

devfest

```
// You'll need  
// com.google.  
listRef.listAll  
.addOn  
prefixes.  
// All  
// You  
}  
it  
ach { item  
the items  
}  
}
```

Experts

2023



# Cloud Surfing with GCP: A Beginner's Adventure

 Google Developer Groups



# Hello Vietnam!

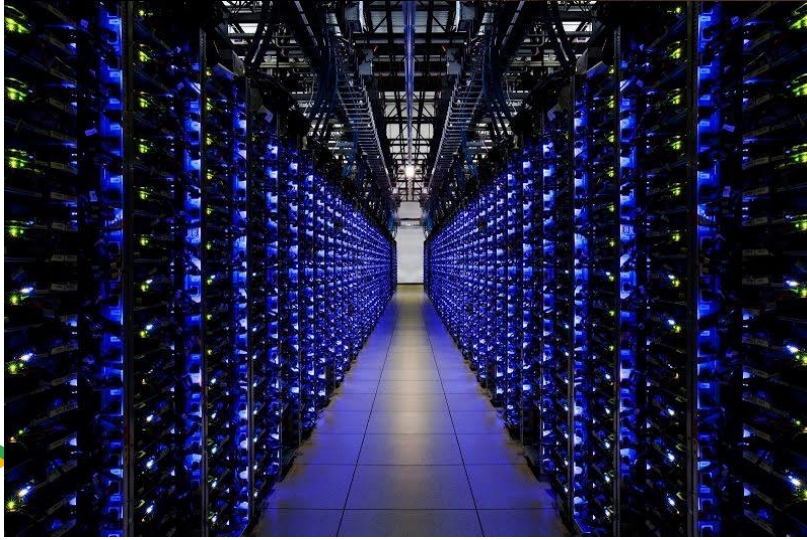
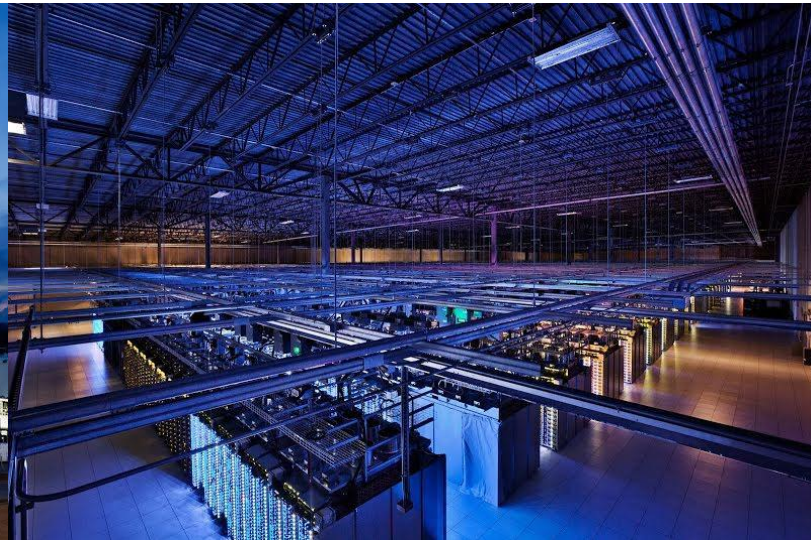
Ananda Dwi Rahmawati

- Cloud Engineer @ Activate Interactive Pte Ltd Singapore | 2023 - present
- 4+ years experience
- GDE Cloud Modernization Apps
- Tech background: System, Networking, IaaS & PaaS Cloud, DevOps, a bit of Programming
- <https://linktr.ee/misskecupbung>

