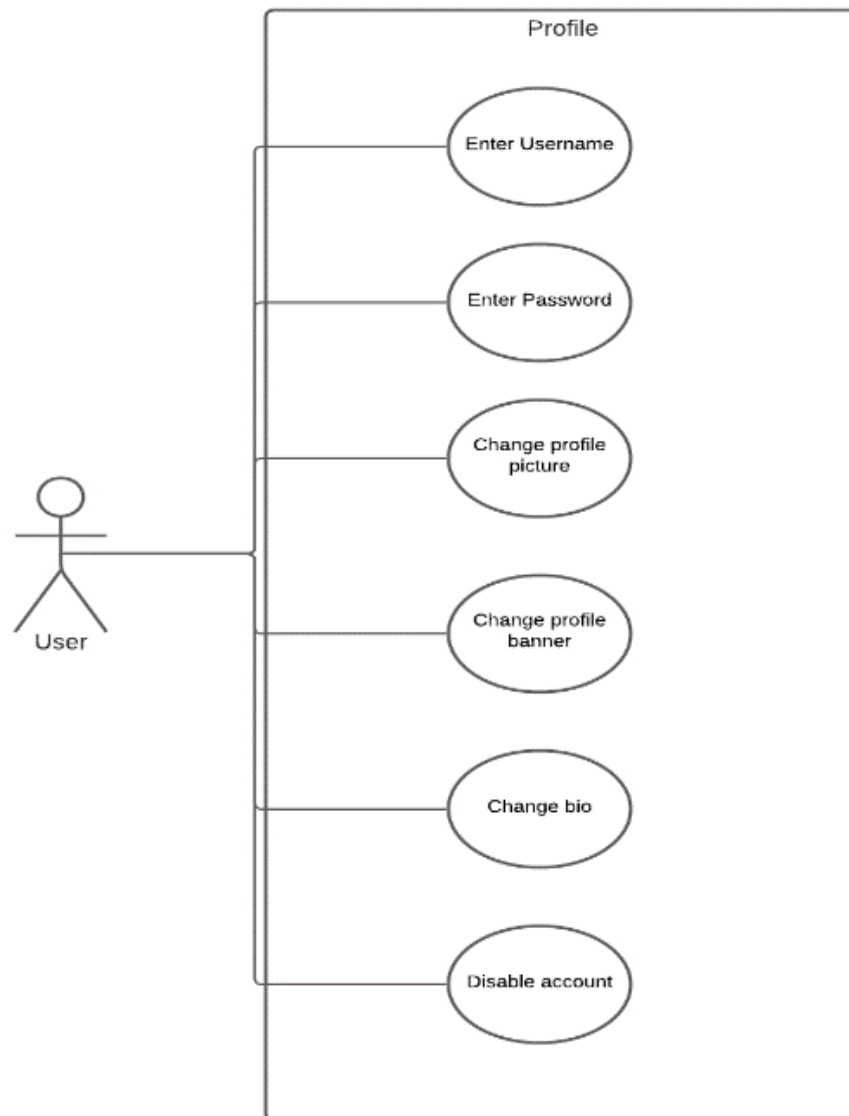
1.3 Covered in Document

In this document we will focus on the requirements that will be needed to complete this type of app and what features will be needed to implement to provide the best experience to the user. What we will be focusing on is what requirements that will allow the user to begin and watch a stream. As well as the user interface requirements that will display the way the user utilizes the app. The convenience to the user is the focus of the app.

2. Functional Requirements

2.1 Profile

The twitch profile will be the basis for other users to recognize you on this platform. You will be able to use a random username with authentication from your email to create a channel for this platform. The channel function will be the area where you will be able to stream yourself to others. The profile will be the focus of all users and will contain all information about your activity. The user can add their own profile picture and banner for their page. Changing the user's bio allows the user to enter 300 characters that can be used to describe your background. You will be able to sign in and out of accounts or switch between accounts at any time.

Profile

- Enter Username
- Enter Password
- Change profile picture
- Change profile banner
- Change bio
- Disable account

