



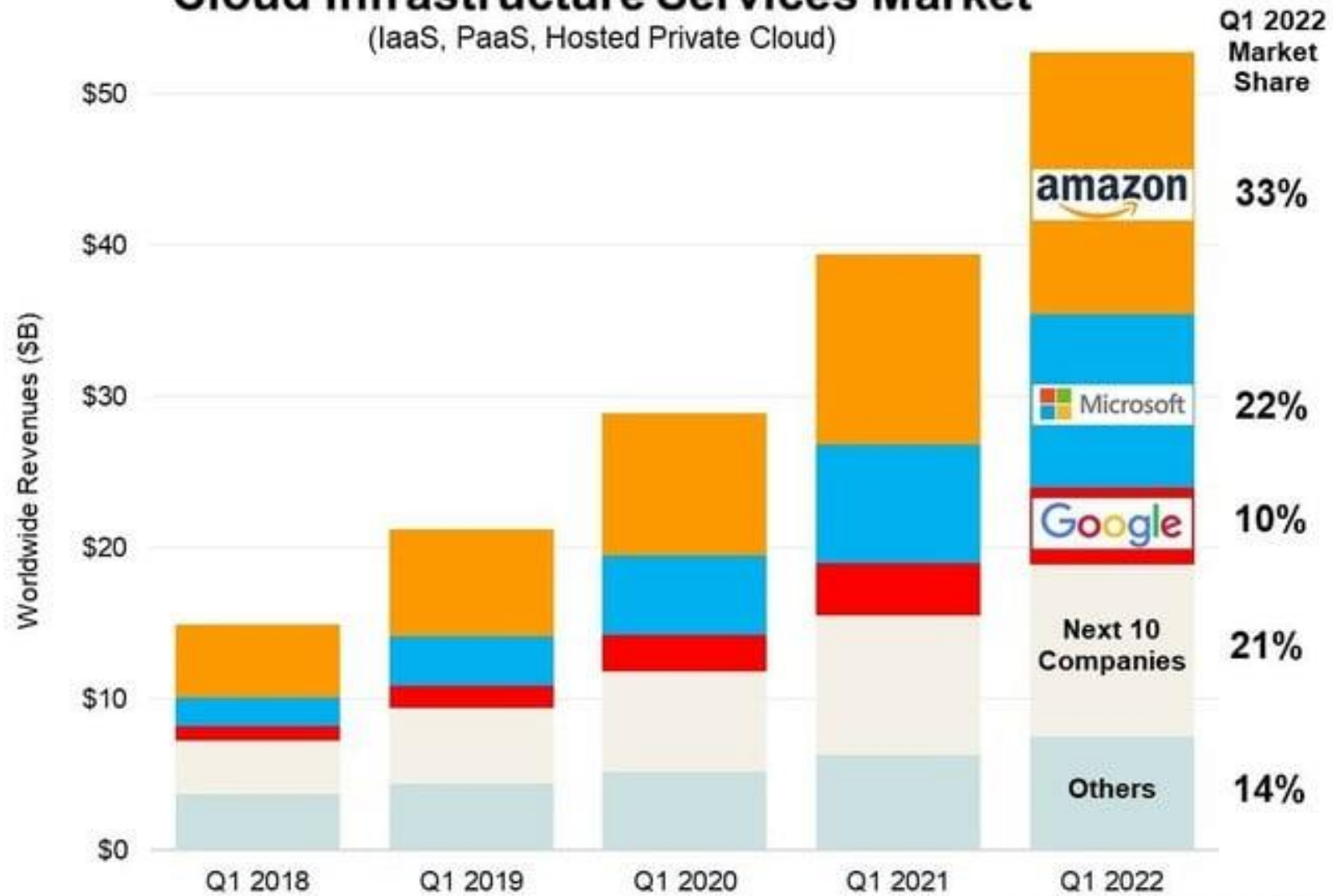
Odisee
DE CO-HOGESCHOOL

Cloud NoSqlToepassingen



Cloud Infrastructure Services Market

(IaaS, PaaS, Hosted Private Cloud)





