

This year the Festive Tech Calendar Team are **raising money** for the Raspberry Pi Foundation @RaspberryPi\_org



#### Who is presenter?

- Azure MVP & MCT
- Speaker, Author, Cloud Architect
- 20+ years of experience
- 24 Azure & M365 Certifications
- Cloud Marathoner Founder
- Tech geek, Lifelong leaner

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## **Agenda**

, White

Why architecture matters?

What is Cloud Architecture

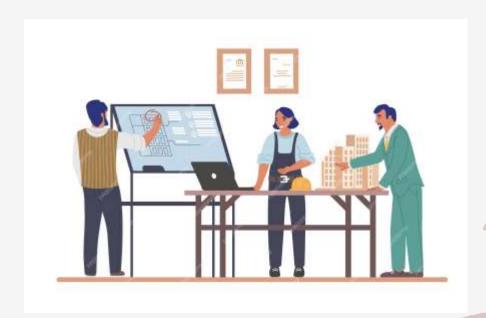
Design patterns to the rescue

Q & A



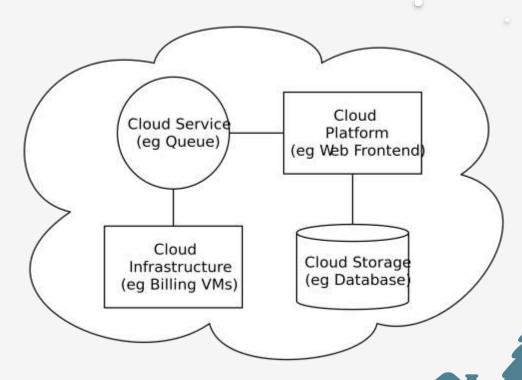
### Why architecture matters

- Process and steps
- Stakeholders
- Identifying Scope
- Identifying Requirements
- Building PoC
- **Building Team**
- Etc.

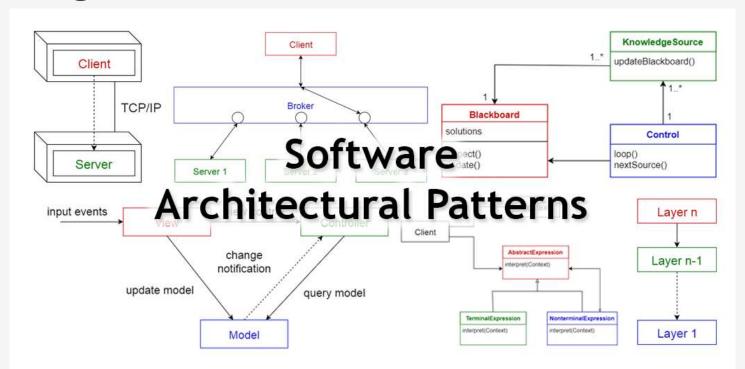


#### What is Cloud Architecture?

- Front-end
- Back-end
- Cloud based services
- Network & connectivity



#### Design patterns in Software Development



#### **Grouping the Design Patterns**

# Creational Behavioral

#### The Software Design & Architecture Stack

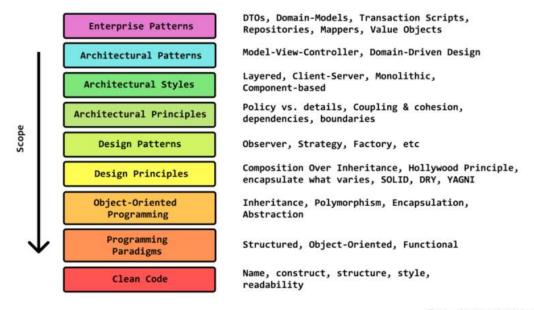
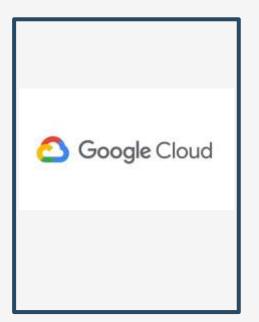


Image Credits: Khalil Stemmler

#### **Cloud Design patterns**







#### **Common Cloud Design patterns**

Anti-corruption layer

Circuit breaker

Claim Check

Retry with backoff

Saga orchestration

Strangler fig

Transactional outbox

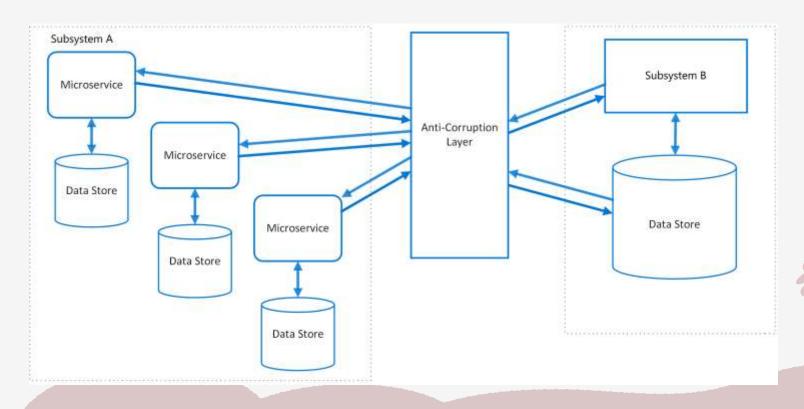
Choreography



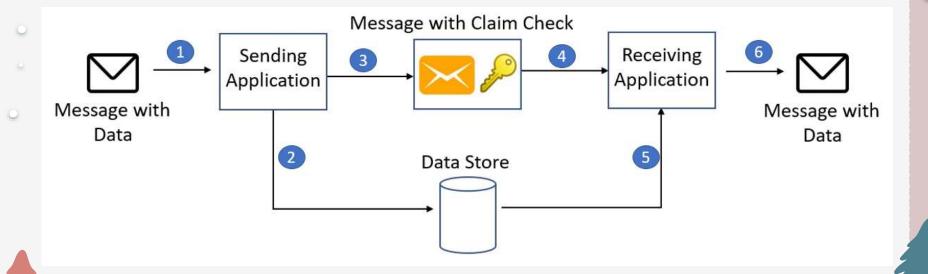




#### Cloud Design pattern: Anti-corruption Layer pattern



#### Cloud Design pattern: Claim-Check pattern



#### Well-Architected Frameworks for your Cloud



#### References: Cloud architecture design patterns

- Architecture Center Design Guides (Google)
- Prescriptive Guidance Cloud design patterns, architectures, and implementations (AWS)
- Data management patterns (Azure)
- Design and implementation patterns (Azure)
- Messaging patterns (Azure)



#### References: Cloud Architect Learning resources

- Microsoft Learn modules
- Cloud Marathoner Study Guide
- Thomas Maurer Study Guide
- Official practice tests
- John Savill's Study Cram
- Labs and exercises
- Azure Architect center
- Microsoft Exam emulator
- Practice Assessment





#### **Azure Solutions Architect Expert (AZ-305) Cert Prep:** Design Infrastructure Solutions 📽



#### Resources

**#CloudMarathoner 's Study Guide** 

Microsoft Lean AZ-305 modules





**AWESOME Azure Architect - GitHub** 



AZ-305 Cert Prep: Design Infrastructure Solutions





## Thank you!