User

2.2 Start Livestream

Starting a livestream is accessible to any user and will basically allow the user to livestream their gameplay or footage to other people. When beginning the livestream, the user will have to choose what category they are streaming in as well as the title of their broadcast. After going live other users can join and watch their streams for free. Other users can watch their streams with by simply clicking on a channel. If the streamer wants to end the stream, they can have the option to send all their viewers in a raid to another channel.
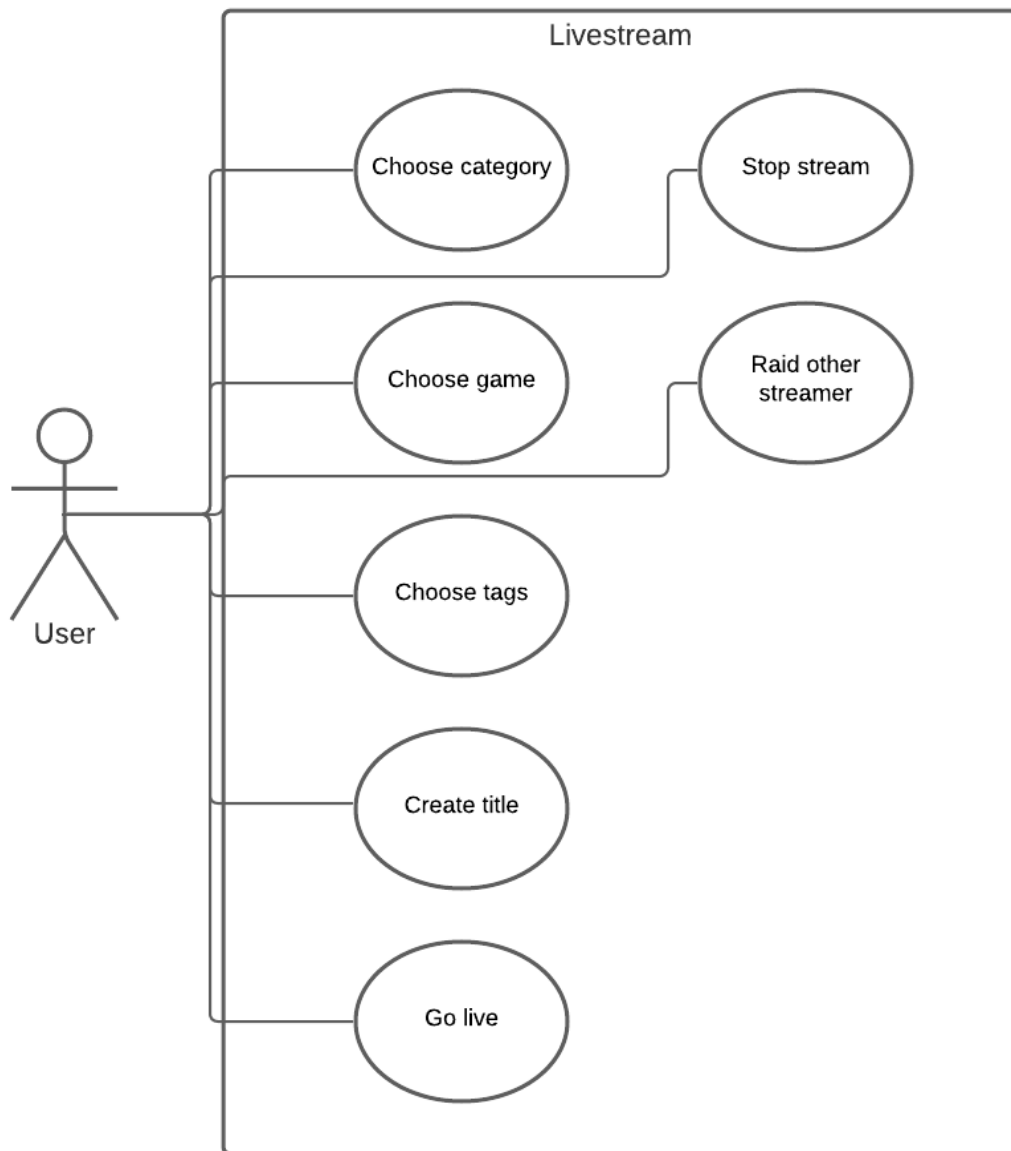
2.3 Browse

The browse function will allow the user to search for specific areas or genres of streams they want to watch. While you can search for individualistic streams by channel names, you will be able to search for certain games or channels that relate to your interests. The categories will be separated into video games, IRL, Music, or Esports. The browse function will also give you a list of all the channels in each section that is popular and or live at the time of the search. You will also be able to search based on tags. Tags are based on smaller categories that you can use to filter bigger categories.
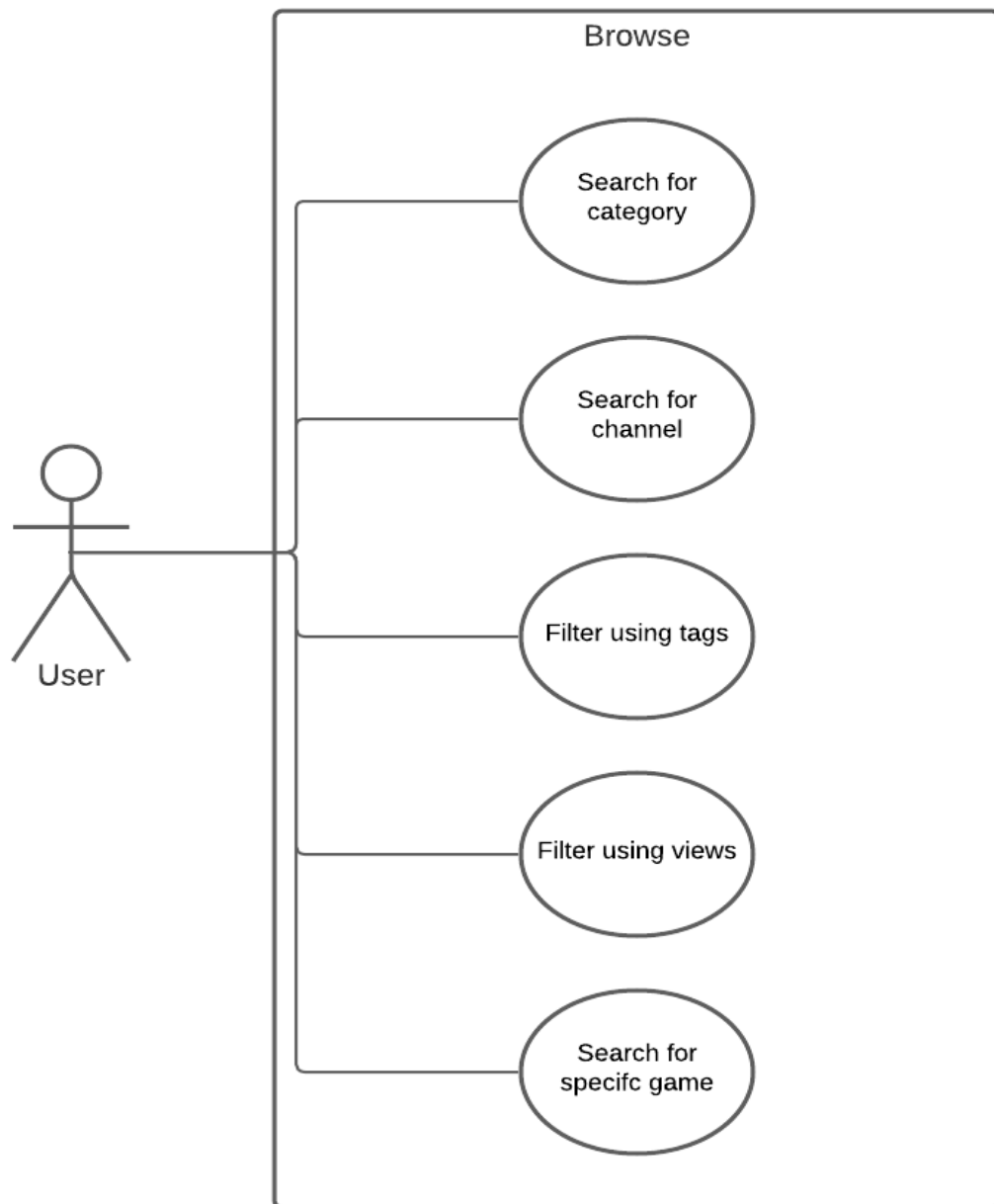
2.4 Following/Subscriptions

