GOOGLE CLOUD PLATFORM

COMPUTE OVERVIEW

GCP'S CLOUD COMPUTE OFFERINGS

- Compute services are focused on executing some type of workload
- Compute is focused on actual processing of data as opposed to storing it, transferring it, etc
- From fully managed function-level execution (Functions-as-a-Service) to single-instance VMs

GCP'S CLOUD COMPUTE OFFERINGS

OFFERING	OVERVIEW	YOU WANT OR NEED...
COMPUTE ENGINE	VIRTUAL MACHINES	• FULL CONTROL OVER YOUR COMPUTE • VERY HIGH PERFORMANCE • SPECIFIC CONFIGURATION NEEDS
KUBERNETES ENGINE	HOSTED KUBERNETES OFFERING	• A FRAMEWORK TO MANAGE COMPLEX CONTAINERIZED WORKLOADS • VERY HIGH RELIABILITY • HYBRID DISTRIBUTED APPLICATIONS
APP ENGINE	FULLY MANAGED SERVERLESS APPLICATION PLATFORM. HANDLES CONFIGURATION AND HAS "OPINIONATED" PATTERNS	• AN LOW-MAINTENANCE OPINIONATED PLATFORM • JAVA, PYTHON, PHP, GO, RUBY, NODE, ASP.NET CORE STANDARD SUPPORT
CLOUD FUNCTIONS	SINGLE-PURPOSE, STAND-ALONE CODE THAT RUNS IN RESPONSE TO EVENTS	• NO MAINTENANCE, JUST CODE • SMALL UNITS OF EXECUTION THAT COMPLETE QUICKLY (NO LONG RUNNING PROCESSES) • TO RESPOND TO EVENTS

PICKING AN OFFERING...

- You don’t need to pick just one
- A robust and well designed application will leverage the right tool for the job
- Capabilities vary, but so does pricing model

GOING DEEPER...

- We'll discuss each offering in turn
- We'll also take a slight detour to discuss Cloud Pub-Sub, it's not a compute offering, but relates to how messages are sent and received by other systems, but knowledge of it is important to understand App Engine and Cloud Functions, so we'll take it on before we get into that