AWS



<https://youtu.be/3XFODda6YXo>

Free tier

- Heel wat gratis om te experimenteren
- Maar pas op:
 - ─ Sluit alles af als je gedaan hebt
 - ─ Anders blijven je resources lopenEn de kosten ook
- Je moet een creditcard koppellen hiervoor

Free Tier details

Filter by:
[Clear all filters](#)

▼ Tier Type

- ☐ Featured
- ☐ 12 Months Free
- ☒ Always Free
- ☐ Trials

▼ Product Categories

- ☐ Analytics
- ☐ Application Integration
- ☐ Business Productivity
- ☐ Compute
- ☐ Containers
- ☐ Customer Engagement
- ☐ Database
- ☐ Developer tools
- ☐ End User Computing
- ☐ Front-End Web & Mobile
- ☐ Game Tech
- ☐ Internet of Things
- ☐ Machine Learning
- ☐ Management & Governance
- ☐ Media Services
- ☐ Migration & Transfer
- ☐ Networking & Content Delivery
- ☐ Robotics
- ☐ Security, Identity, & Compliance
- ☐ Serverless
- ☐ Storage

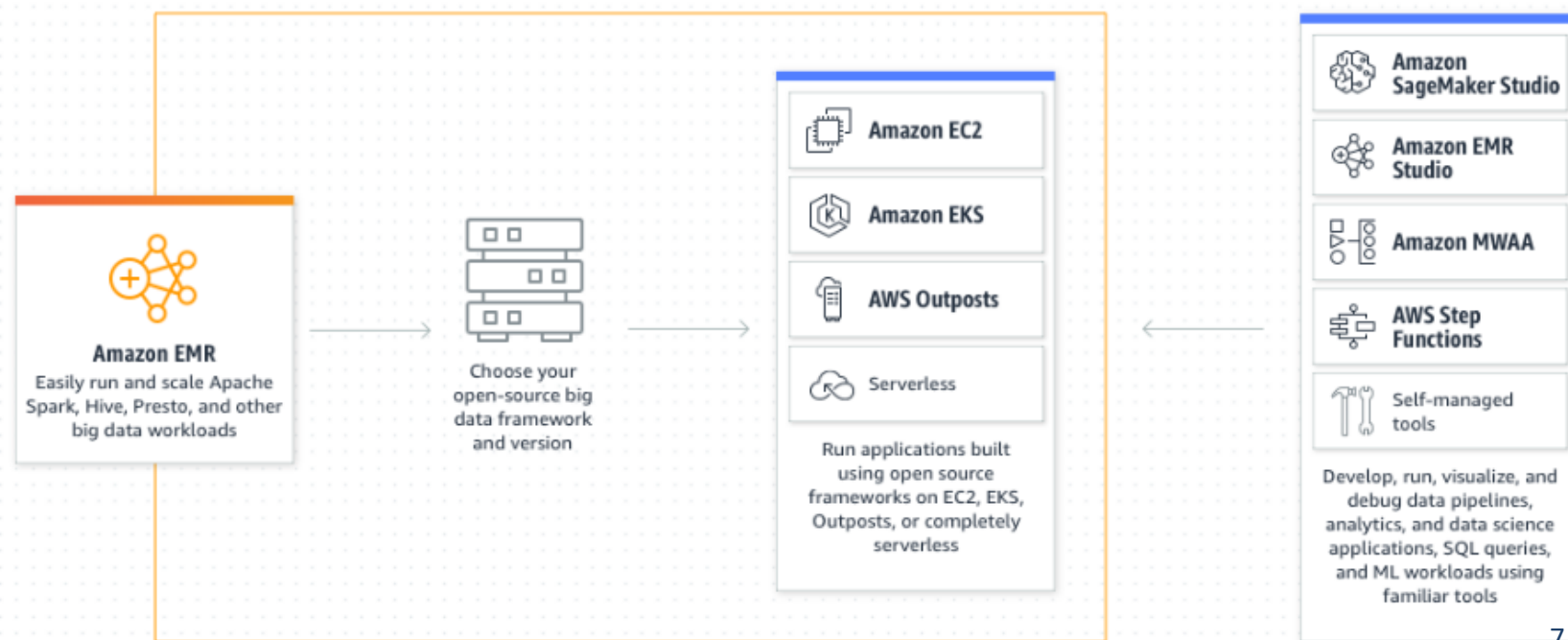
Search free tier products

<p>COMPUTE</p> <p>Free Tier 12 MONTHS FREE</p> <p>Amazon EC2</p> <p>750 Hours</p> <p>per month</p> <p>Resizable compute capacity in the Cloud.</p> <p>750 hours per month of Linux, RHEL, or SLES.