By following other users channel you will save them to a list of followed streamers in the platform. This is essentially a quick way to access channels that you want to visit on a frequent basis. This will also show who out of your following list will be live at the time of you opening the app. The channels that are currently live when the user opens the app will be displayed first with priority over the offline streams.

Subscribing to a channel is another level beyond just following a streamer. The subscriptions are a status that pays the streamers money per subscription and includes a add free feature during a live stream. The user that pays for the subscription will have permissions that other users will not.
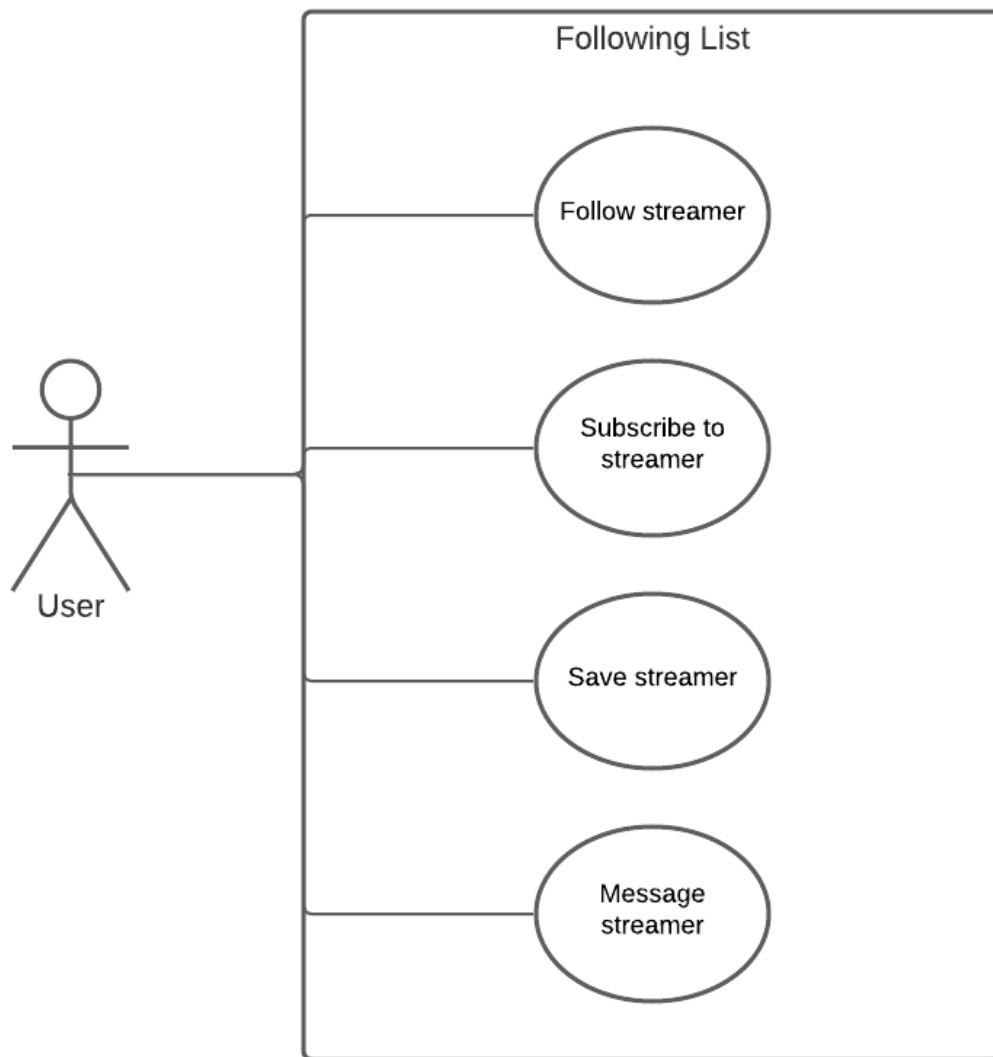
2.5 Chat

Chat is a way to interact with others watching a single streamer while they are live. This will only allow users to type in a list and will display to the main streamer while they are streaming. When sending messages, the chat list will update every second every time a new message is sent in. This will act like an automatic slide show of continuous typed messages so the streamer will be able to read almost every message. Included in the chat will be the commands' function that will allow the streamer to tell the chat various information without having to repeat it verbally. The chat will also include a slow mode where you can slow down the chat to read it without it moving too fast. Sending a message will be a bar where you can type an even send custom emojis that the user has.

