

SWOT analysis:

Strength	Weaknesses	Opportunities	Threats
<p>S1: With version control, full control over updating and maintaining the system worldwide through a DevOps approach.</p> <p>S2: Low infrastructure costs due to localization of the system on users' hardware; no ongoing server expenses for non-profit/local deployments.</p> <p>S3: Small project and MVP can be established quickly, enabling fast iterations and scalability via DevOps and version control pipelines.</p>	<p>W1: Competing with largescale systems like Plex, Jellyfin or Emby, the MVP does not have online streaming feature, which gives the MVP a disadvantage and becomes challenging to make users engage with the product.</p> <p>W2: Crossplatform usability of the MVP might be a large workload to implement, given different OS's might work differently for dir handling and network security, which might result in temporarily only having one compatible OS for the first versions of the MVP.</p> <p>W3: Without implementation of application support on smartTV's, mobile phones etc. the MVP might seem basic, which might result in fewer users engaging with the MVP.</p> <p>W4: Implementing professional looking design for better engagement with the consumer can be time consuming, which gives less time for the developer team to focus on the functionality and security of the MVP.</p>	<p>O1: The potential to implement P2P (peer to peer) with relay through PaaS services or VPN (Virtual Private Network) connection for safe local serverside host website connectivity, gives the MVP a large scalability with a potential low cost.</p> <p>O2: MVP is open source which might give a community based interest in contributing with securing and optimizing the MVP for better scalability.</p> <p>O3: MVP could allow safe, inexpensive / free testing of new streaming technologies and features, eliminating the need to pay for streaming services.</p> <p>O4: The MVP could impose a automated installation and setup of the product compatible with widely used OS's, which if correctly implemented, could make more users engage with the product.</p>	<p>T1: Established competitors like Plex, Jellyfin and Emby already dominate the market with mature ecosystems and high security which might impose a redundancy of developing the project.</p> <p>T2: Misconfigurations or vulnerabilities such as network attacks and SQL-injections to each user could impose a threat of exploiting the system to gain access to the users host computers vital filestorage and potentially installing malicious software like Trojan Horses, Rats etc.</p> <p>T3: Risk of being exposed to legal concerns, given the users use the product for sharing copyrighted media and content.</p> <p>T4: Multiple network environments and OS compatibility might impose a complicated deployment, user support and DevOps for application maintenance.</p>

Risk Analysis:

Probability / Impact = 1 - 5 point system

Product = Probability * Impact

Risk factor	Probability	Impact	Product	Preventive measure	Responsibility	Proposed Solution	Responsibility
W1: Competing with largescale systems like Plex, Jellyfin or Emby, the MVP does not have online streaming feature, which gives the MVP a disadvantage and becomes challenging to make users engage with the product	5	2	10	Keeping the product open source, and making it scalable for VPN or P2P relay through PaaS, could make it a viable upcoming competitor.	Product Manager / Dev Team	The product could be forced to undergo evaluation to focus on implementing the VPN and or P2P relay solution	Product Manager

W2: Crossplatform usability of the MVP might be a large workload to implement, given different OS's might work differently for dir handling and network security, which might result in temporarily only having one compatible OS for the first versions of the MVP.	5	3	15	Making one size fits all product that recognizes the OS of the host hardware and automatically adapts to using implemented features based on the OS of the host machine, could minimize the workload, instead of making two separate Jar files focusing on each OS	Dev Team	Leveraging the need to focus on developing a second product with focus on other operating systems, to make sure there are no complications with the management	Product Manager
W3: Without implementation of application support on smartTV's, mobile phones etc. the MVP might seem basic, which might result in fewer users engaging with the MVP.	5	2	10	Using JDBC template and springboot framework to handle Rest API endpoints with JSON return which Kotlin, Swift and other languages support for data fetch Making a small kotlin or swift program for testing the endpoints, or by Unit testing and integration testing with the purpose of detecting technical debt in the code regarding REST endpoints	Dev Team	Considering a mobile or smartTV compatibility test through making a small application that can talk to the API, in the next iteration or by implementing it in the current sprint if the repercussions are too large	Product Manager
T1: Established competitors like Plex, Jellyfin and Emby already dominate the market with mature ecosystems and high security which might impose a redundancy of developing the project.	5	3	15	By implementing VPN and or P2P relay the product could become a larger upcoming competitor	Dev Team / Product Manager	Considering the need to focus on implementing the VPN and or P2P relay to make sure that the product will not become redundant	Product Manager
T2: Misconfigurations or vulnerabilities such as network attacks and SQL-injections to each user could impose a threat of exploiting the system to gain access to the users host computers vital filestorage and potentially installing malicious software like Trojan Horses, Rats etc.	2	5	10	By taking courses online learning about vulnerabilities such as SQL-injections, and how to assess them could build a better foundation for a secure product. Implementing secure custom login handling through the springboot configurations.	Dev Team / Product Manager	Recalling or Version Controlling a new update to stop all working applications, until the threat has been assessed. Making sure that the community are up to date on the latest versions before rolling out a new update where the vulnerable features has been fixed. Making sure to gather as much information about the problem as possible and informing the community or users about what the threat is and how to respond to it if they have been affected.	Product Manager

T3: Risk of being exposed to legal concerns, given the users use the product for sharing copyrighted media and content.	2	5	10	Making sure that the terms of use of the product are correctly defined, which should cover the developers and the organization from being legally held accountable by what the users use the product for.	Product Manager	Complying with the legal terms, and perhaps rolling out a new update fixing the copyright problems if the program, or stopping the program in its entirety.	Product Manager
T4: Multiple network environments and OS compatibility might impose a complicated deployment, user support and DevOps for application maintenance.	3	2	6	Implementing automated compatibility in the product. Implementing Github Workflow that allows the product to be tested on a Ubuntu Server, which gives us the opportunity to test it on different OS, likewise test the program on different computers and or VM's	Dev Team / Product Manager	Asses the problem and roll out a new version of the product, for installation or update.	Product Manager