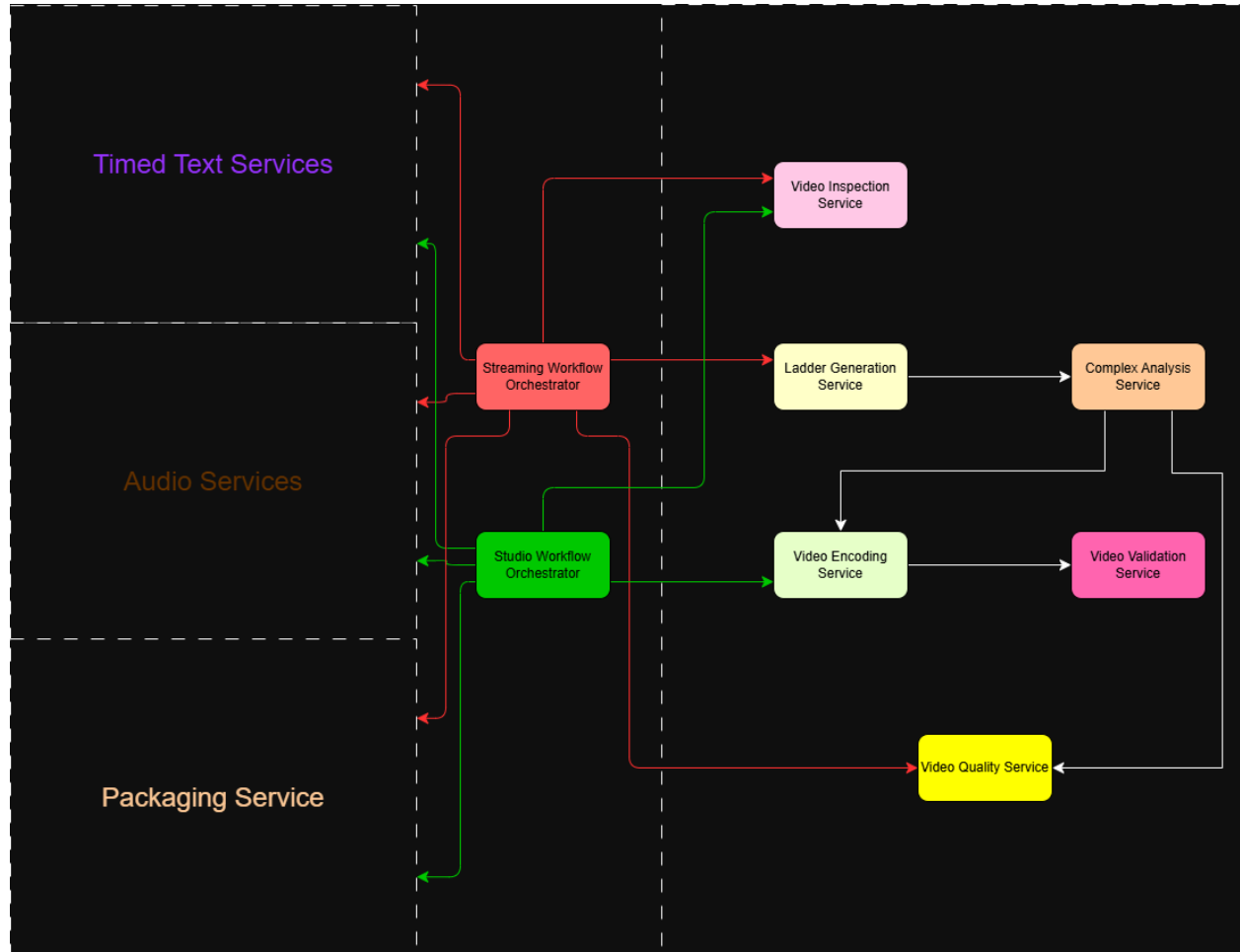Jayden Hutchinson

Lab 2 Microservices at Netflix

Video Processing Pipeline in Cosmos

In 2018 the Netflix CIS and ET teams started development on a new platform, Cosmos. This allowed for more system flexibility and feature development speed.

In Cosmos the team created two independent microservices: Video Encoding Service and Video Quality Service. Each service had a clear and decoupled implementation.

This led to doing this for all video services that were part of the Netflix video processing pipeline. The services added were: Video Inspection Service,

Complexity Analysis Service, Ladder Generation Service, Video Encoding Service, Video Validation Service, and Video Quality Service.

Pros of Micro Services:

- Decoupled Implementation of services for reusability
- More flexibility with the program when adding or removing services
- Increased feature delivery with ease of implementation of a new service
- Ability to keep up with changing requirements due to modularity and productivity benefits
- Ability for videos to be watched millions of times

Cons of Micro Services:

- Increased complexity of code due to more moving parts and processes
- More expensive to reproduce
- Longer onboarding due to complexity and size of the code
- Migration from an old technology to a new one is time consuming
- Code instability due to the increased complexity

https://netflixtechblog.com/rebuilding-netflix-video-processing-pipeline-with-microservices-4e5e6310e359