Cloud Functions for Firebase

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Women Techmakers

Sobre mi

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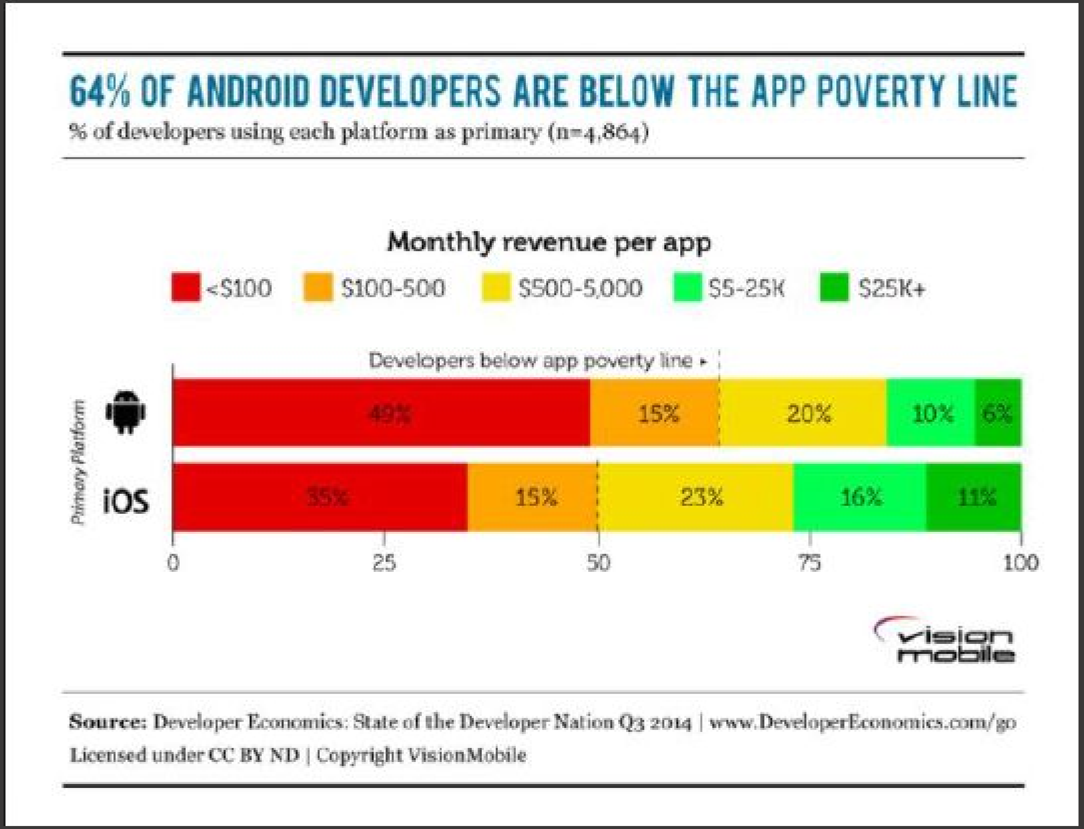
> Miembro y ponente en WTM

