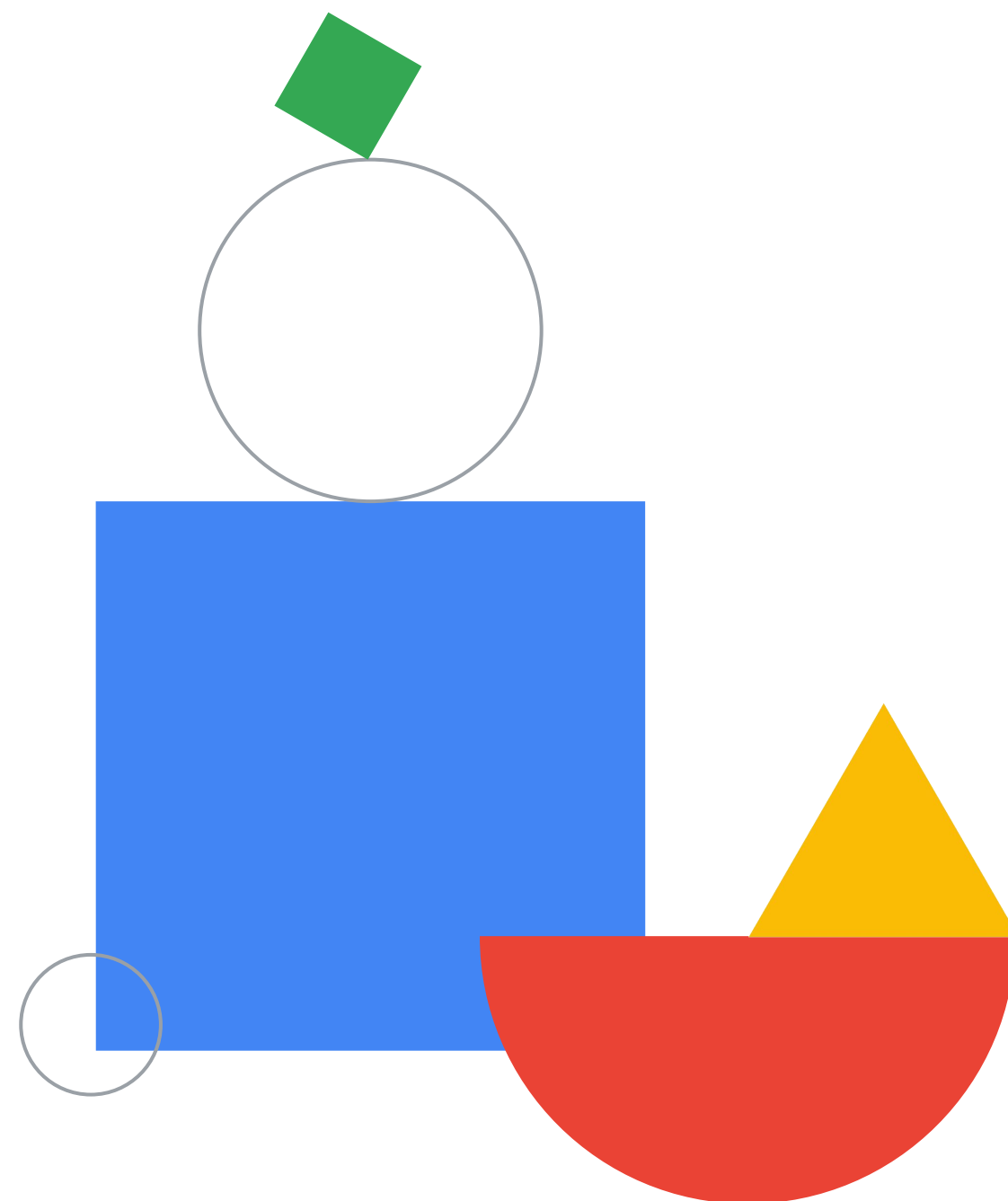


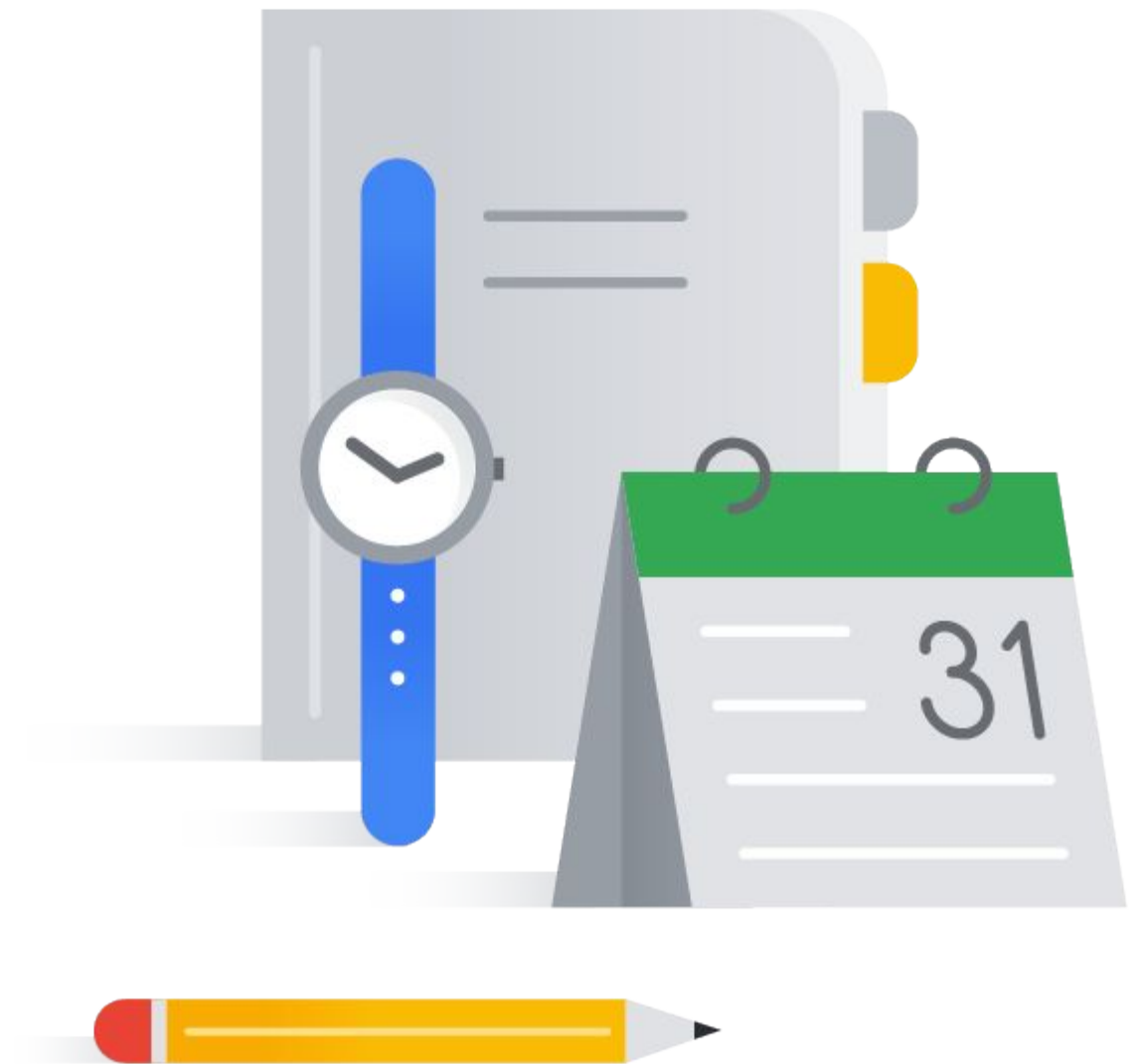
Preparing for Your Professional Cloud Architect Journey