The chat settings will include a filters button to exclude any bad messages from displaying. The pause function will be included to allow you to stop the updating of new messages. The user can also change the appearance of the chat where you can modify the font size and colors. If the user does not want to see the chat they can hide it, and if they want to display the chat in its own window you can pop out the chat.

The users of the chat will also be displayed via a list and the app will give you the ability to filter through the list to find an individual user. The main broadcaster, moderators, VIPs, and other users will have their own section in this list.

With the chat there is also an individual whisper function where you can send more private messages to other streamers. Whispers act as like a direct message function for this app that other users cannot see.
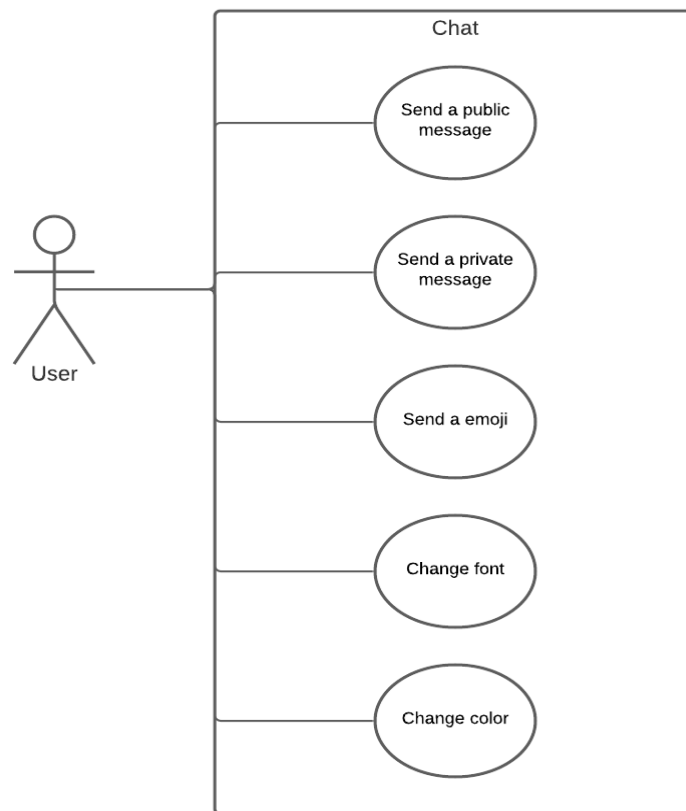
2.6 Options

The options feature shows the user about the information about the app and all the policies that come with streaming on their service. This will allow the change of a username and other information on the profile. The options will allow the user to share their activity of what they are doing to other users and even mark themselves online or offline. The user can customize the dashboard of the profile page as well.
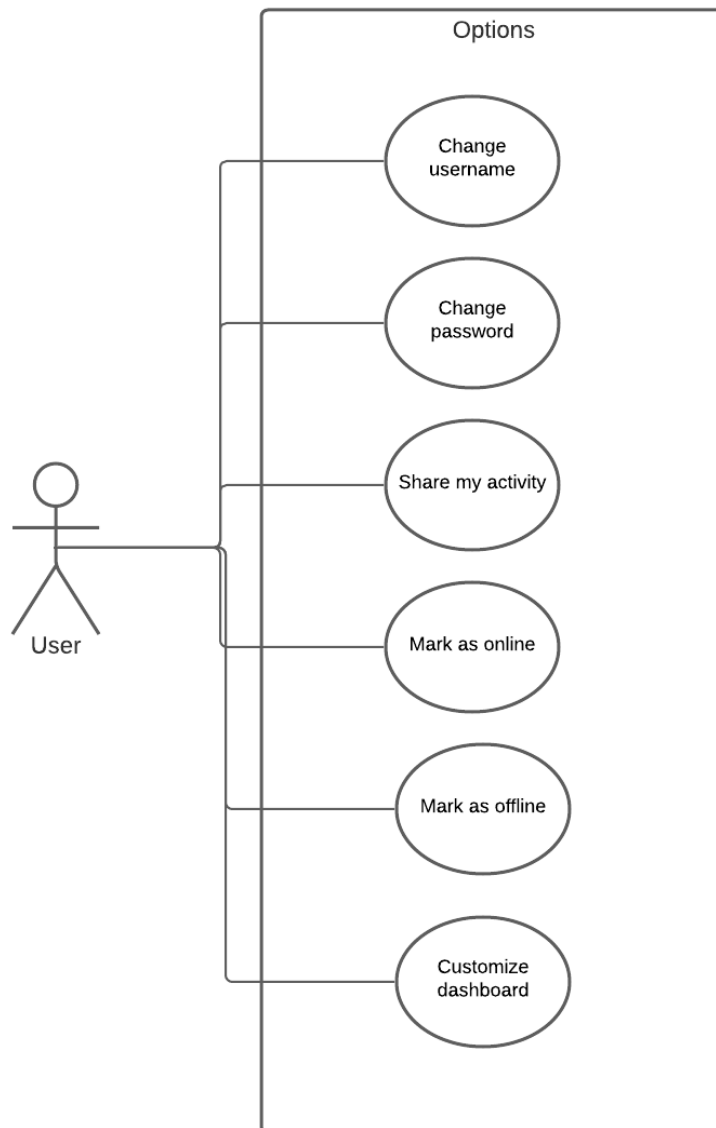
2.7 Notifications

