SIT323 – Task 3.1P

Architecture Consideration

Step 1: Define Cloud-Native Architecture

Cloud-native architecture refers to the approach where applications are built and deployed to increase the scalability, resilience, and flexibility offered by cloud computing environments. Unlike traditional and old monolithic architectures, which are typically huge, tightly packed and integrated systems, cloud-native applications are designed as a collection of loosely coupled microservices. These Microservices can be independently developed, deployed, and scaled, allowing for better agility and efficiency in software delivery and use.

The benefits of using cloud-native architecture include:

Increased Scalability: Microservices can be independently changed or edited based on demand, allowing applications to handle varying workloads more effectively.

Improved Resilience: Such loose architecture reduces risks, as issues in one microservice will not necessarily affect the entire system.

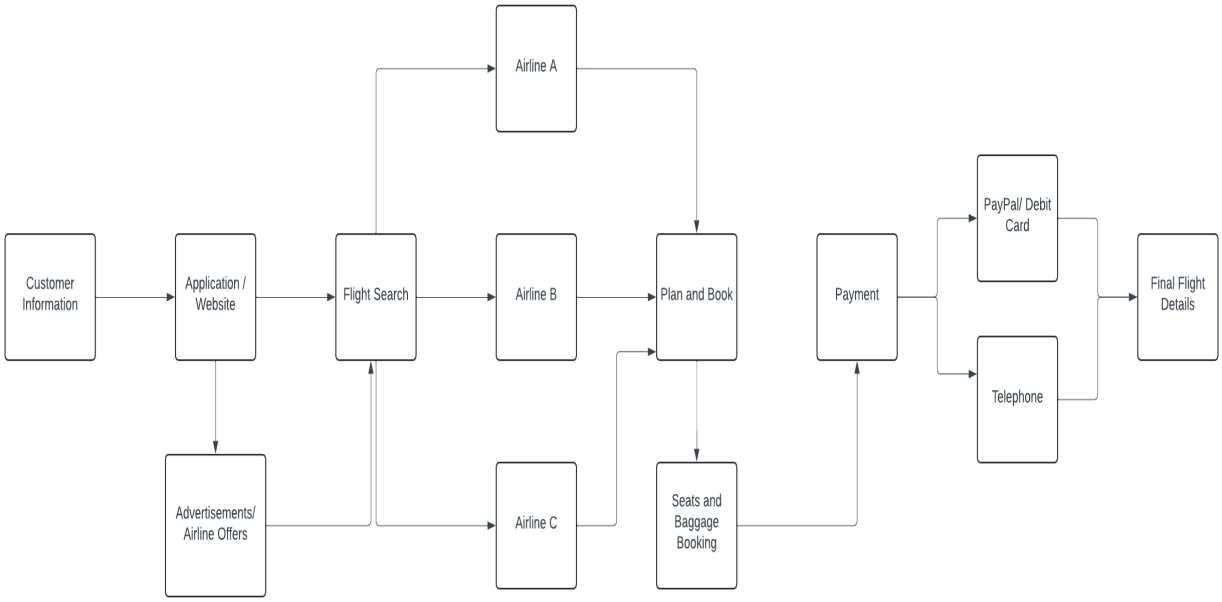
Enhanced Flexibility: Microservices enable rapid development and deployment, leading to quicker adaptation to changing business requirements.

Resource Efficiency: Cloud-native architectures utilize cloud resources more efficiently, optimizing costs and minimizing wastage.

In simpler terms, cloud-native architecture is like building applications with simple pieces, where you can easily customize and expand your creation without starting again from scratch.

Step 2: Outline the architecture of an application

I chose a microservice approach over a monolithic approach as it will be easier to develop, reuse, delete, and edit when compared to a monolithic approach where all the functions are integrated in one place. It is easier to change and reuse parts rather than having to pull apart and put together everything for one small change.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