

Research Plan

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Opportunity

I make use of video syncing platforms sometimes and whenever I make use of them to watch videos with friends I find them very interesting. I was curious how the syncing feature worked if you watch with a friend and how it is possible that if I pause my video it also pauses for them. It also spiked my interest because on some video syncing websites, this feature does not work properly, when I pause the video my friend is not on the same part or it just does not pause for him at all. This interested me in maybe trying to figure out if I can get this to work properly and it seemed like a perfect challenge.

For this project I will be gathering inspiration from [Watch together](#) I used this platform the most because it works well and never had bad experiences with it so this seems like a good example to follow for my project.

Main question

"How can I create a platform where people can watch YouTube videos in sync across multiple devices?"

The main question of this project is about the syncing feature because I believe this will be the biggest challenge and it is what interests me most about this project. I hope I will be able to understand how syncing works and have a successful implementation of it in my project. The estimated time to complete my research for this project is the end of this sprint which is the 31st of March.

Sub questions

What architecture is best suited for my project requirements?

With this sub question, I hope to find out what a good architecture to use is for my project and my learning outcomes this semester I already have some in my like Microservices which is used a lot for Enterprise software but I want to compare it to other architectures and explain why I will choose a certain architecture so I have a better understanding why I am making this project in a certain way.

Field Research	Library Research	Library Research	Workshop
Explore user requirements	Literature study	Community Research	IT architecture sketching

What programming languages and frameworks are available for a good quality streaming service platform?

I chose this sub question because, in my internship project, I got feedback from my teachers to understand why I'm making something a certain way and not just choose the path that seems most convenient. I will be figuring out what programming languages/frameworks fit my project's requirements the best and then filtering down positives and negatives to help make my choice.

Library Research	Library Research
Literature study	Community Research

What level of latency performance is considered acceptable for a streaming service to ensure a satisfactory user experience?

With this sub question, I hope to figure out how to sync videos to multiple users and the best way to do this while focusing on the performance so there is a good user experience with low latency.

Library Research	Library Research	Lab Research
Literature study	Best good and bad practices	Usability testing