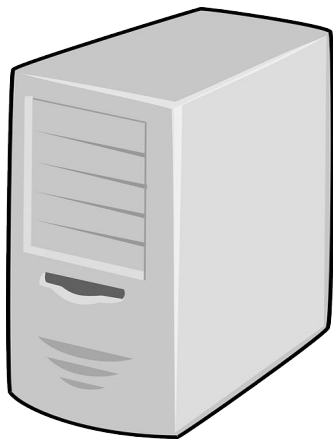




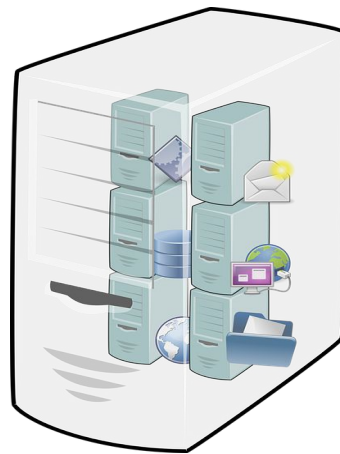




# A virtual machine is a software-based computer



Physical Computer



Virtual Machines in a  
Physical Computer



# Jakarta Region

Worldwide



Multi-Region



asia

Region



asia-southeast-2

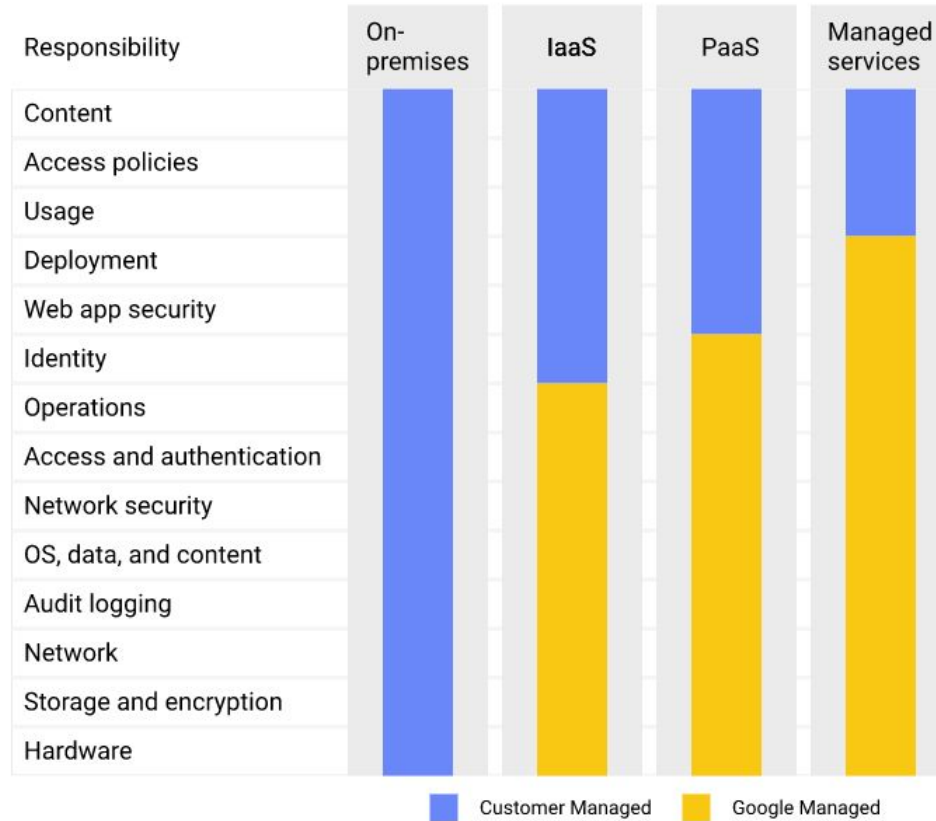
Zone

asia-southeast2-a

asia-southeast2-b

asia-southeast2-c





# Cloud Service

Infrastructure



Platform



Software