</p>	<p>STORAGE</p> <p>Free Tier 12 MONTHS FREE</p> <p>Amazon S3</p> <p>5 GB</p> <p>of standard storage</p> <p>Secure, durable, and scalable object storage infrastructure.</p> <p>5 GB of Standard Storage.</p>	<p>DATABASE</p> <p>Free Tier 12 MONTHS FREE</p> <p>Amazon RDS</p> <p>750 Hours</p> <p>per month of database usage (applicable DB engines)</p> <p>Managed Relational Database Service for MySQL, PostgreSQL, MariaDB, or SQL Server.</p>
<p>DATABASE</p> <p>Free Tier ALWAYS FREE</p> <p>Amazon DynamoDB</p> <p>25 GB</p> <p>of storage</p> <p>Fast and flexible NoSQL database with seamless scalability.</p> <p>25 GB of Storage</p> <p>25 provisioned Write Capacity Units (WCU)</p>	<p>MACHINE LEARNING NEW</p> <p>Free Tier FREE TRIAL</p> <p>Amazon SageMaker</p> <p>2 Months</p> <p>free trial</p> <p>Machine learning for every data scientist and developer.</p> <p>250 hours per month of ml.t3.medium on Amazon SageMaker.</p>	<p>COMPUTE</p> <p>Free Tier ALWAYS FREE</p> <p>AWS Lambda</p> <p>1 Million</p> <p>free requests per month</p> <p>Compute service that runs your code in response to events and automatically manages the compute resources.</p>
<p>ANALYTICS</p>	<p>ANALYTICS NEW</p>	<p>MOBILE</p>

Spark on Amazon?

