**MongoDB vs. Firebase**

**MongoDB**

* MongoDB is a cross platform document oriented that is classified as NO-SQL database program.
* MongoDB can store any type of data. Therefore, it is popular in projects where the incoming data type is not known. Moreover, it allows the faster querying of data, avoiding the traditional methods of first transforming the data and then creating a view according to the query.
* MongoDB is a NOSQL Database Management platform that requires implementation of knowledge of NoSQL. MongoDB uses a GUI called MongoDB compass that allows querying, aggregating, and analysing data in visual environment. Moreover, Data security and quality of data needs to be managed.

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| Features |  |
| Implementation Language | C, C++, Javascript |
| Portioning Data | Data can be partitioned using a shared key which is linked to the collection of data |
| Scalability | Can process through large scale of Data |
| Supporting Operating Systems | Amazon, Linux2/Debian 9/10 Rhel/CentOS 7, 8 Ubuntu LTS 18.04 & 20.04 Windows vista and later FreeBSD |
| Cost | It is free for commercial application as long as server side Public License (SSPL) is complied |

**Firebase**

* The Firebase Realtime Database is a cloud-hosted NoSQL database that lets you store and sync data between your users in real-time. Realtime syncing makes it easy for your users to access their data from any device: web or mobile, and it helps your users collaborate with one another.
* The Firebase Realtime Database can be accessed directly from a mobile device or web browser; there’s no need for an application server. Security and data validation are available through the Firebase Realtime Database Security Rules, expression-based rules that are executed when data is read or written.
* Key features:
  + Real-time Database Helps to Store and Synchronize Data – The cloud-hosted NoSQL database is offered by Firebase real-time database that helps you store and synchronize data between the clients. This indeed makes it easier for the developers to access the data using any of the devices and helps developing collaborative feature.
  + Firebase has Become Smarter with Google – User’s journey can be tracked on several devices. It means you would know whether he is using a smartphone, tablet, or laptop. You can also export your mobile app data to Big Query with the help of Google Analytics. It can further support in engaging more users
  + Fast and Secured Web Hosting – The benefit of Firebase Hosting allows you to set-up a single page, a mobile landing page, web page or progressive web page with ease. It also helps to deliver the content rapidly anywhere.

**Comparison Table**

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| **MongoDB** | **Firebase** |
| * + It can be operated on-site or in the cloud (through MongoDB Atlas, or self-managed cloud MongoDB), whereas Firebase is solely a cloud database service   + Is built for general-purpose data development, therefore has more features to tweak performance, integrations with third-party business intelligence tools, plus advanced features for large data installations such as Atlas Data Lake   + Supports C, C#, Java, JavaScript, PHP, Lua, Python, R and Ruby   + Is an open-source database   + Server operating systems include Solaris, Linux, OS X and Windows   + Supports Master-Slave Replication as a replication method   + Does support Map Reduce methods   + Supports Sharding Partitioning method   + Proprietary protocol using JSON are used as APIs and other access methods   + Is more suitable for large-scale applications   + Provides additional security compared to Firebase | * + Is explicitly designed for mobile application development, meaning it has more features for mobile applications, which includes hosting, authentication, data-driven triggers, and analytics   + Supports Objective C, Java and JavaScript   + Is a commercial database   + Server operating systems are hosted   + Doesn't support any replication methods   + Doesn't support map reduce methods   + Doesn't support any partitioning method   + Android, iOS, JavaScript API, RESTful HTTP API are used as APIs and other access methods   + Is more suitable for small-scale applications |