1. Por qué Firebase
2. Por qué Cloud Functions
3. Let’s code it

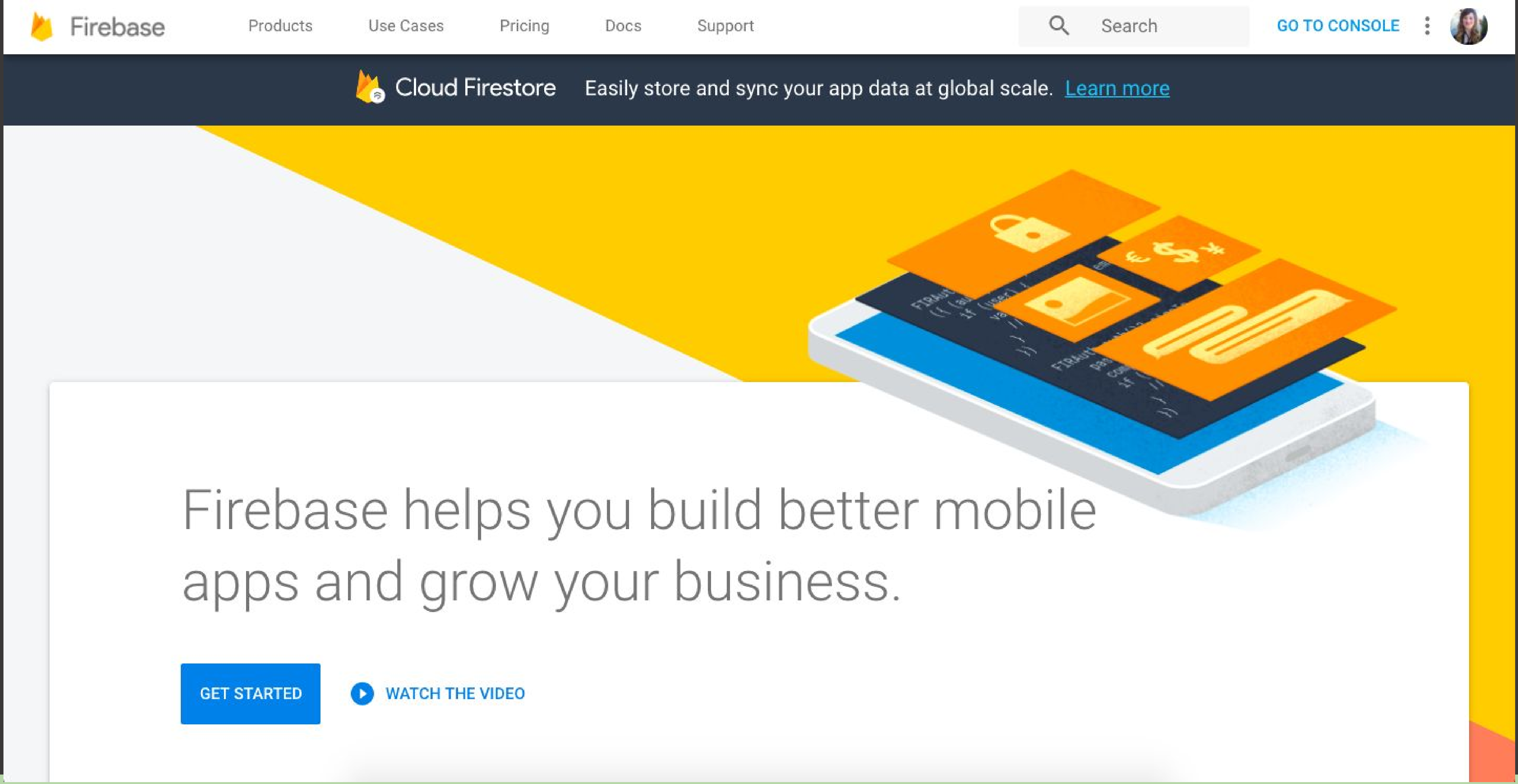
¿Por qué Firebase?



