



Cloud Functions for Firebase & Smash.gg



SMASH.GG

"Firebase makes possible entirely new functionalities that would have been too time-consuming to develop without it. Functions continues this trend and makes a class of features available that wouldn't have been considered otherwise."

- Nathan Welch,
Engineering Director/
Co-Founder

Learn more at:
<http://g.co/firebase/functions>

Reliably running mission-critical realtime features

Company

[Smash.gg](https://smash.gg) is an e-sports platform used by top players and organizers worldwide for games including Rocket League, Super Smash Bros., and Street Fighter.

Challenges

The Smash.gg team was 9 engineers. They wanted to add notifications, but the time and cost of developing and maintaining another new system was too high for this feature to be viable. Moreover, because online e-sports tournaments, a core part of the Smash.gg experience, involves heavy realtime interaction between multiple parties, any delay can delay an entire tournament. The team therefore wanted to avoid adding any unnecessary workload or complexity to their systems that could jeopardize the realtime tournament experience.

Solution

To support their realtime requirements, Smash.gg started with Firebase Realtime Database. It then took less than a day to set up Cloud Functions for Firebase, which worked easily with the Realtime Database, and didn't require creating or scaling a new service.

In addition to setting up their notifications, the team was able to use their data in entirely new ways by using Functions to let separate code watch that data for changes and take actions. Specifically, they could act on changes in data to trigger notifications, such as to alert users of playable matches or tournament moderators of player disputes. This has been key to the the core functionality of Smash.gg: reliably delivering realtime, highly interactive tournaments.