Google Workspace



... as a service

# Benefits of Cloud Computing



**Cost savings**



**Scalability**

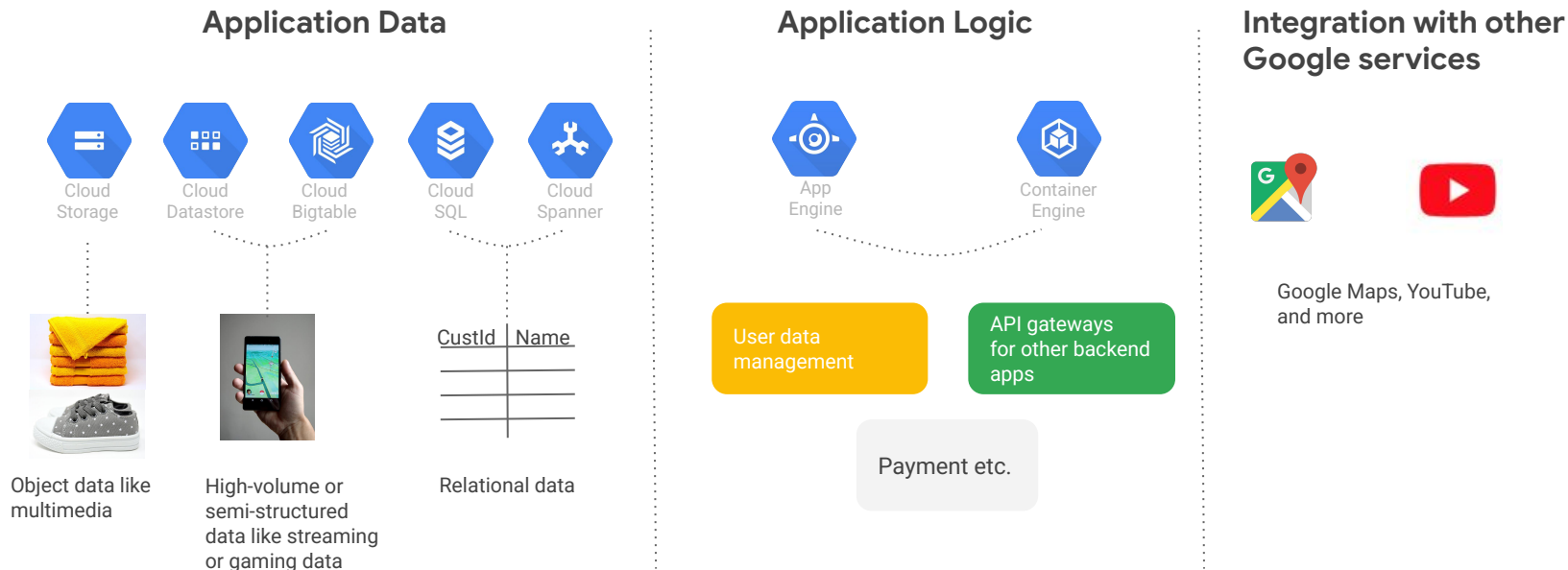


**Security**



**Reliability**

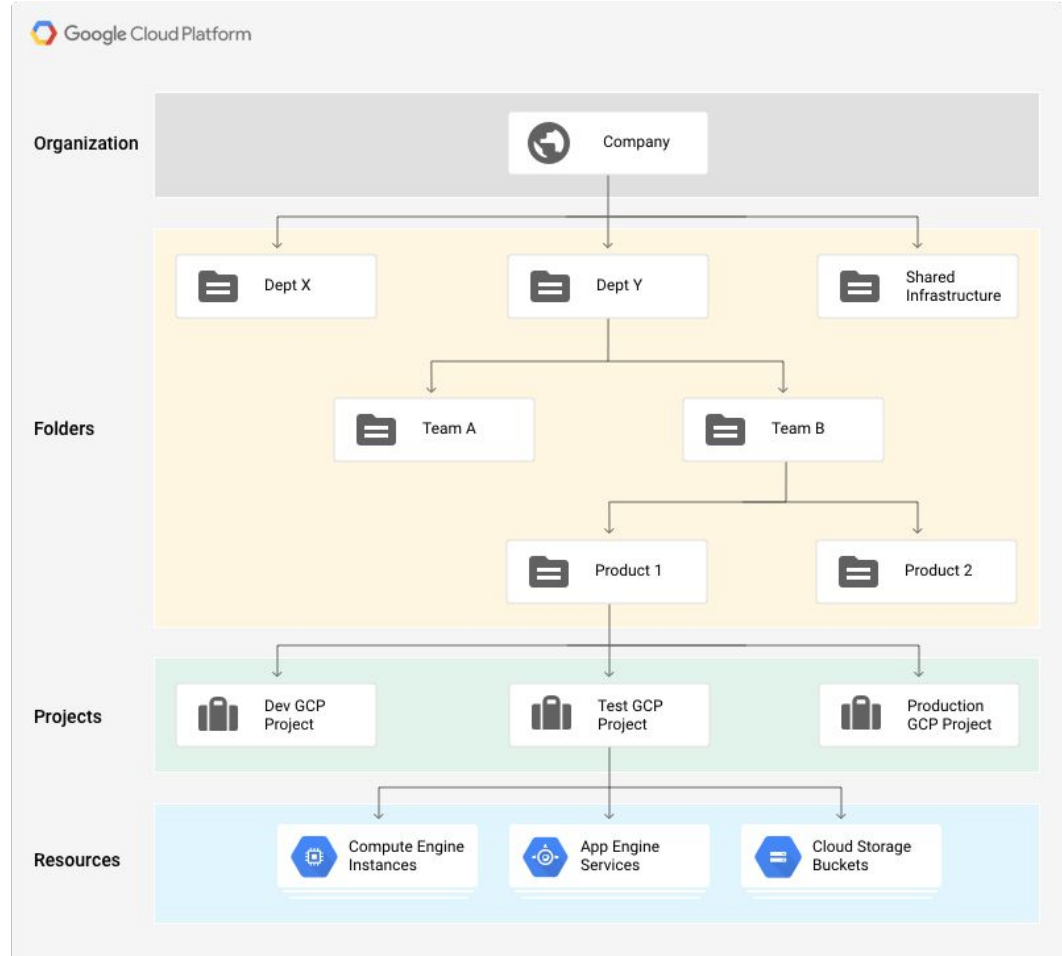
# No need to manage your own infrastructure. Use managed services instead.






# GCP Resource Hierarchy

- **Projects** : Base hierarchy level. Every resource is associated with a project.
- **Folders** : Provide additional grouping mechanism between projects. They can be nested.
- **Organization** : Represent an organization and the root node of Google Cloud resource hierarchy




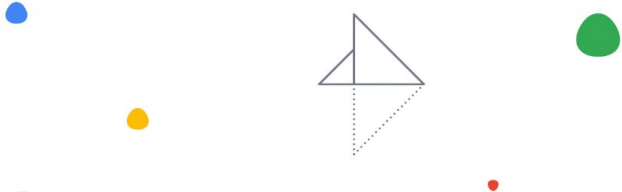
# Google Cloud Console


 bintang-project

Search (/) for resources, docs, products, and more

Search











## Welcome


You're working in [bintang-project](#)


Project number: 760710643234  Project ID: bintang-project-404617 

[Dashboard](#) [Recommendations](#)