64% OF ANDROID DEVELOPERS ARE BELOW THE APP POVERTY LINE

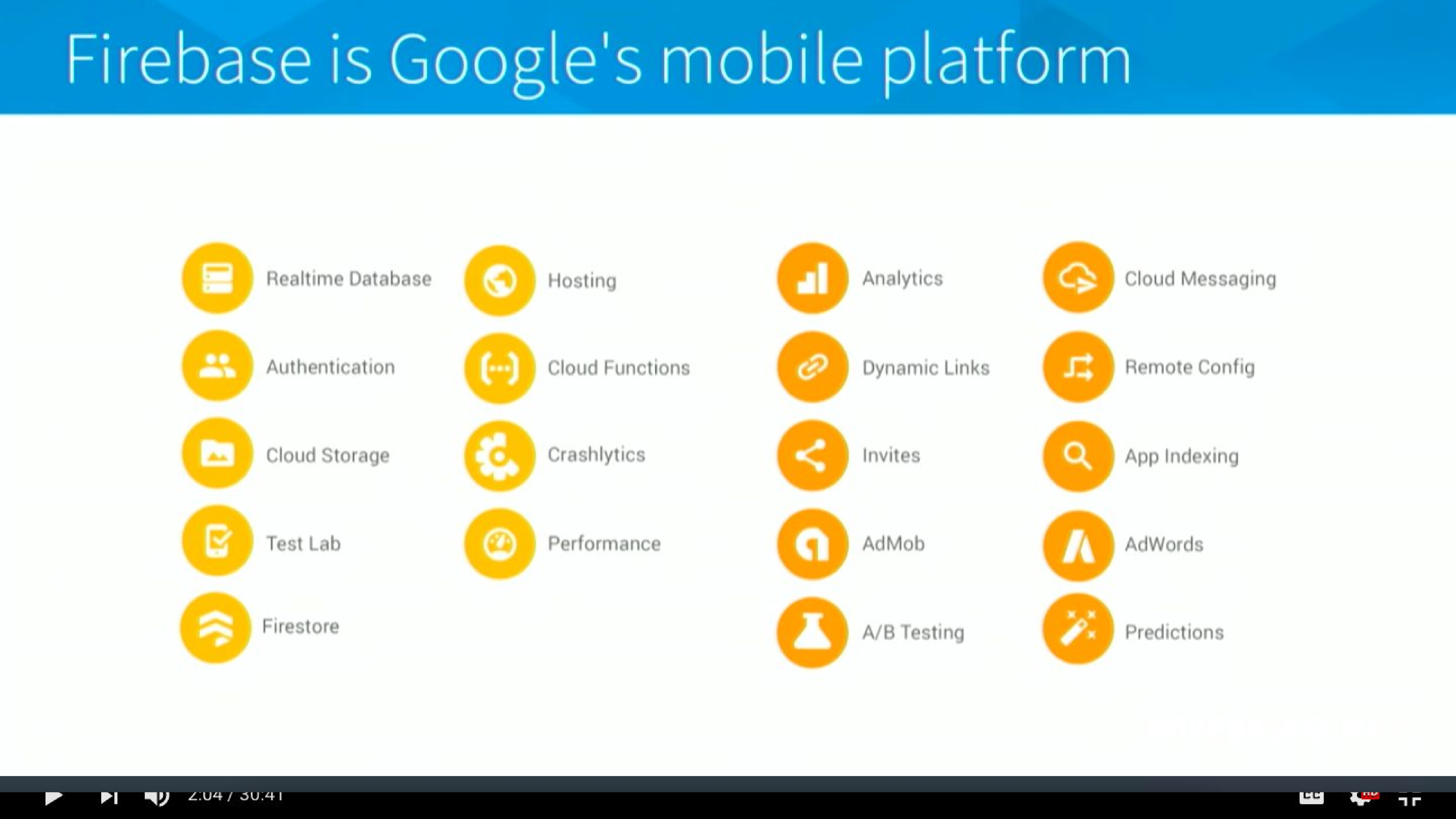
% of developers using each platform as primary (n=4,864)

Source: Developer Economics: State of the Developer Nation Q3 2014 | www.DeveloperEconomics.com/go



