

Part-3: *We discussed the disadvantages of a monolith. We also looked at component based architecture (modular monolith) and microservice architecture. Explain clearly when would you choose a modular monolith and when would you choose microservice architecture.*

Answer: It all depends on the requirements of the problem we want to solve. Meaning if the application we're planning to build is very simple and clear then its better to choose the modular monolith but if there the requirement is evolving and is something that will get complex and is gonna cover so many services and functionalities then its better to consider microservice because modular monolith is not gonna allow us handle such complex and evolving projects. Beside this, the microservice architecture is also going to allow development teams to deliver minimum viable products incrementally easily and quickly. Each service is independent and can communicate with the rest of the system without affecting the remainings, which means it is loosely coupled. Beside this high availability and reliability is also taken care of in microservice which have a dynamic nature compared to modular monolith because it can support any amount of user loads and is flexible for any situation. Therefore the real answer for these questions would be it all depends on the requirement of the project and the complexity of the project.