Introduction



Course agenda

- | | |
|---|--|
| 0 | Introduction |
| 1 | Designing and Planning a Cloud Solution Architecture |
| 2 | Managing and Provisioning a Solution Infrastructure |
| 3 | Designing for Security and Compliance |
| 4 | Analyzing and Optimizing Technical and Business Processes |
| 5 | Managing Implementation and Ensuring Solution and Operations Reliability |
| 6 | Case Study Preparation and Your Next Steps |



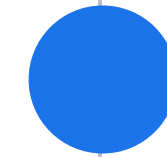


Module agenda

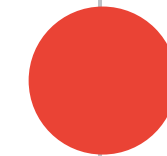
- 01 What is the role of a Professional Cloud Architect?
- 02 Resources to support your certification journey
- 03 Creating your study plan



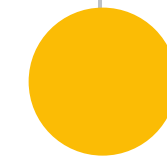
Why become Google certified?



Gain industry recognition!

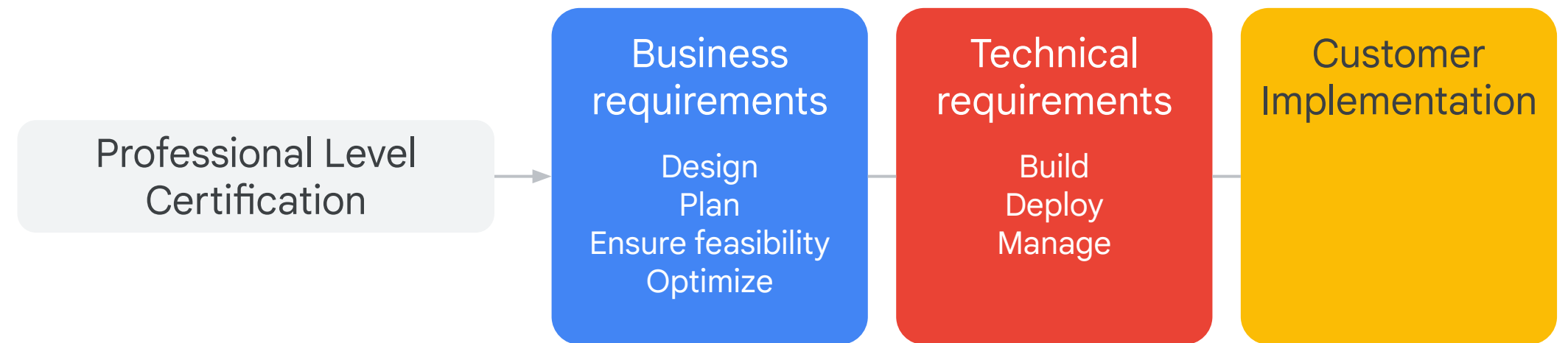


Validate your technical expertise!

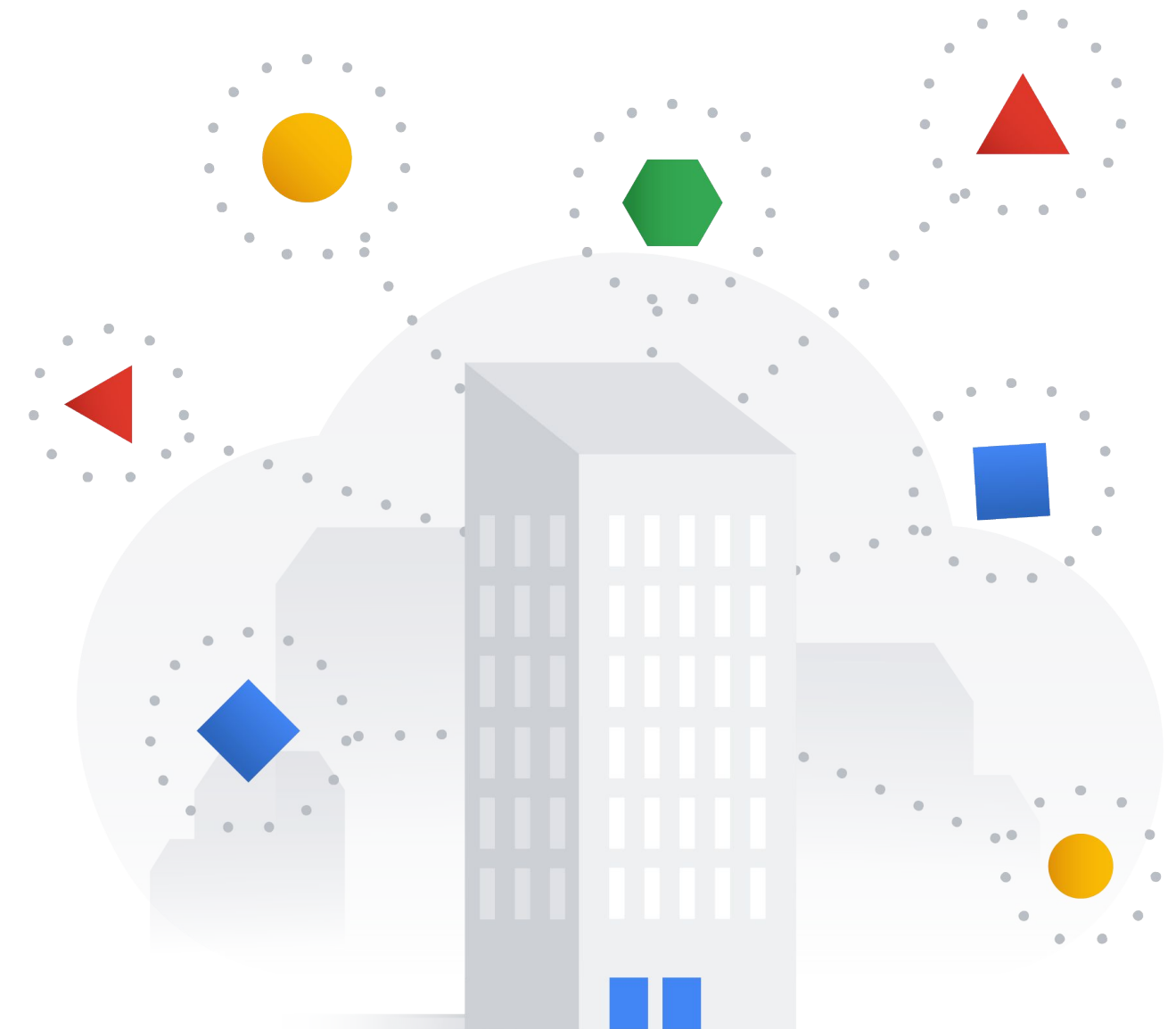


Take your career to the next level!

What is a Professional certification?