 Create a VM


 Run a query in BigQuery


 Create a GKE cluster


 Create a storage bucket


### Quick access


 APIs & Services


 IAM & Admin


 Billing


 Compute Engine

 Cloud Storage

 BigQuery

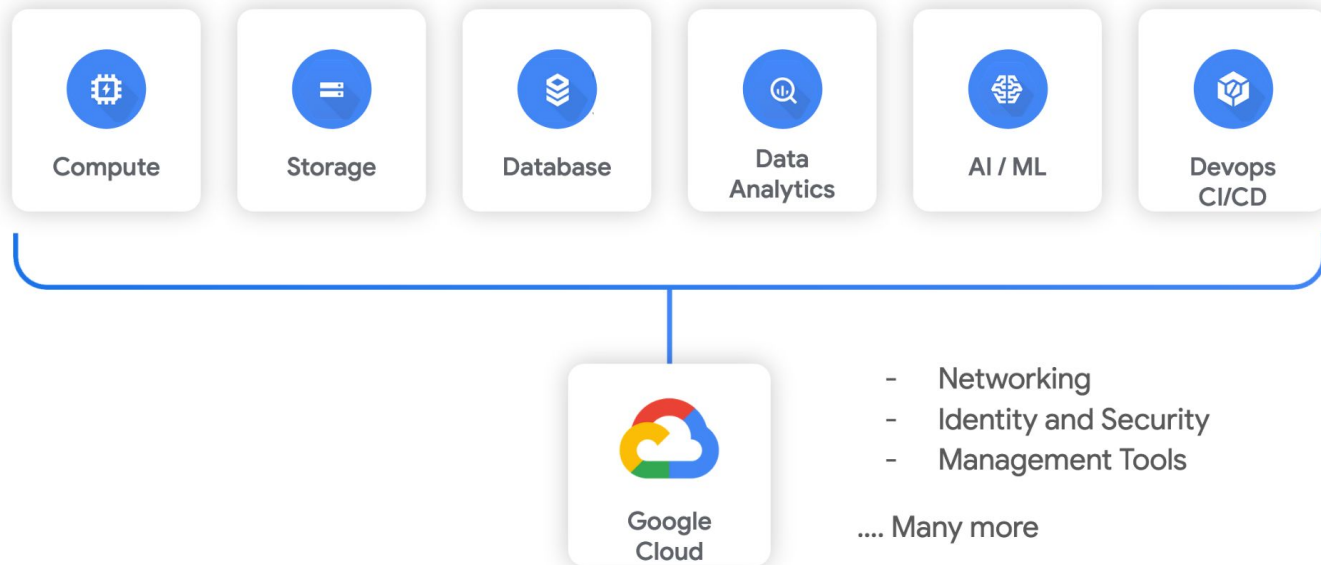
 VPC network

 Kubernetes Engine

 [View all products](#)



# Google Cloud Platform (GCP)



# gcloud CLI

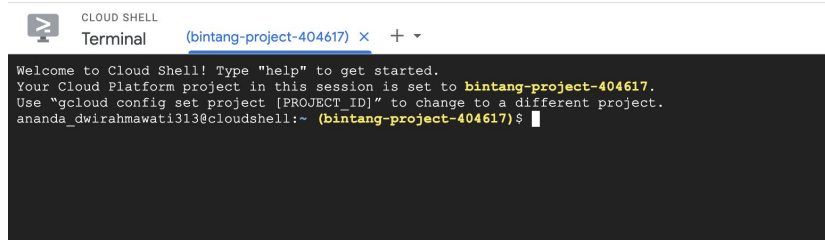
**gcloud CLI** is a set of tools for creating and managing **Google Cloud resources**:

- Compute Engine virtual machine instances
- Cloud SQL instances
- Google Kubernetes Engine clusters
- Dataproc clusters and jobs
- Cloud DNS managed zones and record sets
- Cloud Deployment Manager deployments



