

# SIT323/SIT737- Cloud Native Application Development

## 3.1P: Architecture Consideration

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### Overview

In this task, you will explore the basic principles of cloud-native application architecture and how they contribute to the design of highly scalable, resilient, and adaptable applications:

### Step 1: Define Cloud-Native Architecture

Define the concept of cloud-native architecture and explain how it differs from traditional monolithic architectures. (List the benefits of using cloud-native architecture, such as increased scalability, resilience, and flexibility.)

### Step 2: Outline the architecture of an application (trade-offs for Monoliths and Microservices)

From the early stages of application development, it is fundamental to understand the requirements and available resources. Overall, these will contour the architecture decisions. Imagine this scenario: you are part of the team that needs to outline the structure of a centralized system to book flight tickets for different airlines. At this stage, the clients require the front-end(UI), payment, and customer functionalities to be designed. Also, these are the individual requirements of each airline:

Airline A - payments should be allowed only through PayPal

Airline B - payments should be disabled (bookings will be exclusively in person or via telephone)

Airline C - payments should be allowed to use PayPal and debit cards

Using the above requirements, outline the application architecture. Also, elaborate your reasoning on choosing a microservice or monolith-based approach.

### Submission Details

Once you are done, submit a pdf document (1 page limitation including **references**).