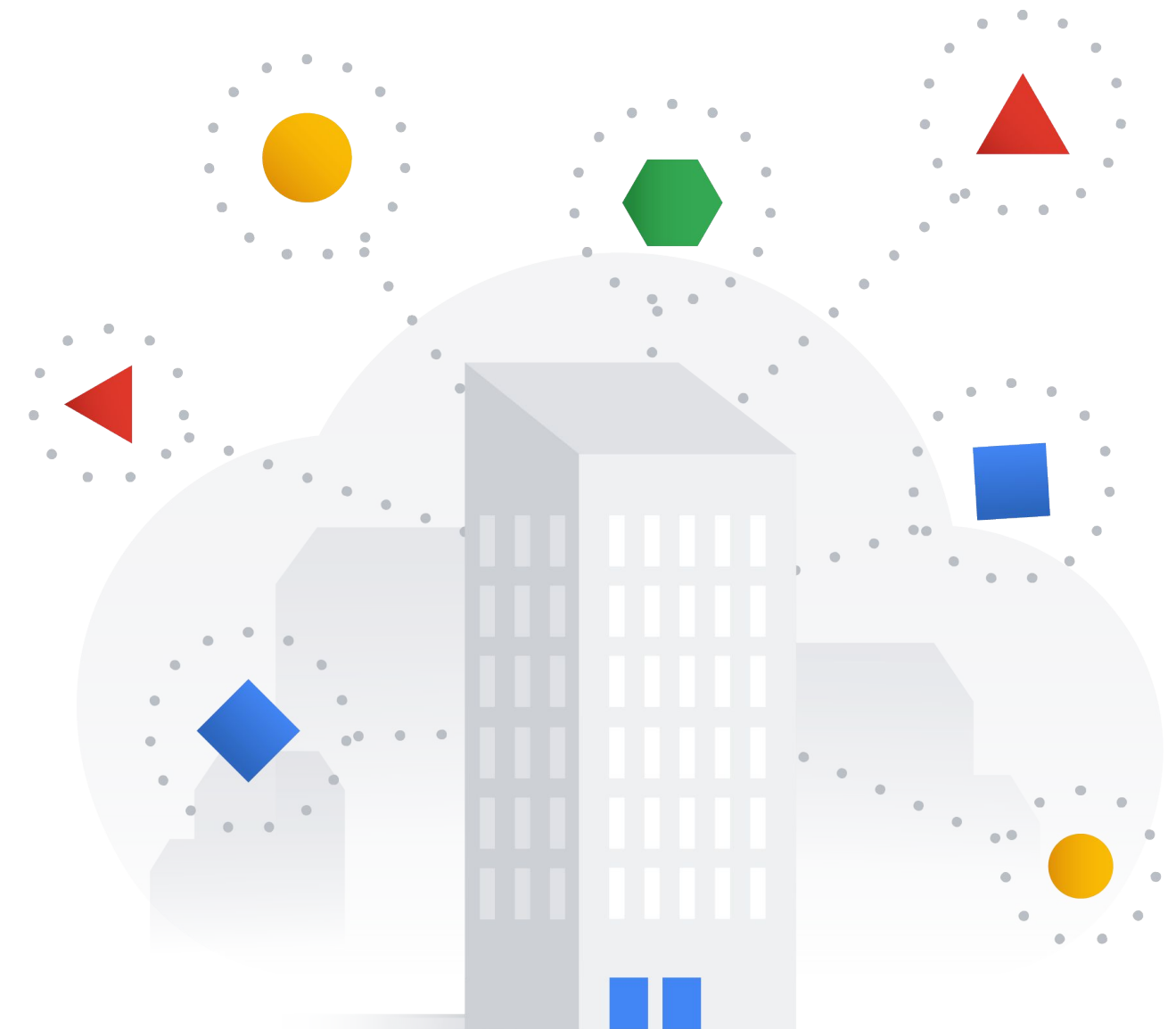


What is the role of a Professional Cloud Architect?



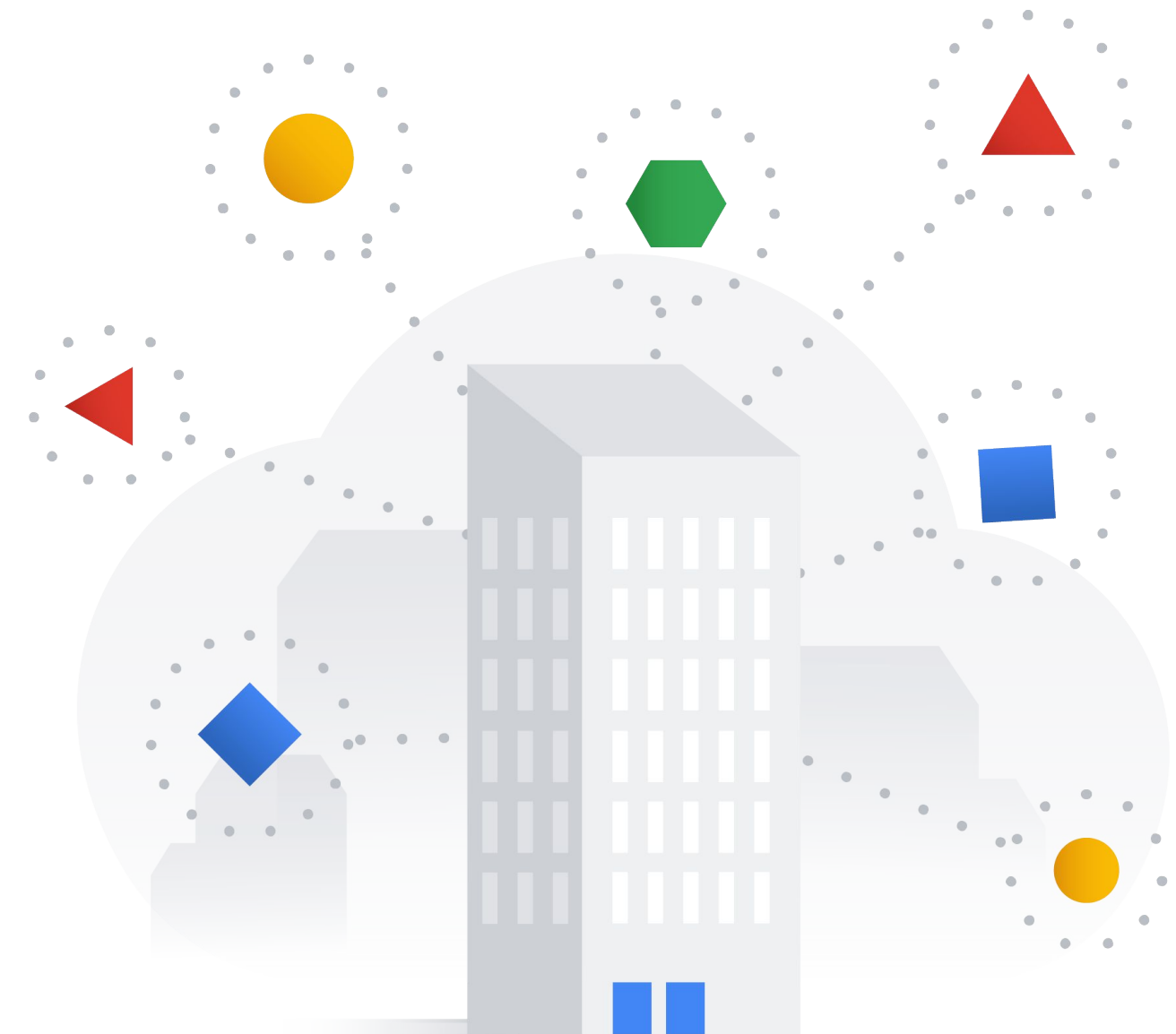
What is the role of a Professional Cloud Architect?

