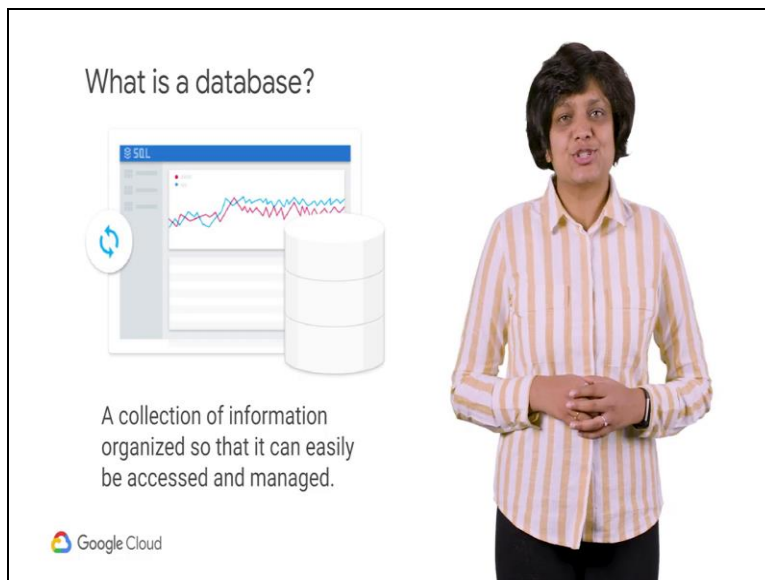


Google Cloud Computing Foundation Course
Priyanka Vergardia
Google Cloud

Lecture-29
SQL Managed Services

In this topic we will discuss the use case for sequel managed services but before you do revisit what database and how it is used.


(Refer Slide Time: 00:10)




A database is a collection of information that is organized so that it can easily be accessed and managed. Users build software application using database is to answer business questions such as buying a ticket, filling a expense report, storing a photo or storing a medical records.

(Refer Slide Time: 00:28)

Get answers fast



- What's this user's name given their sign-in information so I can display it?
- What's the cost of product Y so I can show it on my dynamic webpage?
- What were my top 10 best selling products this month?
- What is the next ad I should show the user currently browsing my site?




Google Cloud

Computer applications run databases to fast answer question like what is this users name given their sign in information so I can display it. What is the cost of product? Why is I show it on my dynamic work page? What were my top 10 best selling products this month or what is the next ad I should show the user currently browsing my site. App must be able to write data in and read data out from the databases. When a database is used it is usually run by computer applications.


So when it is said that database is useful for X it is usually because it is designed to make answering a question simply fast and efficient for the app.

(Refer Slide Time: 01:14)

Relational databases are the most common



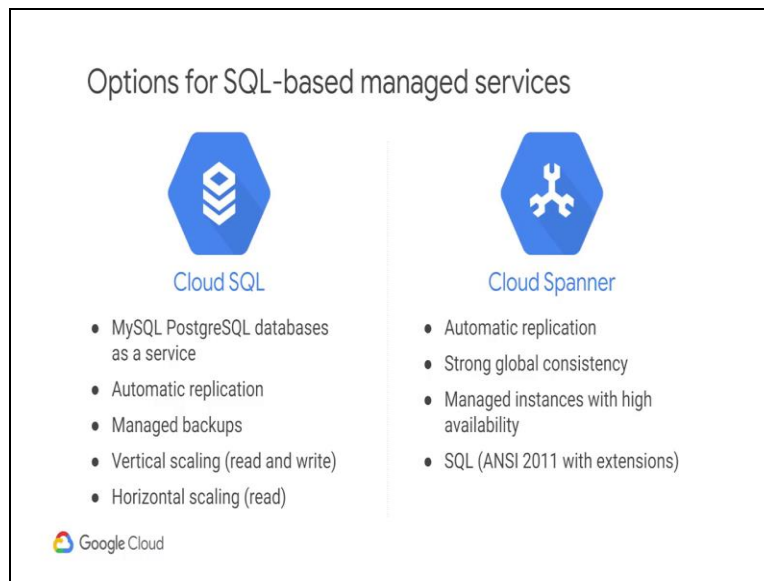
Relational database management systems
= RDBMS
= relational databases
= SQL databases



Google Cloud

Relational database management system abbreviated RDBMS or just relational database. Used extensively the kind of databases encountered most of the time. And they are organized based on the relational model of data because they make use of the structure query language. Relational databases are sometimes call sequel databases. Relational database is a very good when you have a well structured data model and when you need transactions and ability to join data across tables to retrieve Complex combinations of your data.

(Refer Slide Time: 01:50)



GCP offers to manage relational database services. Cloud sequel is a managed my sequel of course a sequel database. When setting up cloud sequel replicas with replication automatic. The infrastructure of this database is managed. This will include through backups, update, spillovers and maintenance. You are still responsible for user's schema and data management. A database can scale horizontally for read using replicas.

For writes you have make the database larger which usually requires rebuild. Cloud spanner is strongly consistent horizontally scalable managed relational database. This service can run your database across multiple nodes either within the single region or multiple regions. The managed server are automatically replicate data to the nodes. Spanner is ANSI 2011 compliant extensions