# Cloud Shell

## Cloud Shell terminal

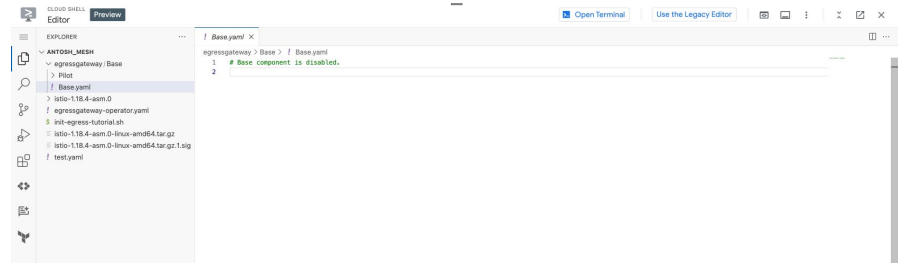


The screenshot shows the Cloud Shell terminal interface. At the top, it says "CLOUD SHELL" and "Terminal (bintang-project-404617)". Below this, a welcome message is displayed: "Welcome to Cloud Shell! Type 'help' to get started. Your Cloud Platform project in this session is set to **bintang-project-404617**. Use 'gcloud config set project [PROJECT\_ID]' to change to a different project." The prompt "ananda\_dwirahmawati313@cloudshell:~ (bintang-project-404617) \$" is shown at the bottom.

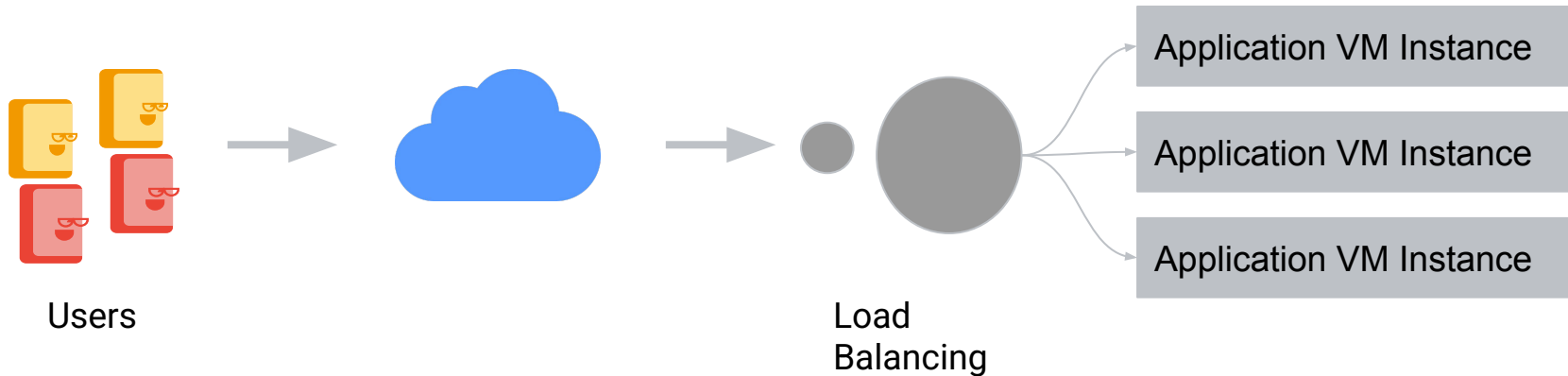
```
CLOUD SHELL
Terminal (bintang-project-404617) x + v

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to bintang-project-404617.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
ananda_dwirahmawati313@cloudshell:~ (bintang-project-404617) $
```

## Cloud Shell editor



# Handle heavy traffic with load balancing



# Tips!

1. Use managed services whenever possible
2. Automate tasks to save time and money
3. Monitor your resources and costs
4. Keep your software up to date
5. Have fun!

[Developer cheat sheet](#)[Map view](#)[List view](#)[Get the poster on GitHub](#)[Architecture](#)