- Enables organizations to leverage Google Cloud technologies
- Designs, develops, and manages solutions to drive business objectives



What is the role of a Professional Cloud Architect?

- Should be proficient in:
 - Enterprise cloud strategy
 - Solution design
 - Architectural best practices
- Should be experienced in software development methodologies including multi-tiered distributed applications which span multicloud or hybrid environments
- For more information, visit the [Professional Cloud Architect certification](#) page





Company overview

An online direct-to-consumer Chicago-Based footwear and apparel retailer founded in 2008 and acquired in 2010.



Initiatives and challenges

- Delivery by Drone (BETA)
- Partner APIs
- Social Integration Service (Proof of Concept)

Designing a solution infrastructure for Cymbal Direct

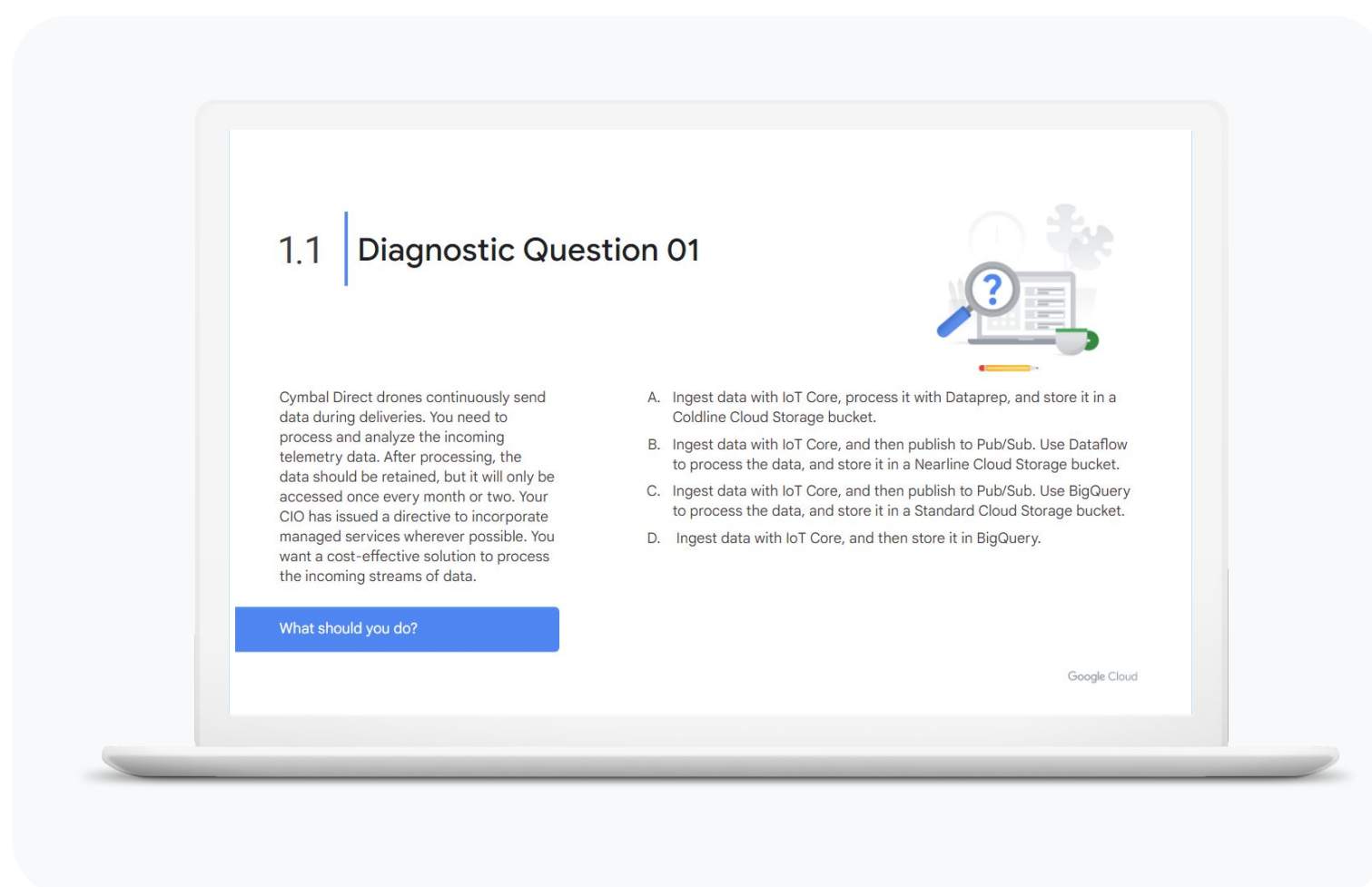


Understand the scope of the exam based on the Professional Cloud Architect Exam Guide.

[Professional Cloud Architect Certification Exam Guide](#)



Separation between exam and course developers



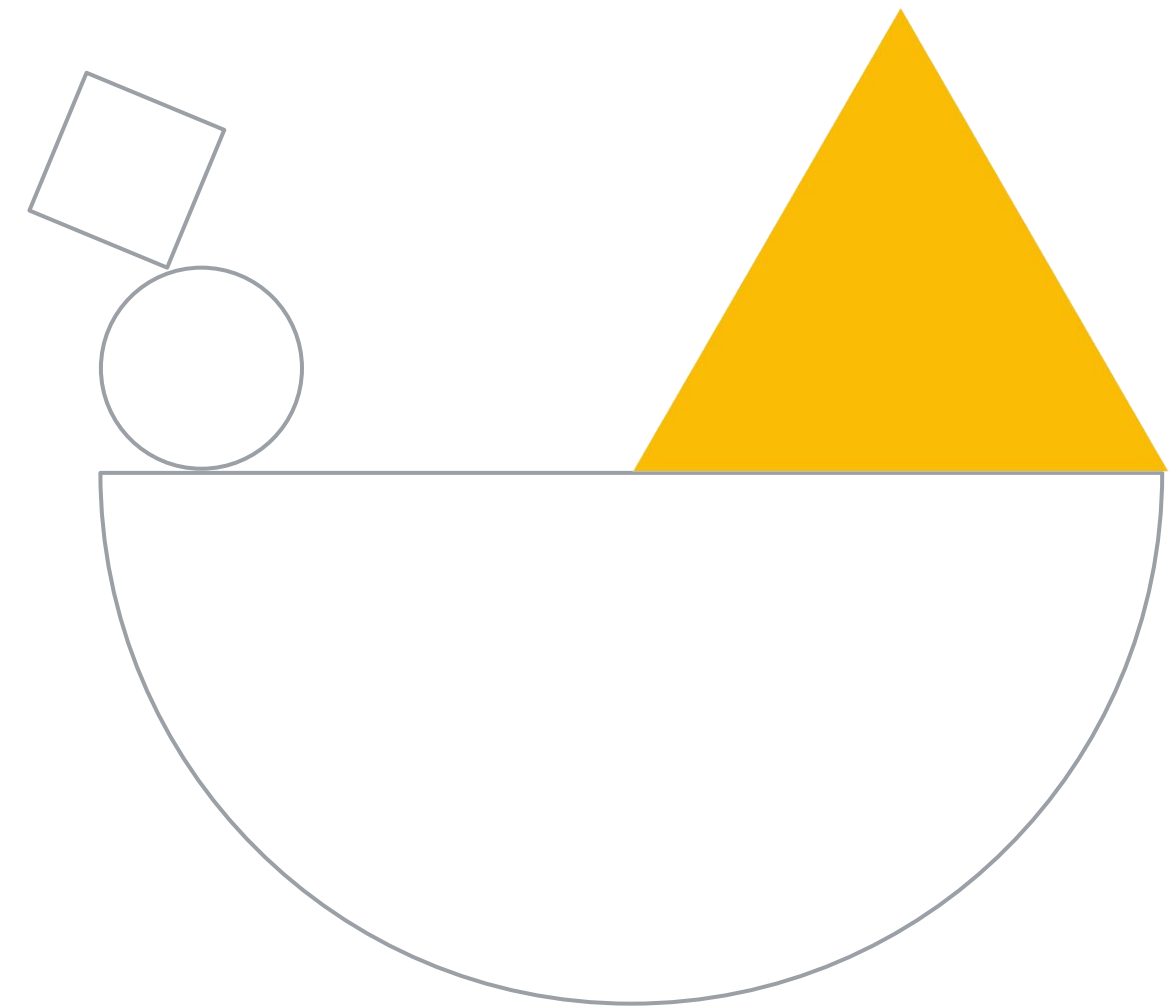
Highlight what you know/don't know to prepare your exam study plan