■ Amazon EMR

- Big data workloads in AWS
- <https://aws.amazon.com/emr/>



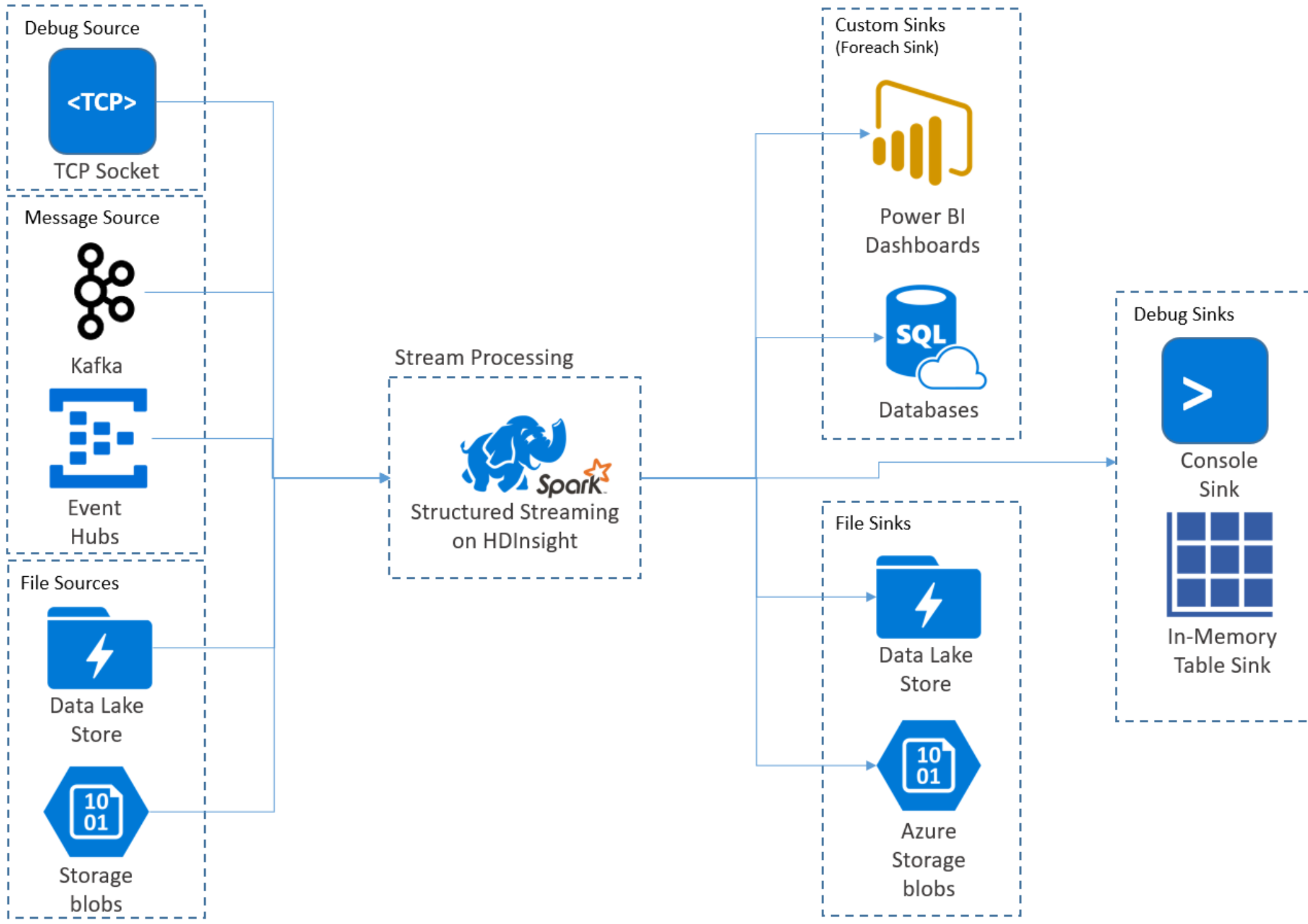


Microsoft - Azure

Wat is Azure?

▣ Microsoft versie van AWS

- Computing resources
 - VMs
 - Azure Functions (lambda functions van AWS)
 - Azure Databricks: Spark on Azure – BigData analytics
- Storage solutions
 - SQL databases
 - Non-SQL databases: CosmosDB, MariaDB, ...
- Machine learning tools





Oefening met Azure

- ▣ Volg deze tutorial en maak de oefening:
 - <https://learn.microsoft.com/en-us/training/modules/explore-non-relational-data-stores-azure/>



Google Cloud



Wat bieden ze aan?

- ▣ Computing

- ▬ VMs, Batch processing en streaming data

- ▣ Storage

- ▬ SQL, Wide-Column (Big Table), Redis (Memorystore), Document based (Firestore)

- ▣ Machine learning in the cloud

Cloud data pipeline

Google Cloud



<https://youtu.be/yVUXvabnMRU>





Firestore

- ▣ Volg dit stappenplan om een firestore account aan te maken en deze aan te spreken vanuit python:
 - ▬ <https://www.freecodecamp.org/news/how-to-get-started-with-firestore-using-python/>