Notifications is a way for a user to be notified when one the channels on your following or subscription list becomes live for you to join. This will also notify you of any special events in the app is occurring or any specials are happening for each channel. Every time the user goes live the notification to their followers will automatically go out, so they can know when they can watch their favorite streamers. The notifications can be set for each user and can be turned off at any time if the user does not want to see them.
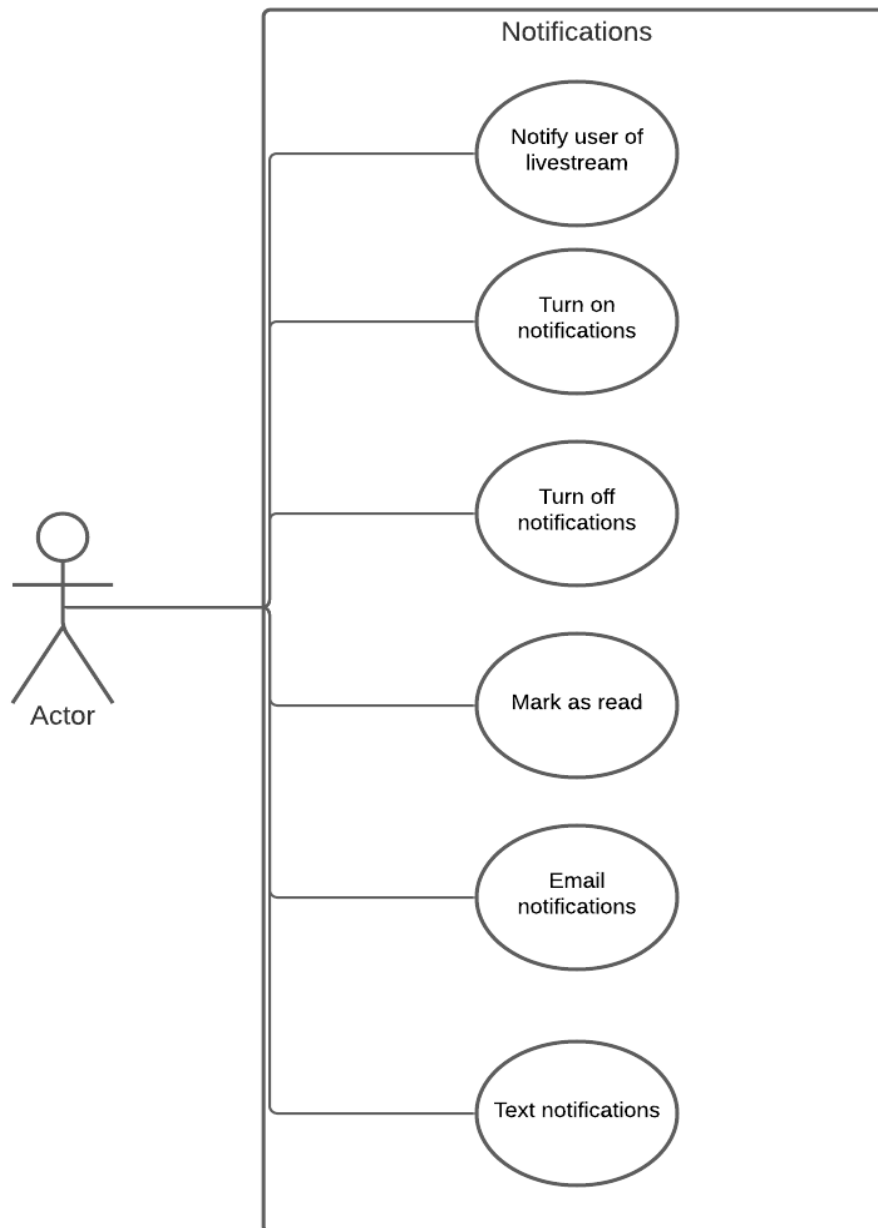
2.8 Bit System

The bit system is a way for users to use in events that will occur in individual channels when live. If a stream starts a poll of who will win a gaming match you will be able to use bits to bet on the match. Bits can only be redeemed individually in channels and are free based on how active you are in a streamers channel. Bits can also be gifted to streamers as a form of currency the streamers can then use those bits to redeem as money or other services on twitch.
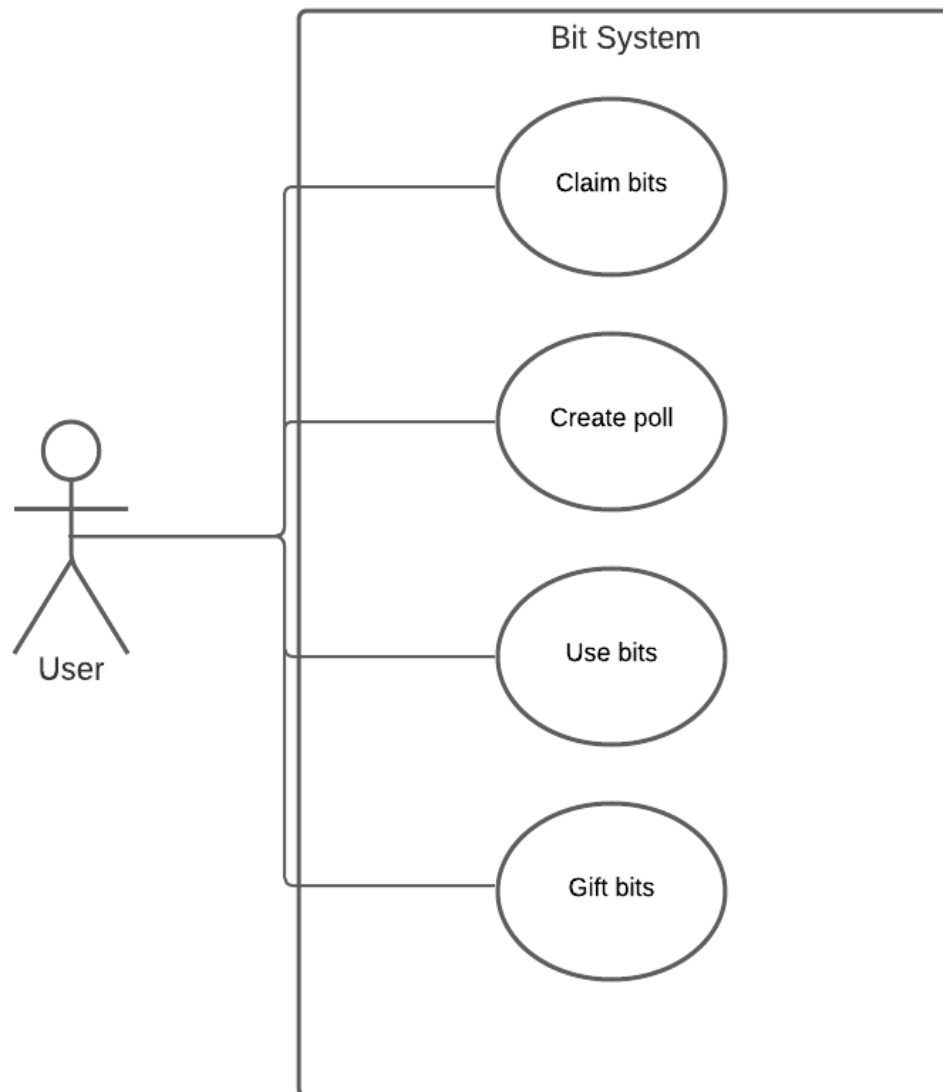
2.9 Recommended