Exam Questions



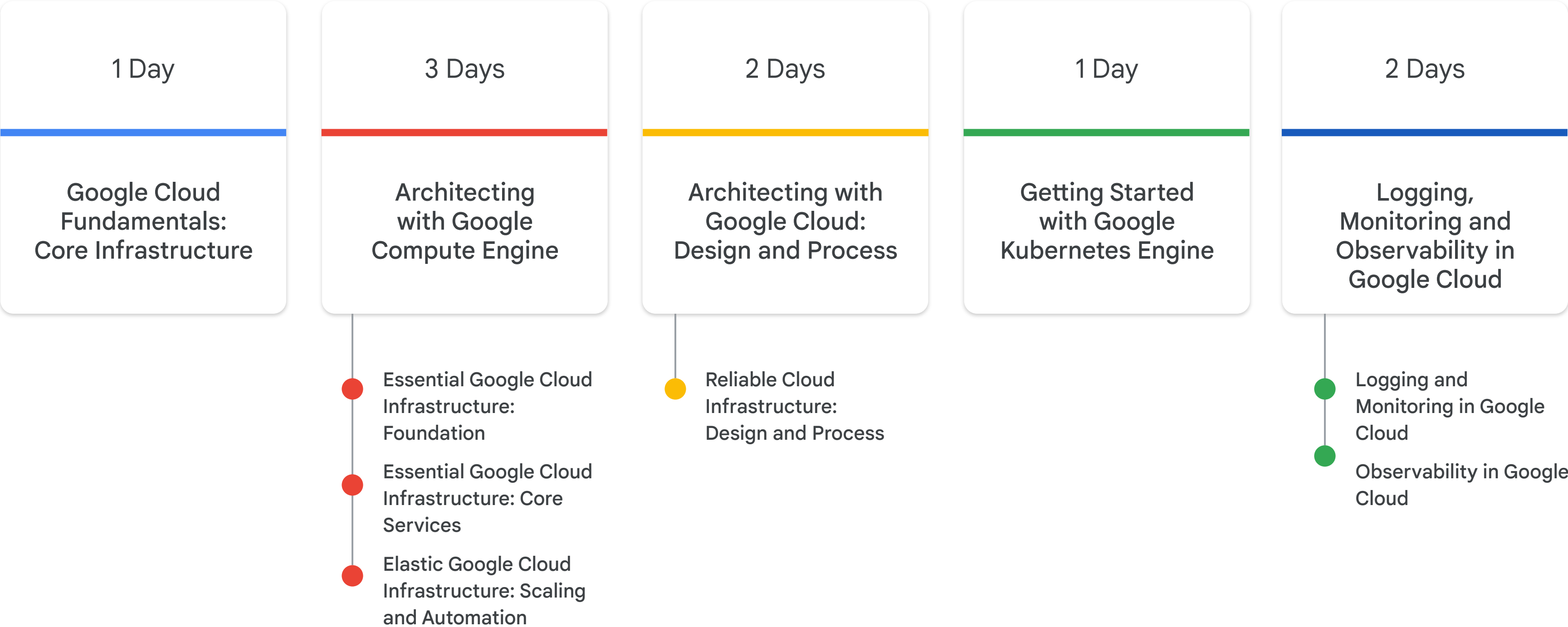
Determine if you have skills and knowledge to earn Professional Cloud Architect certification

Resources to support your certification journey



Courses and skill badges in the learning path

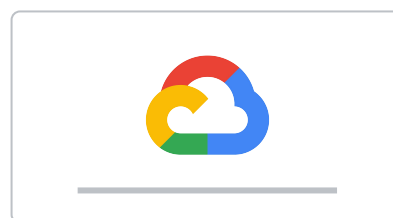
Courses



Courses and skill badges in the learning path

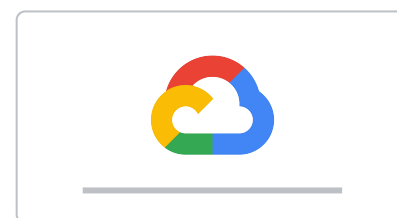
Skill badges

4 Hours



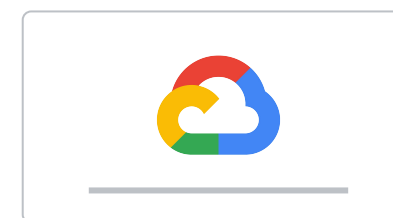
Implement Load Balancing on Compute Engine

4 Hours



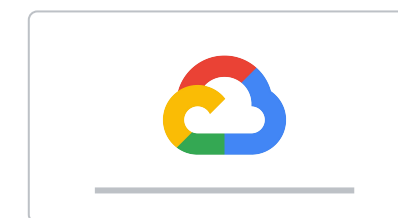
Set Up an App Dev Environment on Google Cloud

6 Hours



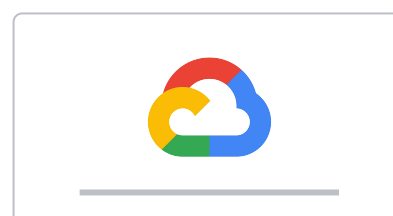
Develop your Google Cloud Network

5 Hours



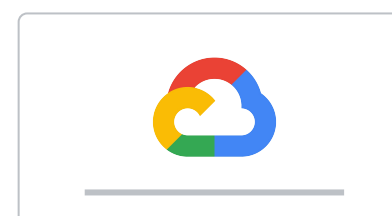
Build Infrastructure with Terraform on Google Cloud

1 Day



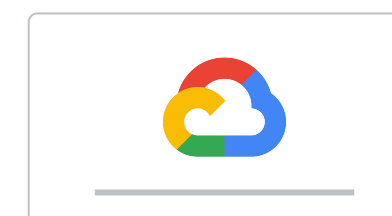
Set Up a Google Cloud Network

1 Day



Optimize Costs for Google Kubernetes Engine

7 Hours



Cloud Architecture: Design, Implement, and Manage

Case studies



Some of the questions on the certification exam may refer to a case study. Review the current case studies in the exam guide.