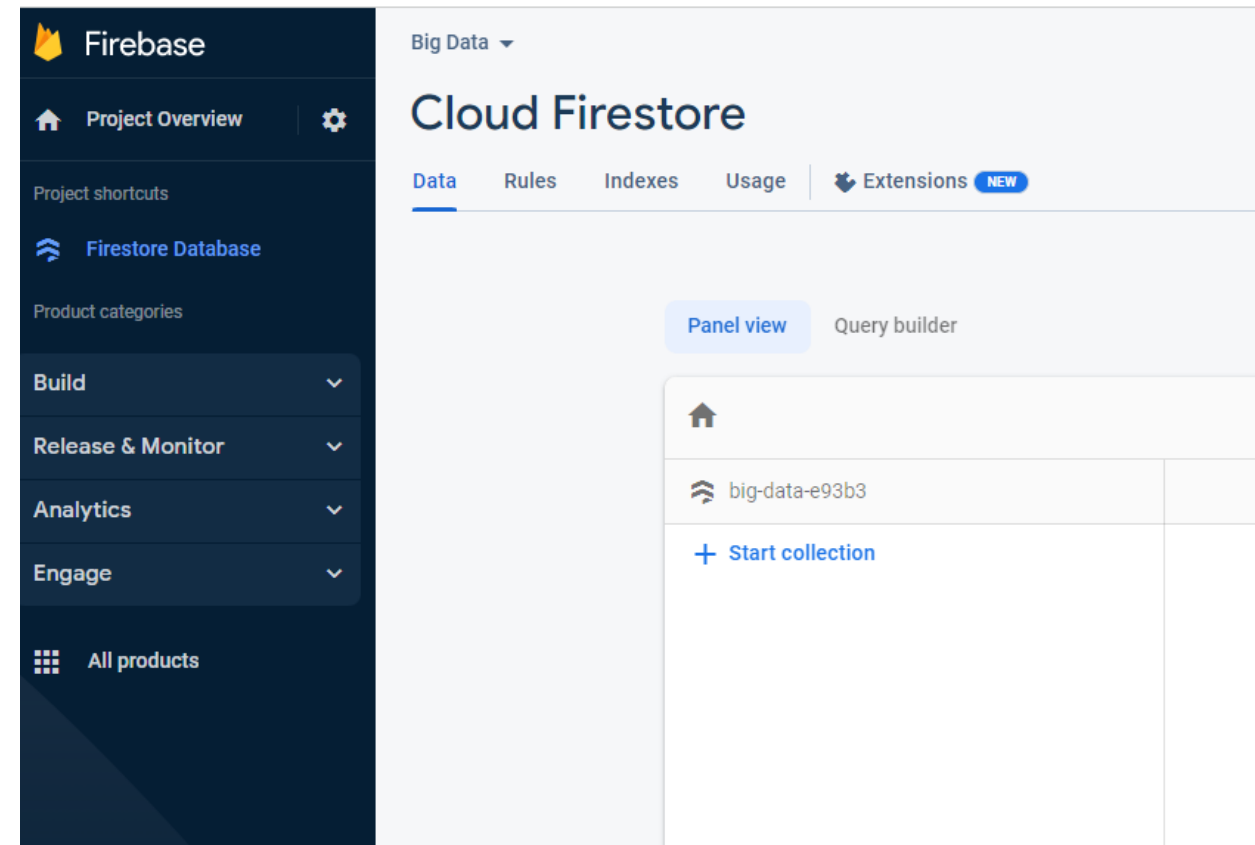


Oefening Firebase

- ▣ Schrijf de nodige code om het restaurant.json bestand in Firebase in te laden
- ▣ Zoek daarna de volgende zaken op:

How to use firebase

- ▣ Maak een gratis firebase account aan
- ▣ Voeg een firestore database toe in Europa





How to use firebase

- ▣ Ga naar project settings -> service accounts
- ▣ Generate private key
 - ▬ Bewaar dit ergens op je pc (niet in de cloud/public repo)