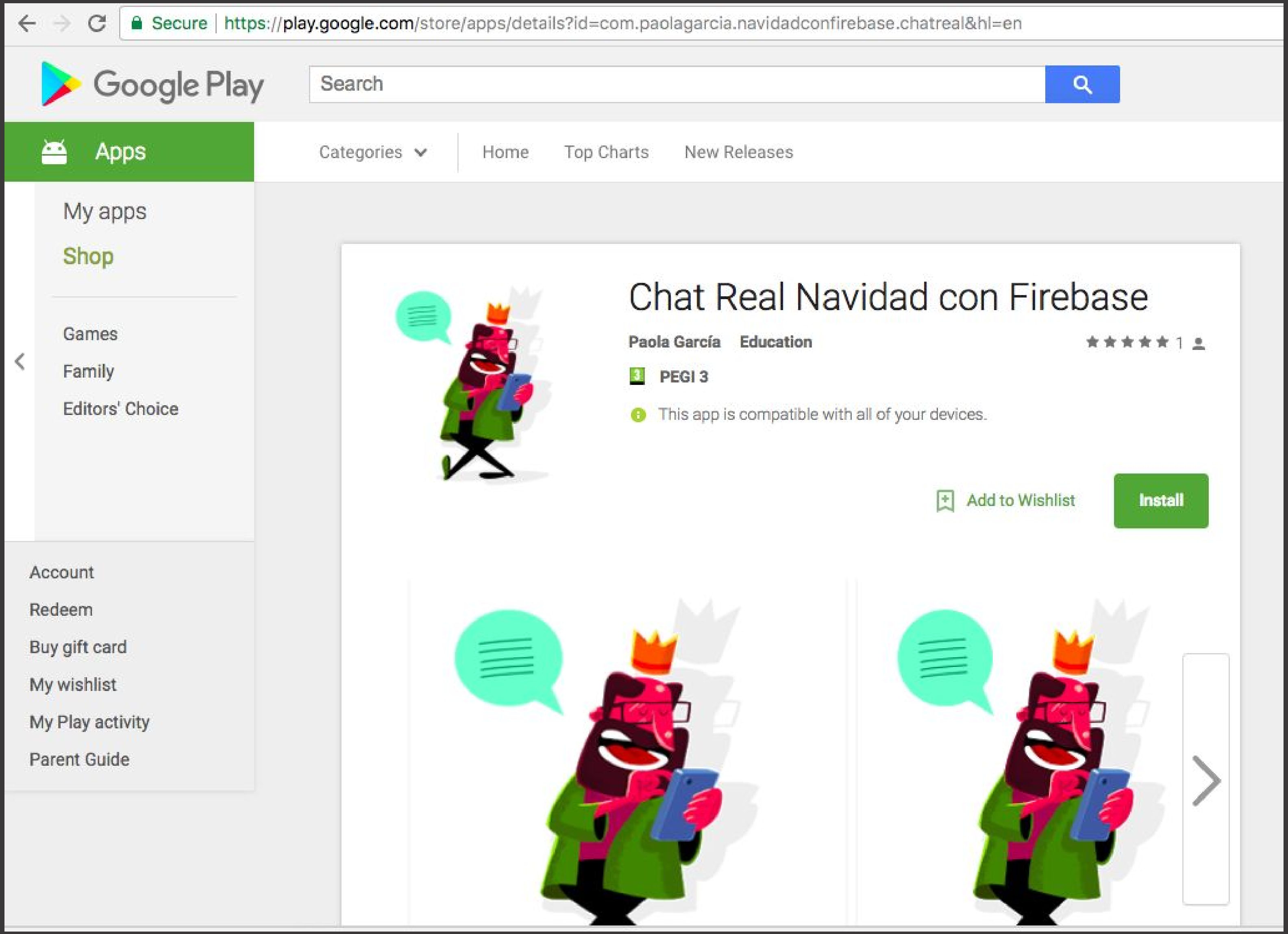
Easily store and sync your app data at global scale.

Firebase helps you build better mobile apps and grow your business.



Firebase is Google's mobile platform

- Realtime Database
- Authentication
- Cloud Storage
- Test Lab
- Firestore
- Hosting
- Cloud Functions
- Crashlytics
- Performance
- Analytics
- Dynamic Links
- Invites
- AdMob
- A/B Testing
- Cloud Messaging
- Remote Config
- App Indexing
- AdWords
- Predictions



Chat Real Navidad con Firebase

Paola García Education

★★★★★ 1

PEGI 3

This app is compatible with all of your devices.

