Firebase Services

In this lesson, I will introduce you to the Firebase services that will be covered in this course. These are what I consider core services and the ones you need to learn to get the most out of Firebase when getting started. The best thing about Firebase services is you can use each one as a stand-alone service or combine them.

We'll cover the following

- Cloud Firestore
  o Realtime
  o NoSQL
  o Security
- Hosting
  o SSL for Every Site
  o Cached on SSDs
  o Deploy From CLI
- Storage
  o Can Handle Large File Sizes
  o File Security
  o Any File Type
- Authentication
  o Email and Password Authentication
  o OAuth Authentication
  o User Security
- Additional Firebase Services
- Summary

Cloud Firestore

Cloud Firestore is Firebase's newest database. Nearly every project needs persistent data, and this is how Firebase delivers that functionality to you. Let's take a look at some benefits of using Firestore:

1. Realtime
2. NoSQL
3. Security

Cloud Firestore

The next generation of the Realtime Database

Realtime

Realtime means that for every change in the database, all connected clients are updated. This feature saves you a ton of time when developing applications. It simplifies logic and reduces how much code you need to write.

NoSQL

Cloud Firestore is a NoSQL document database. There has been a surge of popularity for NoSQL databases. A lot of developers find them easier to use. The data structures used by NoSQL databases are also viewed as "more flexible" than relational database tables.
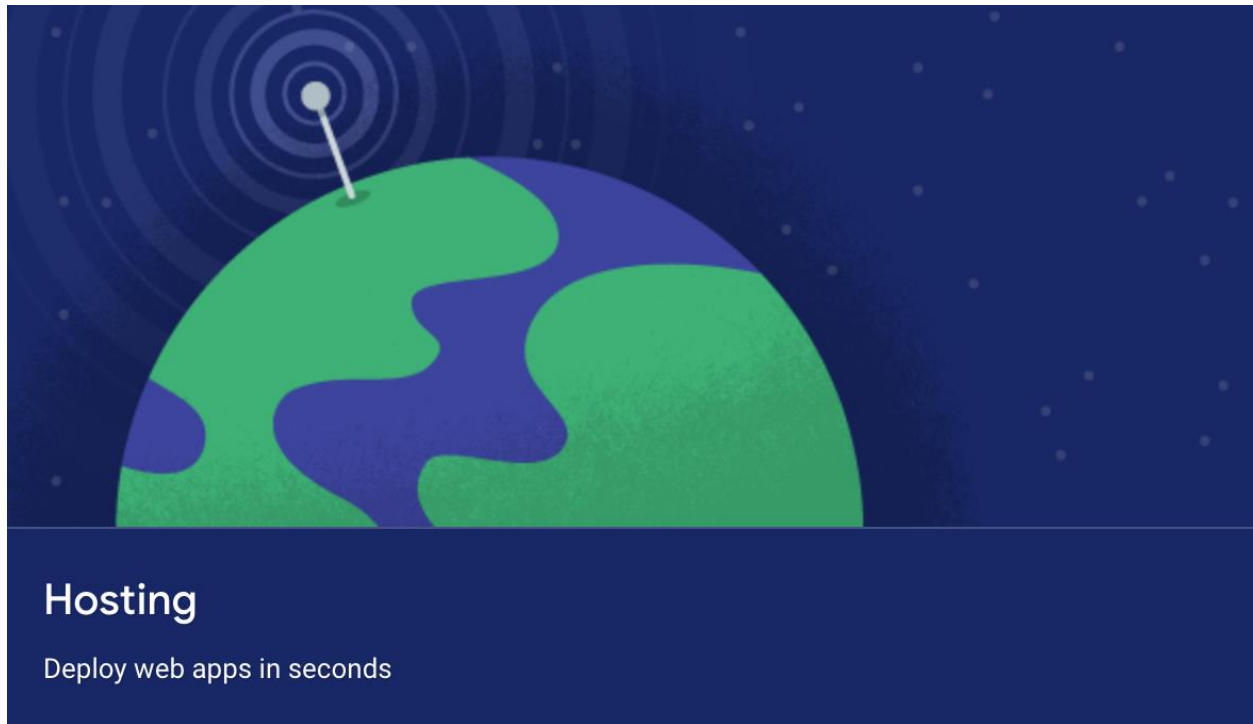
Security

Security is handled by a comprehensive set of security rules. With them, you can easily create restrictions for who can read, write, update, or delete information from your database.

Hosting

Firebase Hosting is a no-nonsense, low learning curve, problem-free option. Here are a few reasons I like it and recommend it for other developers:

1. SSL for Every Site
2. Fast Servers
3. Deploy From CLI

Hosting
Deploy web apps in seconds

SSL for Every Site

The SSL certificate is automatically provisioned and configured for each site deployed.