## Compute

Scalable VMs and Containers



Bare Metal Solution



GKE



Blockchain Node Engine



Shielded VMs



Cloud Run



Backup and DR Service

## Storage

Long and short term storage



Cloud Storage



AlloyDB



Cloud Bigtable

## Database

Relational and non-relational databases



Cloud Memorystore



BigQuery BI Engine



BigQuery GIS



Cloud Spanner



Analytics Hub



BigQuery

## Data Analytics

Collect, store, process, and analyze data



App Engine



Batch



Cloud Functions



Sole-tenant Nodes



Persistent Disk



Cloud Filestore



Local SSD



Vertex AI Predictions



Cloud SQL Insights



Cloud Firestore



Cloud SQL



Database Service



Compute Engine



Preemptible VMs



VMware Engine

## AI/ML

Create & use ML models



Deep Learning Containers



Vertex AI Feature Store



Looker



Data Studio



BigQuery DTS



BigQuery



Speech-To-Text



Cloud Translation



AutoML



Document AI



Vertex AI Pipelines



Backend Service



Dataprep by Trifacta



Data Catalog



Cloud Functions



Vertex AI Data Labeling



Cloud Vision



Cloud TPU



Vertex AI



Vertex Explainable AI



Anthos Service Mesh



Public Datasets



Datastream



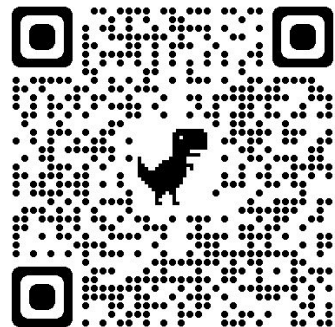
Dataflow



Dataform



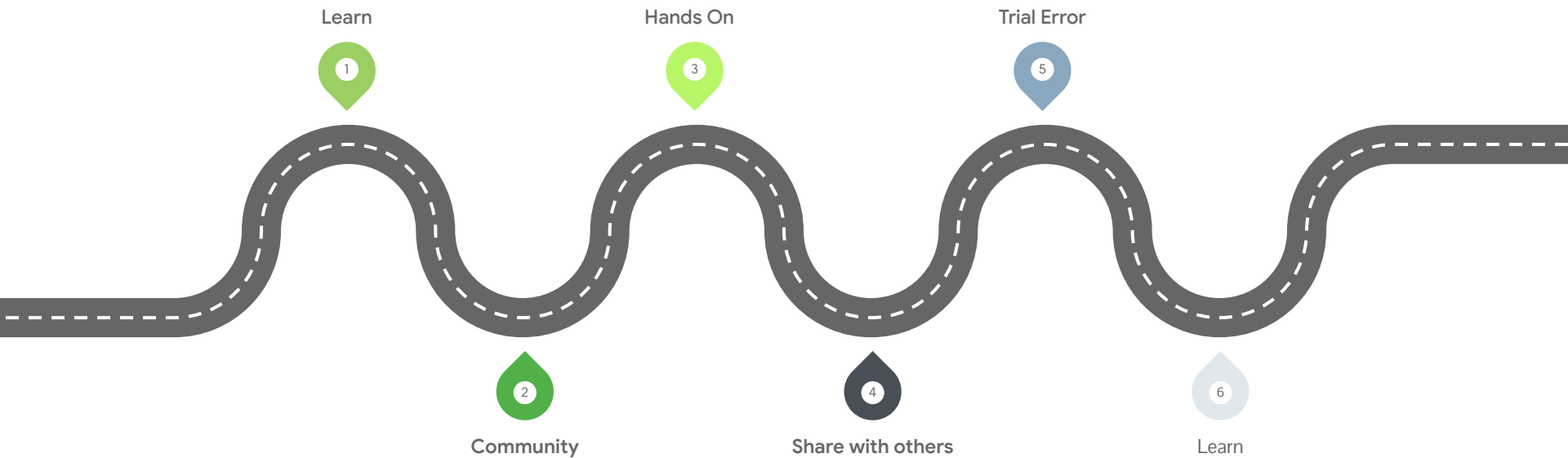
Dataproc





# Leverage cloud skills to launch your startup or land your first job!





Keep the learning going ....

devfest

<http://goo.gle/google-cloud-edu>



```
Text(  
  'Section Title',  
  style: TextStyle(  
    color: Colors.green[200],  
  ),  
),  
),  
s.star,  
r: Colors.green[500],  
Text('23'),
```

# devfest



**Thank you!**