

Project Proposal

Flux Streaming

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System Description

The proposed system is a streaming application that will be available on PC, iOS, and Android devices. It will include mediums for a plethora of streaming topics—including video games, podcasts, and pre-recorded videos. Users can sign up to create their own accounts, and will then be able to post videos, podcasts, or live stream their gameplay. Eventually, users with verified accounts will be able to monetize their channels and earn income.

Why This Interests Us

Streaming services come with a high risk, but also a high reward. If profitable, the service will bring in large amounts of revenue. Currently, applications such as Twitch, Kick, and YouTube are among the largest of streaming services. As part of a team of software engineers, we would like to design and implement new technologies and complex systems, such as content delivery platforms and a microservices-based architecture.

Challenges

Our team anticipates that the entirety of the project will be challenging due to a constant influx of new and relevant technologies. However, we have concluded that live streaming itself will be the most difficult hurdle to cross; it creates a large workload full of new systems that must be learned and integrated. Live streaming requires a method for your device to capture audio and picture, a streaming protocol (such as Real-Time Messaging Protocol), media servers, and much more.

Real-World Example

The closest real-world example to our proposed system is YouTube. Although this platform does not have a dedicated podcast section in their application, users are still able to post these sessions as longer videos. YouTube is owned by Alphabet (the parent company to Google), making it one of the most successful competitors out there. YouTube's users are able to make accounts that

don't need to be verified to be monetized, whereas our proposed project will require users to be verified to qualify for monetization of their channel. YouTube also allows their users to either live stream content or post videos to their channels, which will be very similar to our own system.