The recommended list will display all user channels that relate to the channels you already follow or have viewed in the past. This will also display categories that the app will think you will like and are based on the followers like other users' profiles. The user will only be recommended the channels that are live. The app will track the user's activity and only recommend based on what the user has viewed and clicked on. The app will give the user the option to ignore the recommendations to get different types of recommendations on the page.
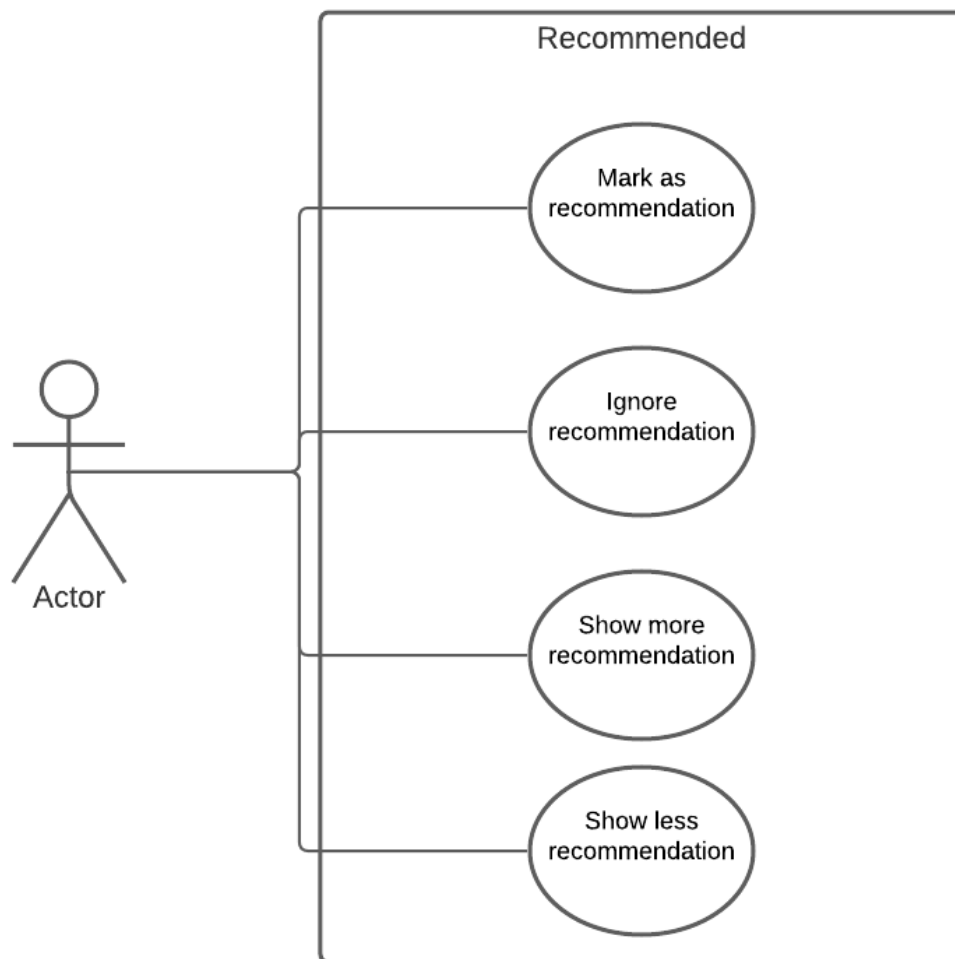
2.10 Channel Points System