Navidad con Firebase:

Chat multiplaforma en tiempo real serverless

Cloud Functions de Firebase

- Trozo de código Javascript
- Ejecutado en un server de Google
- Solo te preocupas de desplegarlo

Firebase

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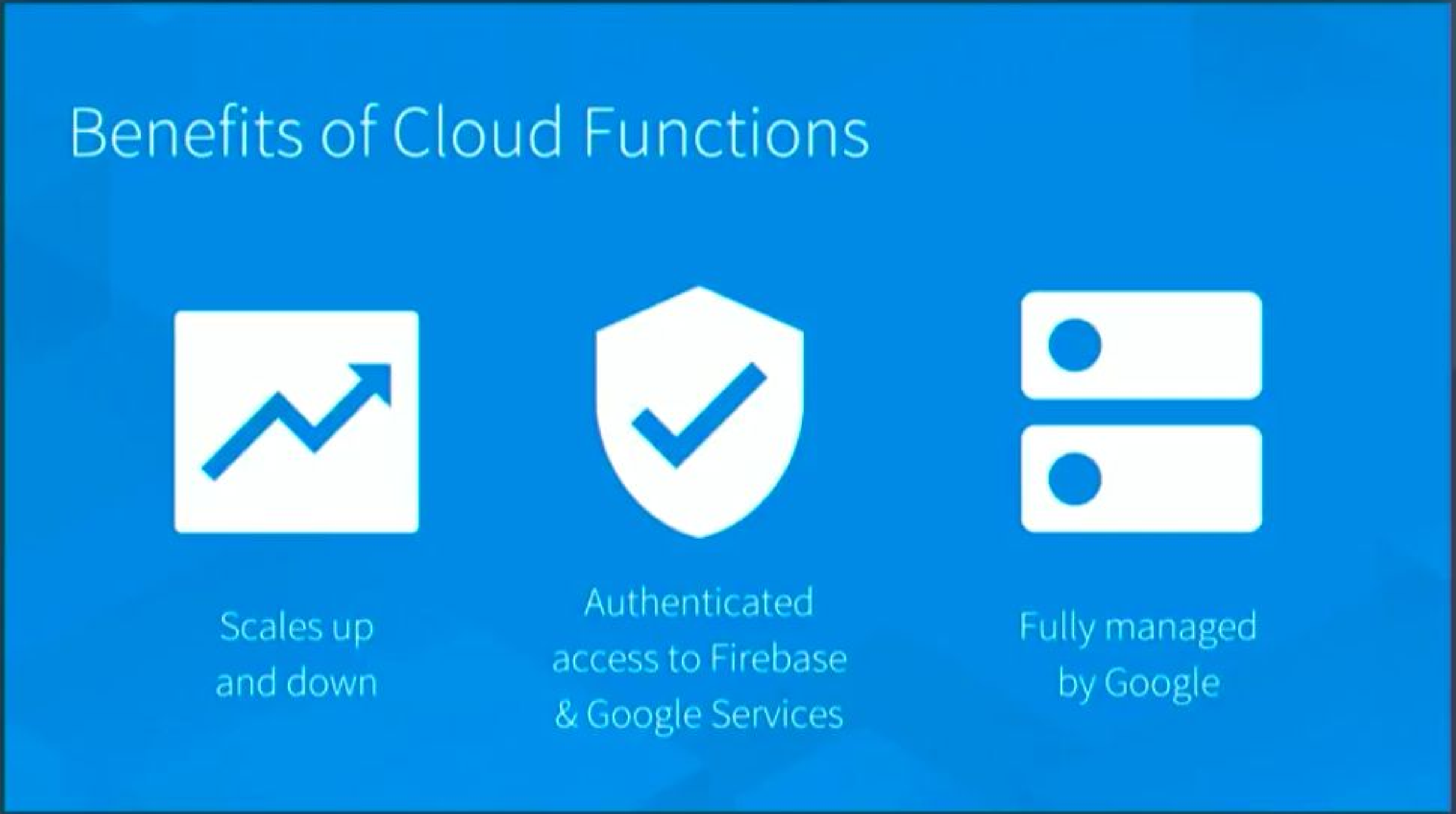
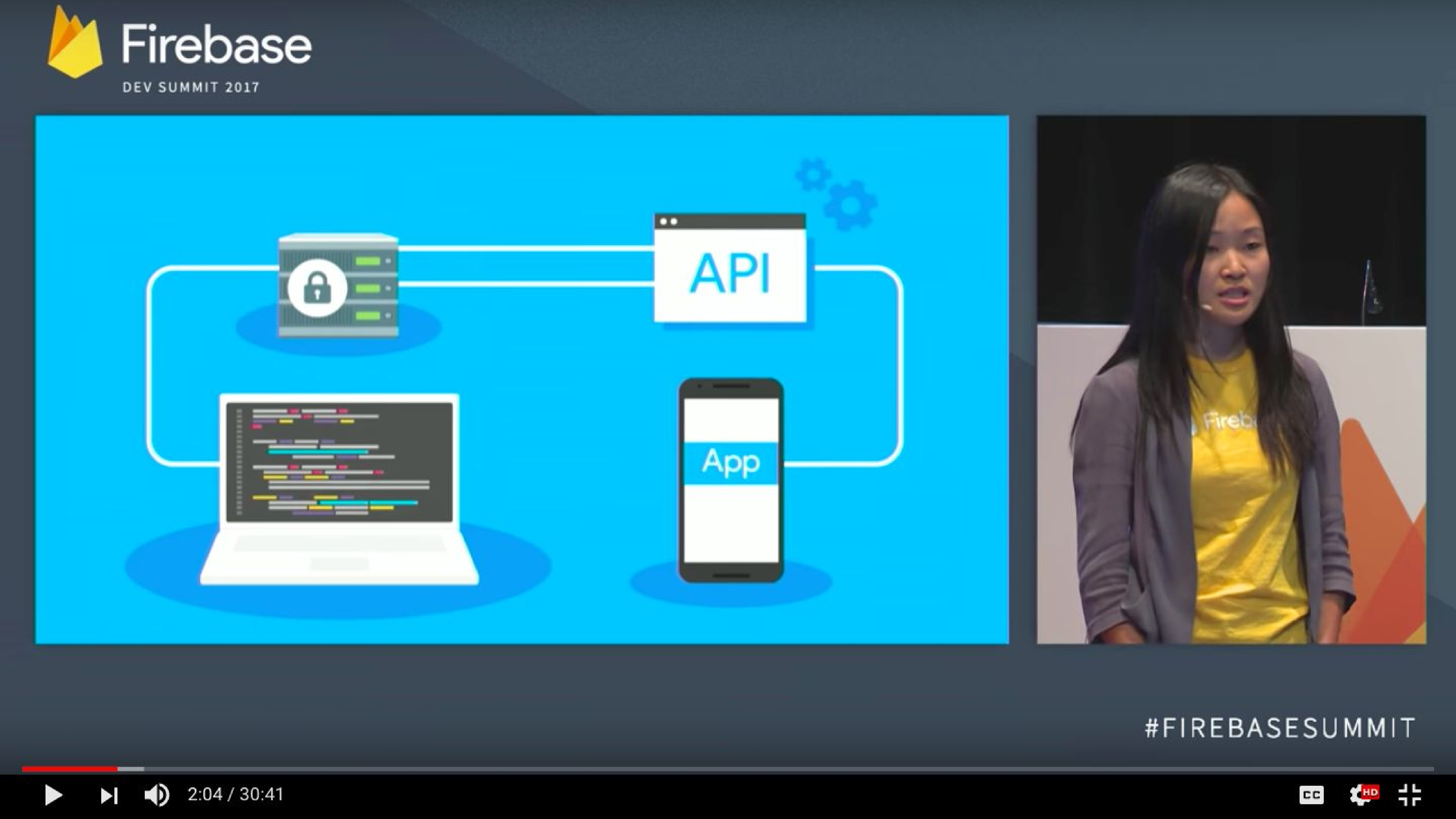


