



FIREBASE FUNDAMENTALS

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What is firebase?



Firebase

Firebase is a backend-as-a-service platform, which offers a set of cloud-based services and tools that handle the backend of applications.

Firebase was founded by Andrew Lee and James Tamplin back in 2011. It was later acquired by google in 2014.

Initially, it was a real-time database backend that allowed developers to build applications with real-time updates and synchronization across multiple clients.

After its acquisition by Google, more features and services were added beyond its original real-time database offering.

Over the years, Firebase has evolved significantly to become a comprehensive mobile and web application platform, offering a variety of tools and services that make the building and deployment of apps quick and easy.

What does firebase have to offer?



Firebase

Firebase offers a wide range of features and tools that developers can use to build and deploy modern apps fast and easily.

These features include:

- Real-time database
- Authentication
- Hosting
- Cloud functions
- Cloud messaging
- Machine learning
- Storage

Features

Real-time database

It is scalable and flexible in handling large amounts of data.

Has real-time synchronization of data between multiple clients without needing to write complex server code.

Easy integration with other Firebase features and services e.g
Firebase authentication.

Features

Authentication

Secure and reliable user authentication.

Easy integration with third-party authentication providers e.g Facebook and Google.

Has robust user management features e.g account and email verification.

Features

Hosting

Fast and reliable hosting with SSL encryption and CDN caching.

Simple deployment and management of web apps and static content.

Features

Cloud functions

Easy deployment and testing of functions, using firebase's command line tools and console

Enable serverless backend logic without needing to manage servers or infrastructure.

Integration with Firebase's third-party services to trigger functions based on events.

Features

Cloud messaging

Cross-platform messaging with support for Android, iOS, and web.

Customizable notifications and messages

Integration with Firebase's analytics and remote config features

Features

Machine learning

Powerful machine learning features like image recognition, text recognition, and natural language processing.

Easy integration with other features.



Firebase

Features

Storage

Secure and scalable storage for user-generated content e.g
photos

Easy integration

Customizable security rules and access controls to ensure
data privacy and security



Firebase

Why consider using Firebase?



Firebase

Why do developers choose to use Firebase?
Here are some key reasons.

- Scalability
- Ease of use
- Cost-effectiveness
- A broad range of features

Done with the boring stuff!

Any Questions?





Firebase

Firestore DEMO

Performing CRUD on Firestore, using
firebase_admin and Flask.

Resources

- [Getting started with Firebase](#)
- [Firebase learning pathways](#)
- [Getting started Firebase emulator and Flutter apps](#)
- [User authentication flow to a flutter app using FirebaseUI](#)
- [Firebase Summit 2022 \(Keynotes and sessions\)](#)
- [Firebase Blog](#)

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Firebase