The channel point system is based on how long you spend in a certain streamers channel. The streamer can make a certain time frame for when the user can earn points. The points can only be collected and earned per channel and cannot be shared to other channels. The user can only use channel points to redeem per channel where the streamer gets to decide what rewards you can redeem with them. The streamer discloses how you can earn channel points in the system. You can also bet channel points if the streamer makes an event during the livestream.
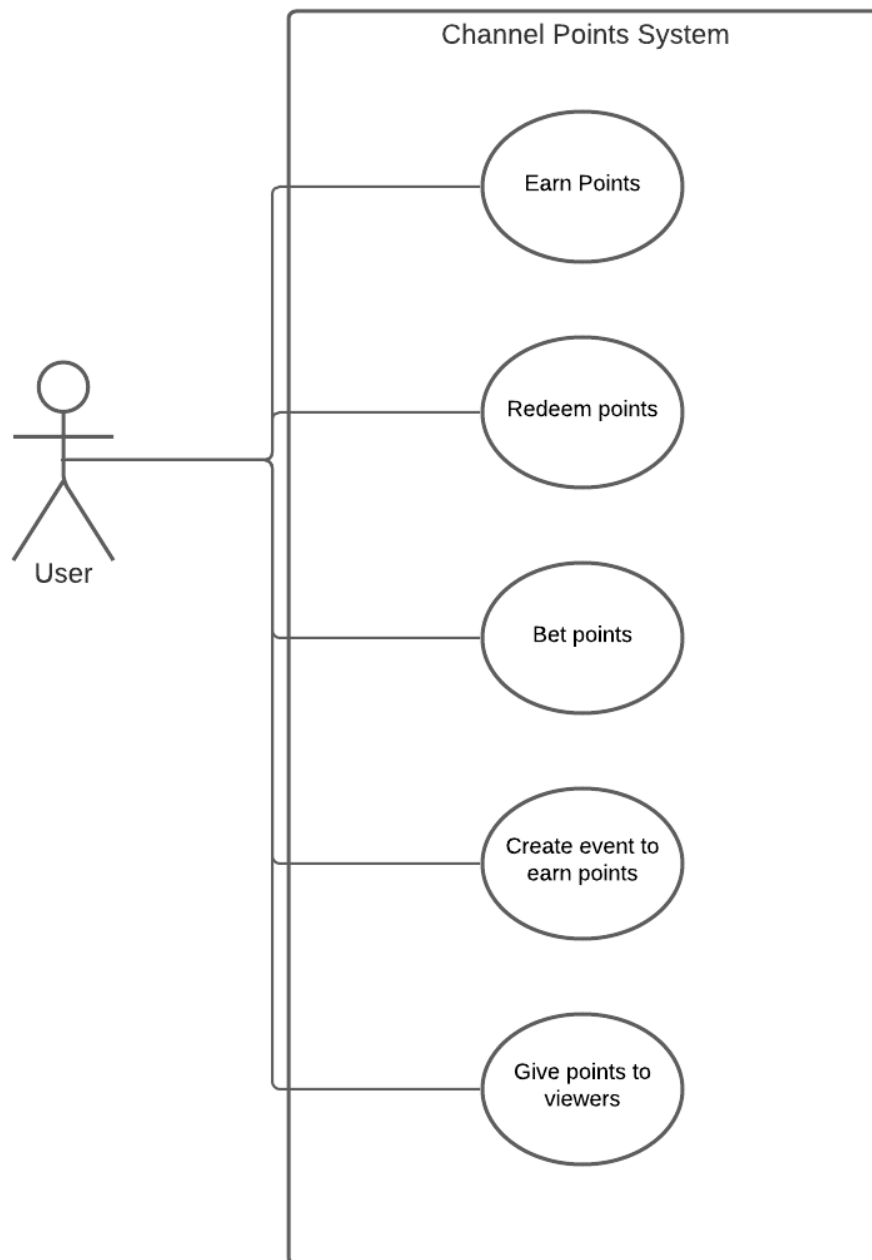
Twitch Diagram
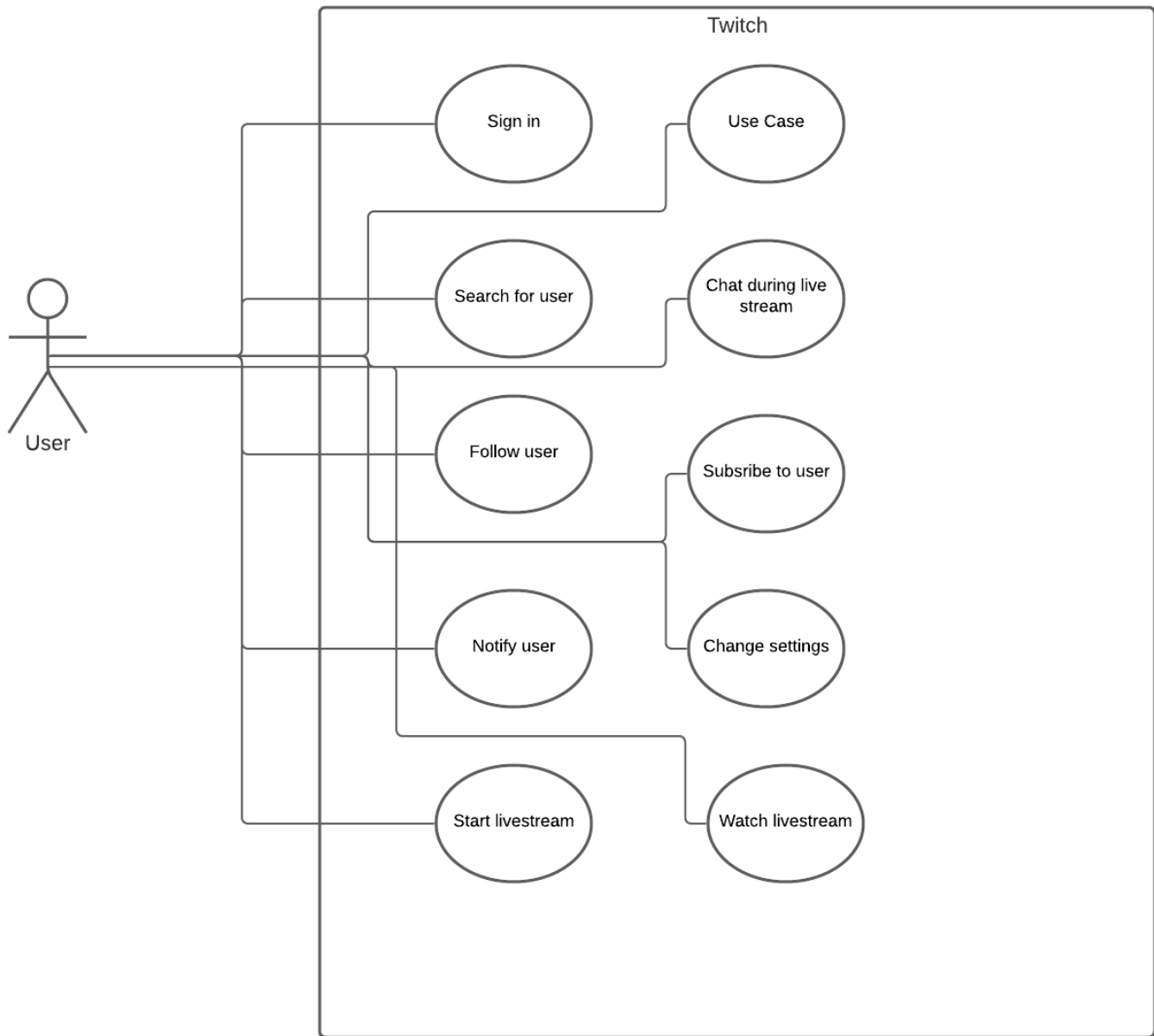
3. User Interface Requirements

