
Enroute

App Development

Created by : Adarsh S Nayak and Basava Prabhu

Firestore Database Management :

Firestore is a platform for building web and mobile applications. It was originally developed by Firebase Inc., and purchased by Google in 2018.

We'll be having firestore to store data,

It provides features like:

1. Building and managing backend database;
2. Monitor performance and stability of the app.
3. Provide analytical data about the users to the developer.
4. Currently used by:

The New York Times



HALFBRICK

duolingo



lyft

venmo

The Economist

trivago

Ctrip

wattpad

GAMELOFT



Pricing :

Firebase has two main pricing plans. The Firebase pricing plans are:

- **Spark Plan (Firebase free tier)** is a basic plan offering 1 GB total storage, 20K writes/day, 50K reads/day, and 20K deleted/day
- **Blaze Plan (paid)** is a pay as you go plan charging \$0.18/GB for database storage, \$0.026/GB for application storage, and additional charges for database operations, data transfer, etc. This plan is needed when we are going to scale it up.

Refer the link : <https://firebase.google.com/pricing>

Basic overview of payments:

Cloud Firestore		
Stored data	1 GiB total	No-cost up to 1 GiB total Then \$0.108 per additional GiB
Network egress	10 GiB/month	No-cost up to 10 GiB/month Then Google Cloud pricing
Document writes	20K writes/day	No-cost up to 20K writes/day Then Google Cloud pricing
Document reads	50K reads/day	No-cost up to 50K reads/day Then Google Cloud pricing
Document deletes	20K deletes/day	No-cost up to 20K deletes/day Then Google Cloud pricing
Cloud Storage 		
GB stored	5 GB	\$0.026/GB
GB downloaded	1 GB/day	\$0.12/GB
Upload operations	20K/day	\$0.05/10k
Download operations	50K/day	\$0.004/10k
Multiple buckets per project	✗	✓
Test Lab 		
Virtual Device Tests	10 tests/day	No-cost up to 60 min/day Then \$1/device/hour
Physical Device Tests	5 tests/day	No-cost up to 30 min/day Then \$5/device/hour

Steps that we'll be following :

- Setup Firebase and connect to a front-end application.
- Choose a firebase authentication methods.
- Firebase CRUD(Create, Read, Update and Delete) operations using REST API commands.
- Buy an appropriate plan for Firebase Storage.
- Firebase hosting.
- Firebase with different JavaScript frameworks.

MILESTONES

Updated pricing information.

We referred to the firebase documentation to provide an estimate of the cost required to buy storage for our database and host the application.