[Professional Cloud Architect
Certification Exam Guide](#)





Anatomy of a case study

- Company overview
- Solution concept
- Existing technical environment
- Business requirements
- Technical requirements
- Executive statement

Sample questions

You set up an autoscaling managed instance group to serve web traffic for an upcoming launch. After configuring the instance group as a backend service to an HTTP(S) load balancer, you notice that virtual machine (VM) instances are being terminated and re-launched every minute. The instances do not have a public IP address. You have verified that the appropriate web response is coming from each instance using the curl command. You want to ensure that the backend is configured correctly. What should you do?

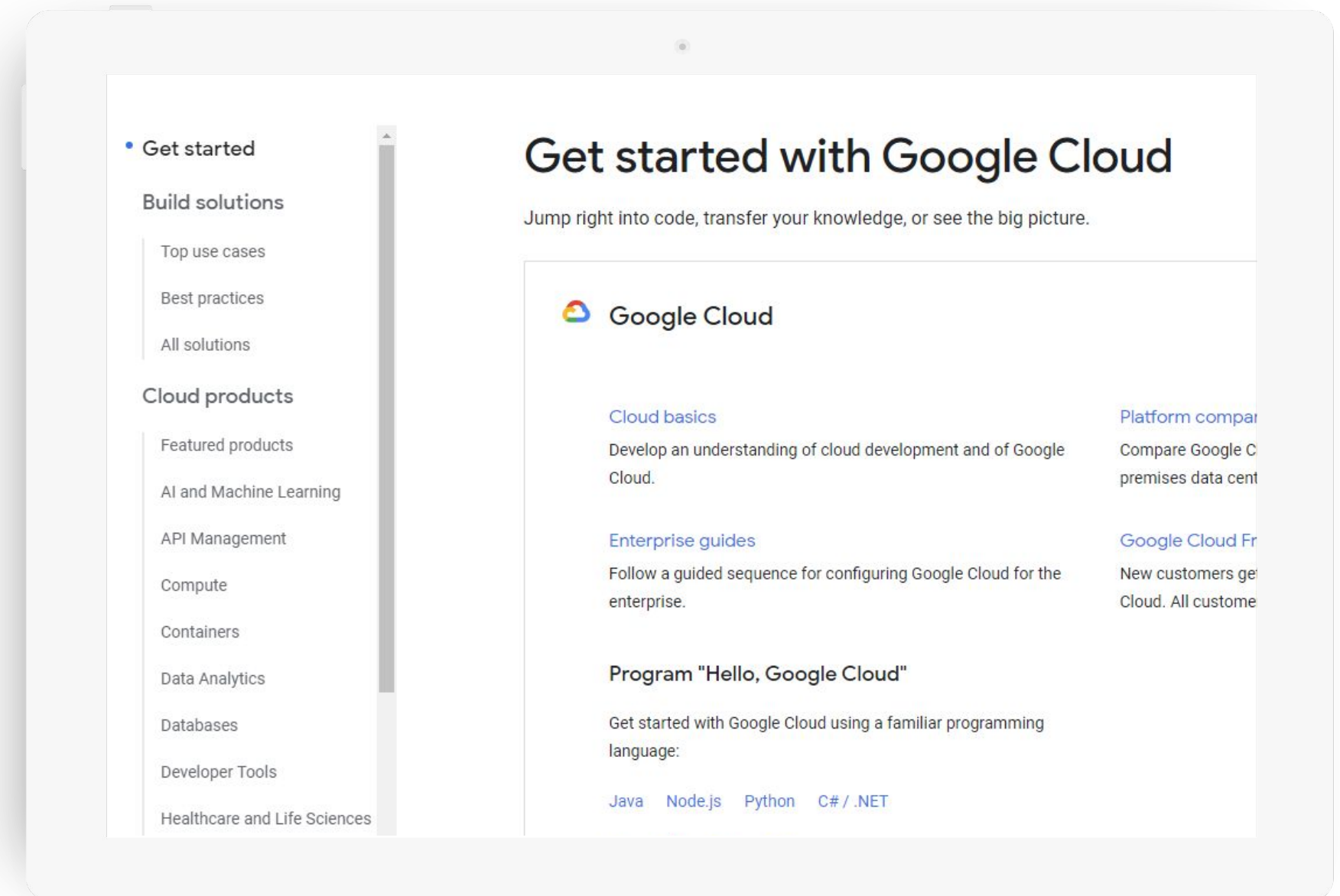
- A. Ensure that a firewall rule exists to allow source traffic on HTTP/HTTPS to reach the load balancer.
- B. Assign a public IP address to each instance, and configure a firewall rule to allow the load balancer to reach the instance public IP address.
- C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instance in the instance group.
- D. Create a tag on each instance with the name of the load balancer. Configure a firewall rule with the name of the load balancer as the source and the instance tag as the destination.