3.1 Home Page

The home page will be the main page as soon as you enter the app. It will mostly consist of the channels and categories you are currently following. It will show directly underneath that the channels that are currently live streaming titled "your live channels". Following the live channels, it will display the channels recommended based on the categories and channels you follow. This will be titled "channels recommended for you". In the home page it will have a profile icon at the top which you can access to change your profile settings. There are also quick access stream, notifications, whisper, and search buttons.

3.2 Channel Page

The channel page will be accessible when you press on your profile icon. This will give you options to go live, view dashboard, or edit your profile settings. Underneath those options it will give you the past streams you have done because the app will automatically record every time you go live. This will also give the user the chance to display their creativity and background in the "about" section. The user will be given a chance to make a streaming schedule to notify other users of when they are planning to go live. The videos of past live streams will be automatically saved in the videos tab. Finally, the clip section will also be accessible on the channel page. Clips are basically short videos that users can save onto their profile to watch and share at later times. These clips will be saved in the clips tab as well.

3.3 Following List/Recommended List

The following and recommended lists will be saved on the home page on the direct left of the user interface. The followed channels will be displayed in a column format and the number of users watching a single stream. The live channels will be displayed above the offline channels. The recommended channels will be displayed below the followed channels based on recommendations from the app. The viewers that are also like the user will help the recommendations list by displaying the "…viewers also watch" list underneath the recommended channels.

3.4 Chat Interface

While the following list will be displayed on the left of the user interface the stream chat will be displayed on the right. Beside displaying the constantly updating chat of the stream, the chat interface will give the option to send emojis via an icon. The settings icon will also be available to change the font size of the typed messages. The users of the chat will be displayed via a "users in chat" list on the top right of the interface. The people icon will allow the user to view the users who are currently typing while watching the stream.

3.5 Discover

The discover tab in the app will give the user more recommendations and separate tabs for each category. At the top of the discover tab it will display the most popular streams live now. This can range from music, gaming, or even real-life streams. Below the most popular streams it will display the categories you can access like gaming, esports, music, and IRL. Those individual tabs will give the most popular streams for those categories. Below those categories the app will continue to give the user more recommended channels based on what they watch.

3.6 Browse

The browse tab right next to the discover tab in the app, will also display the categories in a list like format. The categories will be displayed based on what the user viewed and will show the tags that are placed with each category. The viewers per category instead of per channel will also be displayed to see how many users are watching each category.

While searching through each category the user will be able to sort based on viewers (high to low) and those recommended to the user. When searching for categories with certain tags, the user will be given a list they can search through to find the tags they are looking for. The tags list will be given via alphabetical order and will also have an information icon that will explain what each icon means.

3.7 Stream Page

The stream page is the main page a user will see when viewing a live broadcast. Like the home page the chat will be directly located on the right of this page. When opening this page, the main screen should display the gameplay or footage of the streamer's camera. The viewer will be able to see how many people are viewing the stream along with them and the title of the stream. The viewer will be able to adjust the screen via quality and flip the screen to view it in a horizontal motion.

4. Overview

Twitch is an app that allows others to communicate and connect with others to establish a community by streaming themselves and expressing things they love to do. This app will allow users to create their own following and connect with others that have similar interests.

4.1 Functional Requirements

The functional requirements in the document represents what the user can do when using the app and explain how the app should function when viewing or starting a stream. When viewing other streams, this document will give a basic description of what the features of the app will do. The app is designed for a user-friendly experience with many functions that will allow the user to use the app without much experience.

4.2 User Interface Requirements

The user interface requirements in the document will explain how the app should look based on user experience. These requirements explain how app looks and briefly goes over where each tab and button are located from the home screen. These requirements will briefly go over what each tab might contain and what should be displayed to the user.