Firebase

Introduction

Firebase is a mobile and web application development platform developed by Firebase, Inc. in 2011, then acquired by Google in 2014. Firebase provides a number of services for example firebase cloud messaging, firebase authentication, firebase storage, firebase hosting, etc.

Firebase is best known for providing a realtime database and backend as a service. The service provides application developers an API that allows application data to be synchronized across clients and stored on Firebase's cloud. [1]
The company provides client libraries that enable integration with Android, iOS, JavaScript, Java, Objective-C, swift and Node.js applications. The database is also accessible through a REST API and bindings for several JavaScript frameworks such as AngularJS, React, Ember.js and Backbone.js. [2]
The REST API uses the Server-Sent Events protocol, which is an API for creating HTTP connections for receiving push notifications from a server. Developers using the realtime database can secure their data by using the company's server-side-enforced security rules. [3]

The Firebase Realtime Database is a cloud-hosted database. Instead of typical HTTP requests, the Firebase Realtime Database uses data synchronizationevery time data changes, any connected device receives that update within milliseconds. Provide collaborative and immersive experiences without thinking about networking code.

Firebase apps remain responsive even when offline because the Firebase Realtime Database SDK persists your data to disk. Once connectivity is reestablished, the client device receives any changes it missed, synchronizing it with the current server state.

The Firebase Realtime Database can be accessed directly from a mobile device or web browser; theres 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.
Therefore compared to the traditional sql database, firebase is more robust and

more accessible with changes being made at one's own convenience.

References

[1] Farr, Christina (February 13, 2013). "Firebase's scalable backend makes it '10 times easier' to build apps". VentureBeat. Retrieved June 12, 2014.

[2] "Firebase Realtime Database". Firebase, Inc. Retrieved May 19, 2016.

[3] Darrow, Barb (Dec 18, 2012). "Firebase secures its real-time back-end service". Gigaom. Retrieved June 12, 2014.