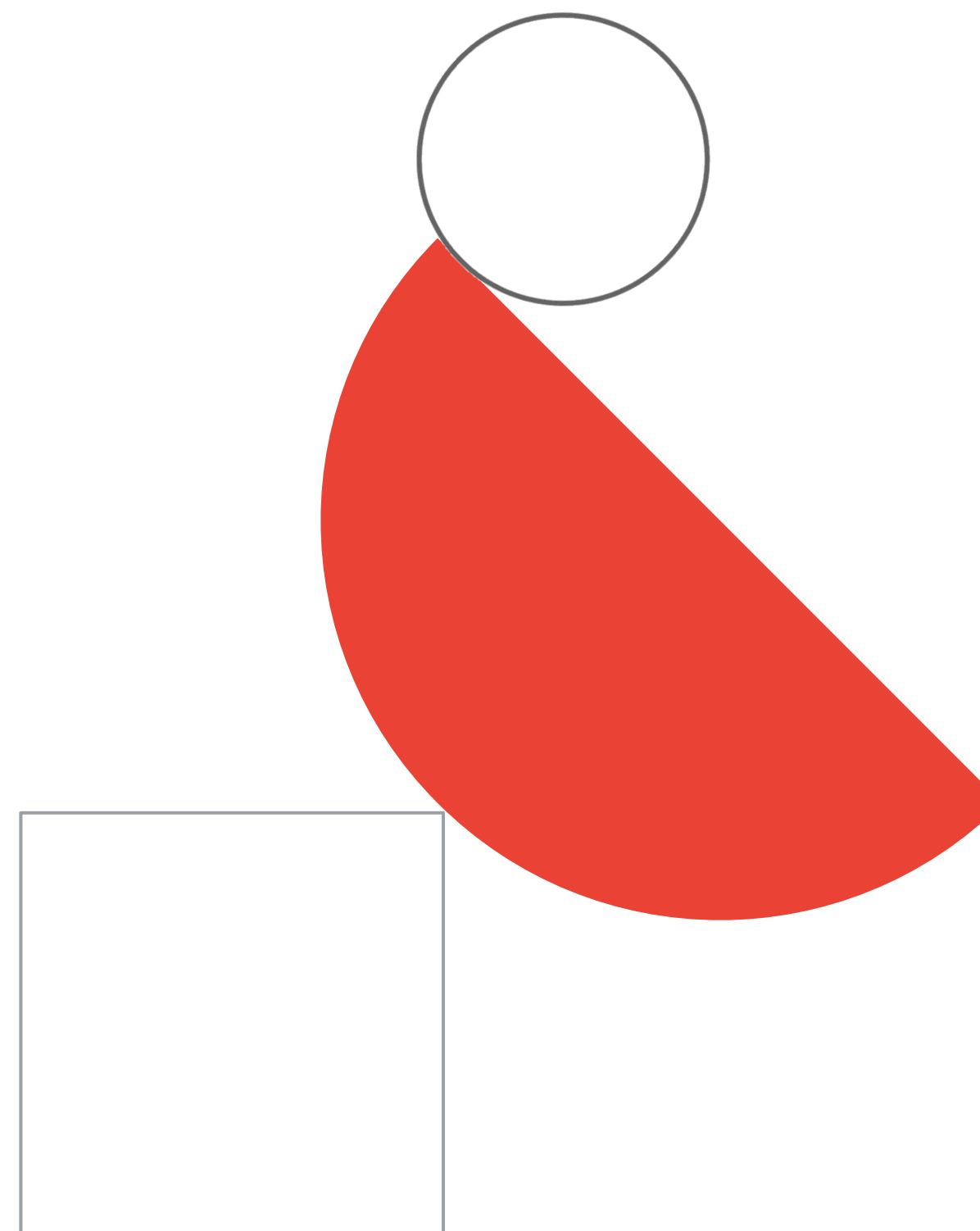
Product Documentation

Google supplies official public documentation for its products and services.

cloud.google.com/docs

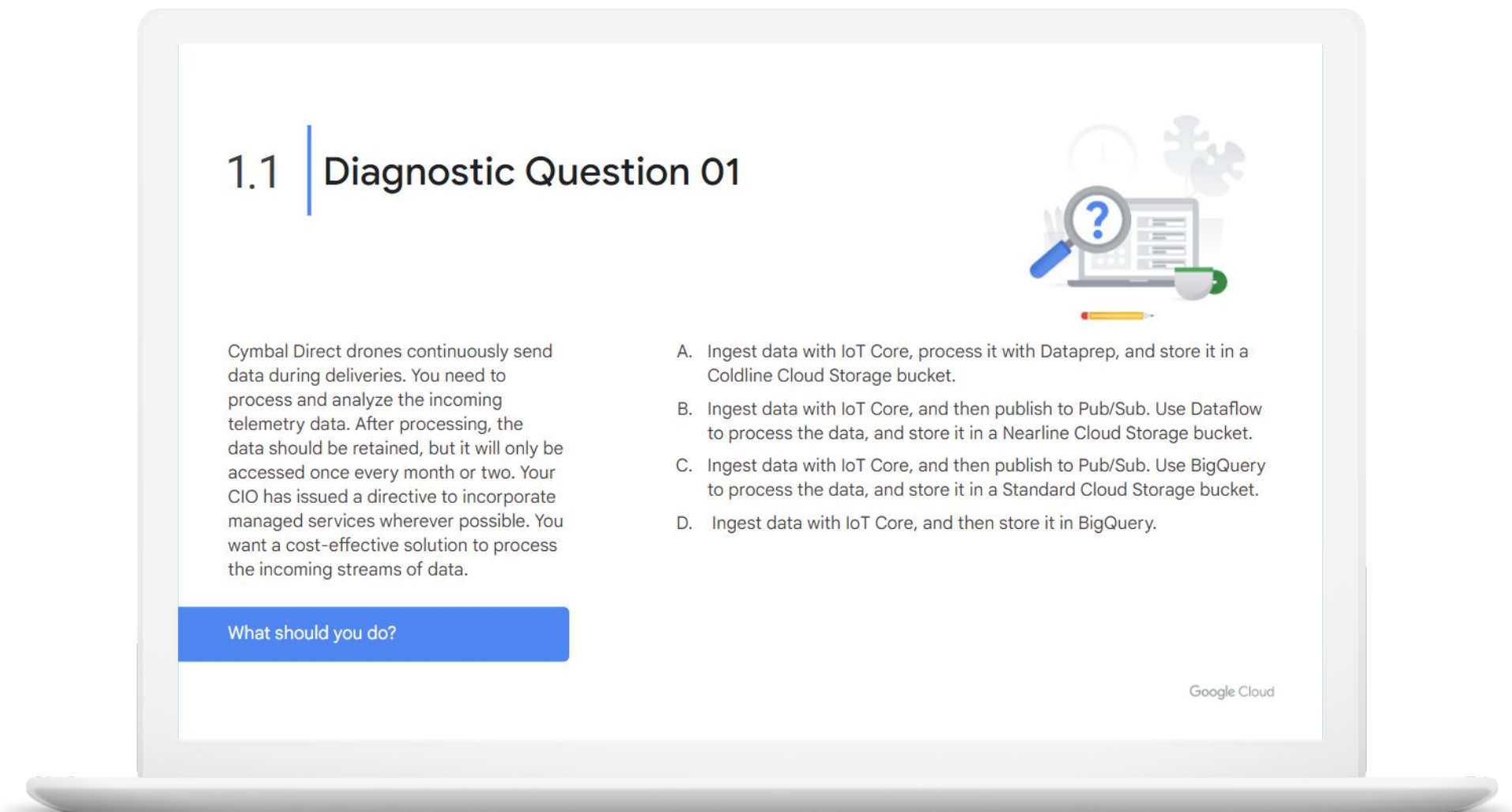


Creating your study plan



Diagnostic questions:

Identify areas you need to study and resources to support you



Review diagnostic questions

1.1 | Diagnostic Question 01 Discussion



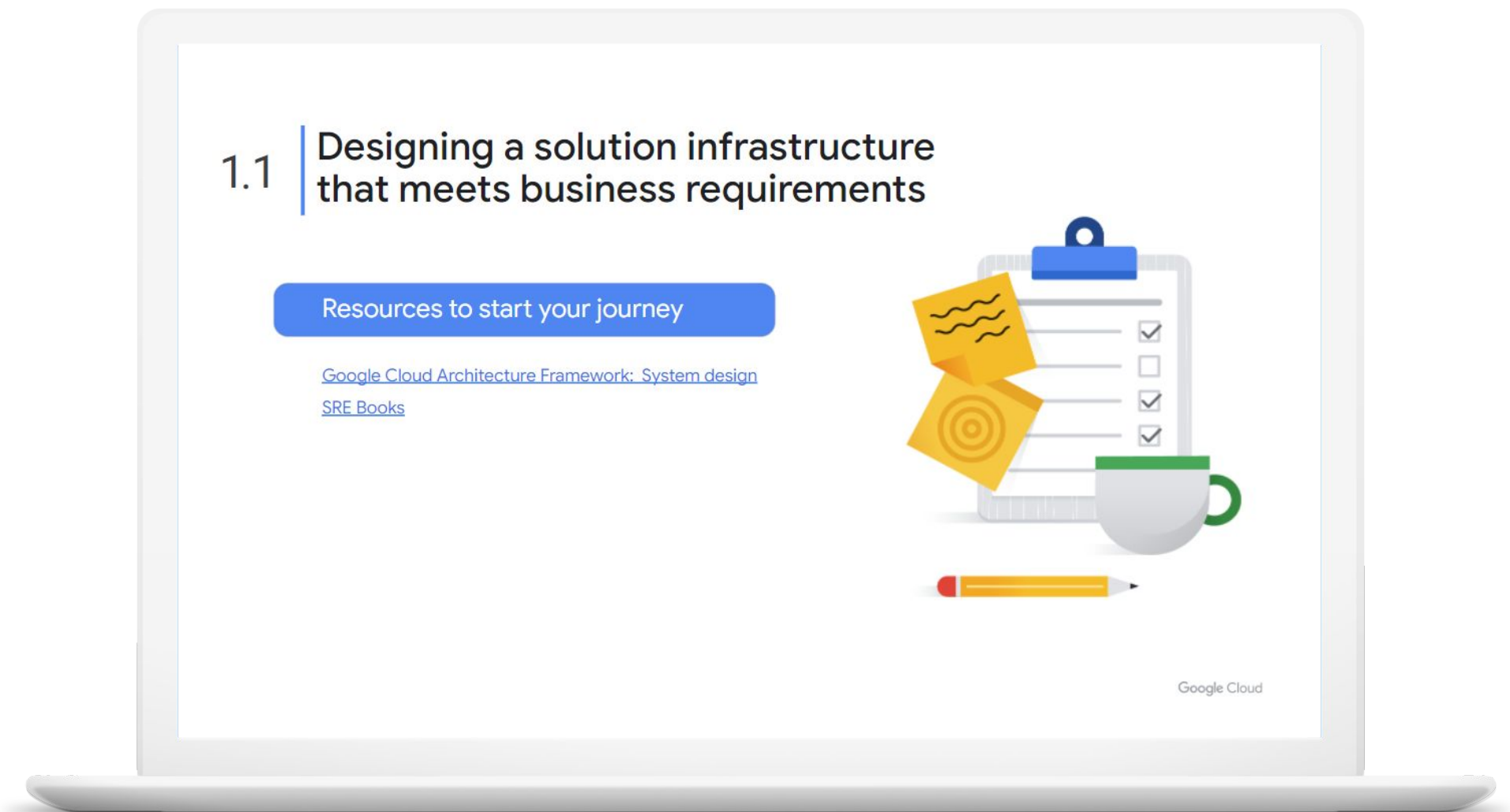
Cymbal Direct drones **continuously send data** during deliveries. You need to **process and analyze the incoming telemetry data**. After processing, the data should be **retained, but it will only be accessed once every month or two**. Your CIO has issued a directive to **incorporate managed services** wherever possible. You want a **cost-effective solution** to process the incoming streams of data.

What should you do?

- A. Ingest data with IoT Core, process it with Dataprep, and store it in a **Coldline Cloud Storage bucket**.
- B. Ingest data with IoT Core, and then publish to Pub/Sub. Use Dataflow to process the data, and store it in a Nearline Cloud Storage bucket.**
- C. Ingest data with IoT Core, and then publish to Pub/Sub. Use BigQuery to process the data, and store it in a **Standard Cloud Storage bucket**.
- D. Ingest data with IoT Core, and then **store it in BigQuery**.

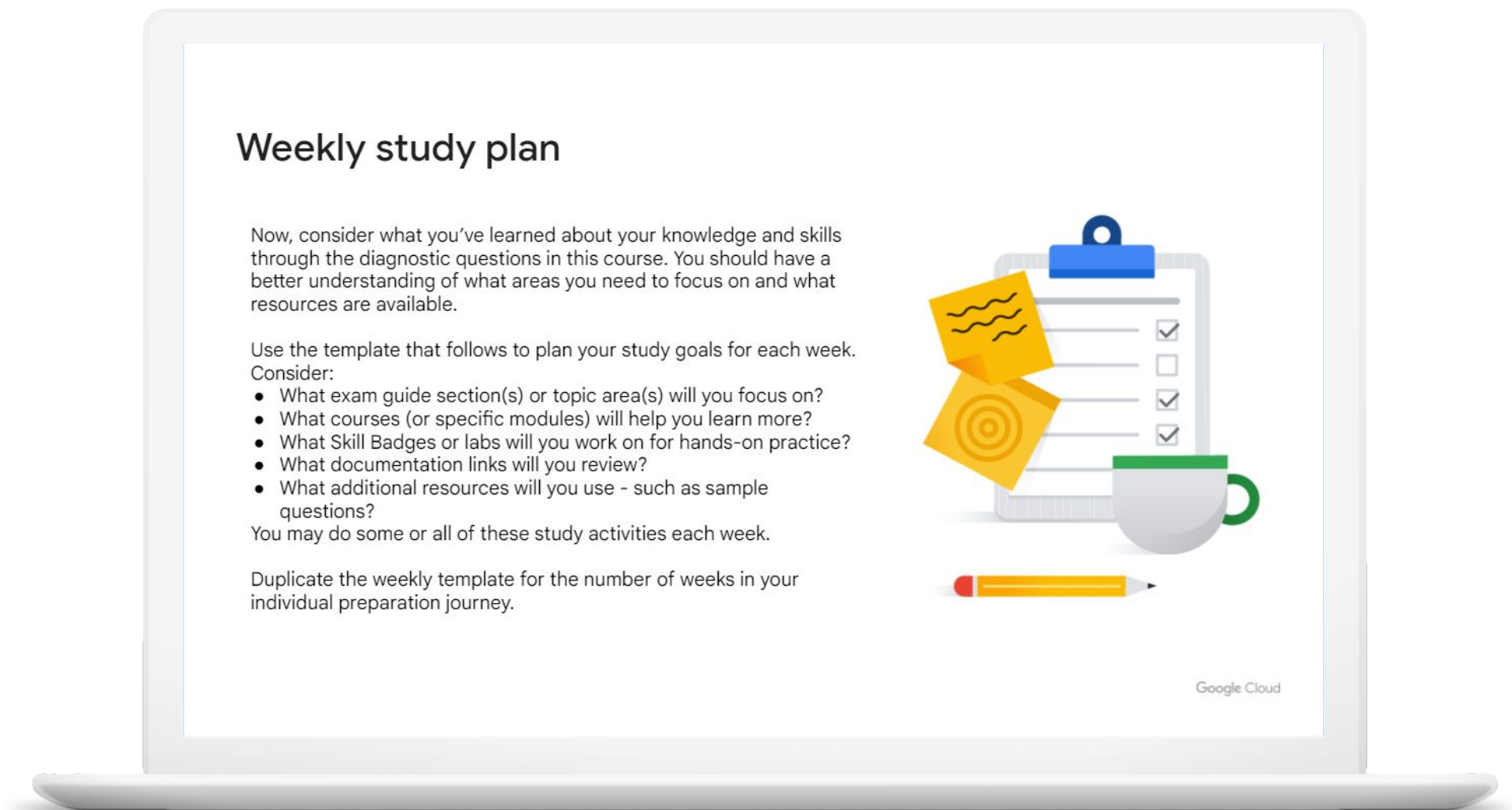
Locate resources:

Take notes in your workbook on the resources and documentation to fill your gaps



Use the workbook:

Plan your study for
each week in the journey



Let's start on your
**Professional Cloud
Architect journey.**