Cached on SSDs

Sites deployed to Firebase Hosting are cached on SSD's for a low latency reliable experience.
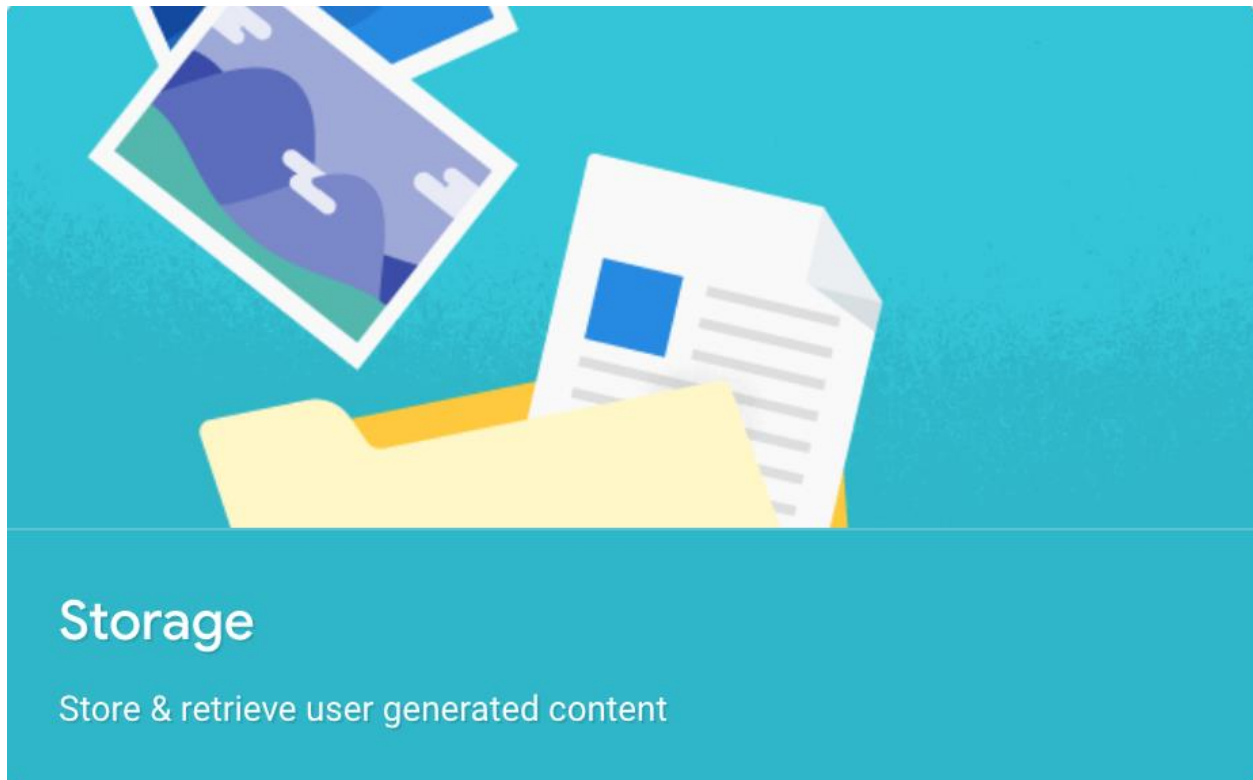
Deploy From CLI

Deploying your app to the web from a local directory only takes one command.

Storage

People love to share photos, videos, and gifs. Firebase storage allows your users to store and share these files through your app. Here are some of the features of Firebase's storage:

1. Can Handle Large File Sizes
2. File Security
3. Any File Type

Storage

Store & retrieve user generated content

Can Handle Large File Sizes

Storage can scale to petabytes. No matter how big your file is Firebase can handle it.

File Security

Use a set of comprehensive security rules that allow you to control who can upload to or read from your **Storage**.

Any File Type

There are no restrictions on the types of files you can upload, which means you can use the service for images, videos PDFs, or any other type of file.

Authentication

Authentication from scratch usually takes days if not weeks of coding to get it done correctly. Firebase offers a solution to authentication that requires less code, less time, and better security through the following features:

1. Email and Password Authentication
2. OAuth authentication
3. User Security

Email and Password Authentication

This method of authentication is a must-have for many applications. Firebase has this built-in.

OAuth Authentication

Using an existing platform to authenticate a user is known as OAuth. Firebase utilizes Google, Facebook, Twitter, Github, and many other providers that you can use to authenticate your users.

User Security

Authentication security can be tricky to configure from scratch but Firebase has taken care of all the difficult stuff for you. Users are automatically secured. No configuration required!

Additional Firebase Services

There are several more services Firebase has to offer, but for this course, we will be discussing the core services used in the development of applications. With them, you will be able to leverage Firebase to build fast, highly effective web applications. When you finish this course I encourage you to take time to explore the other services Firebase has to offer.