Benefits of Cloud Functions

Scales up and down

Authenticated access to Firebase & Google Services

Fully managed by Google



Firebase
DEV SUMMIT 2017
API
App
#FIREBASESUMMIT
2:04 / 30:41

Firebase

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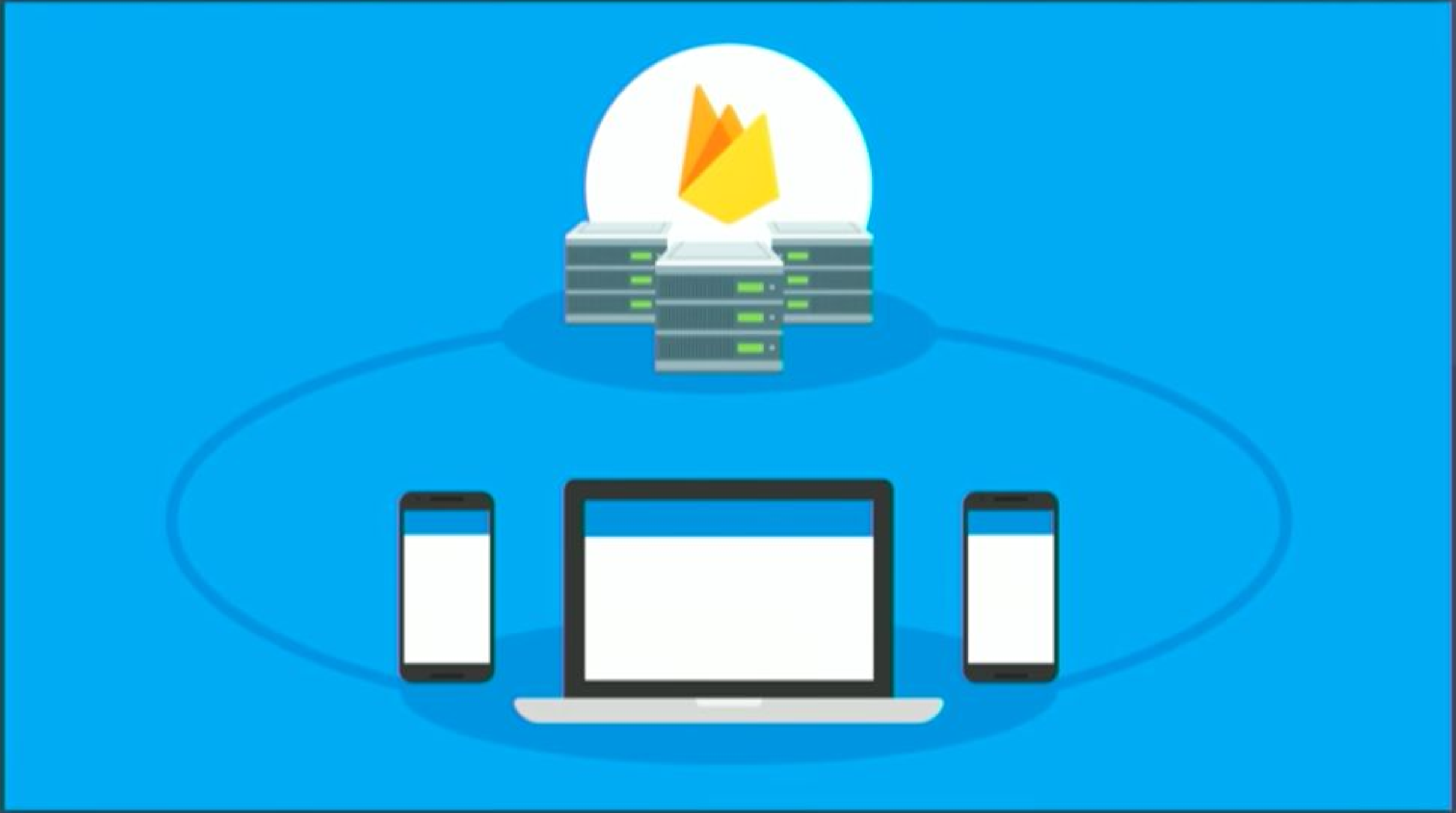

#FIREBASESUMMIT

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Firebase

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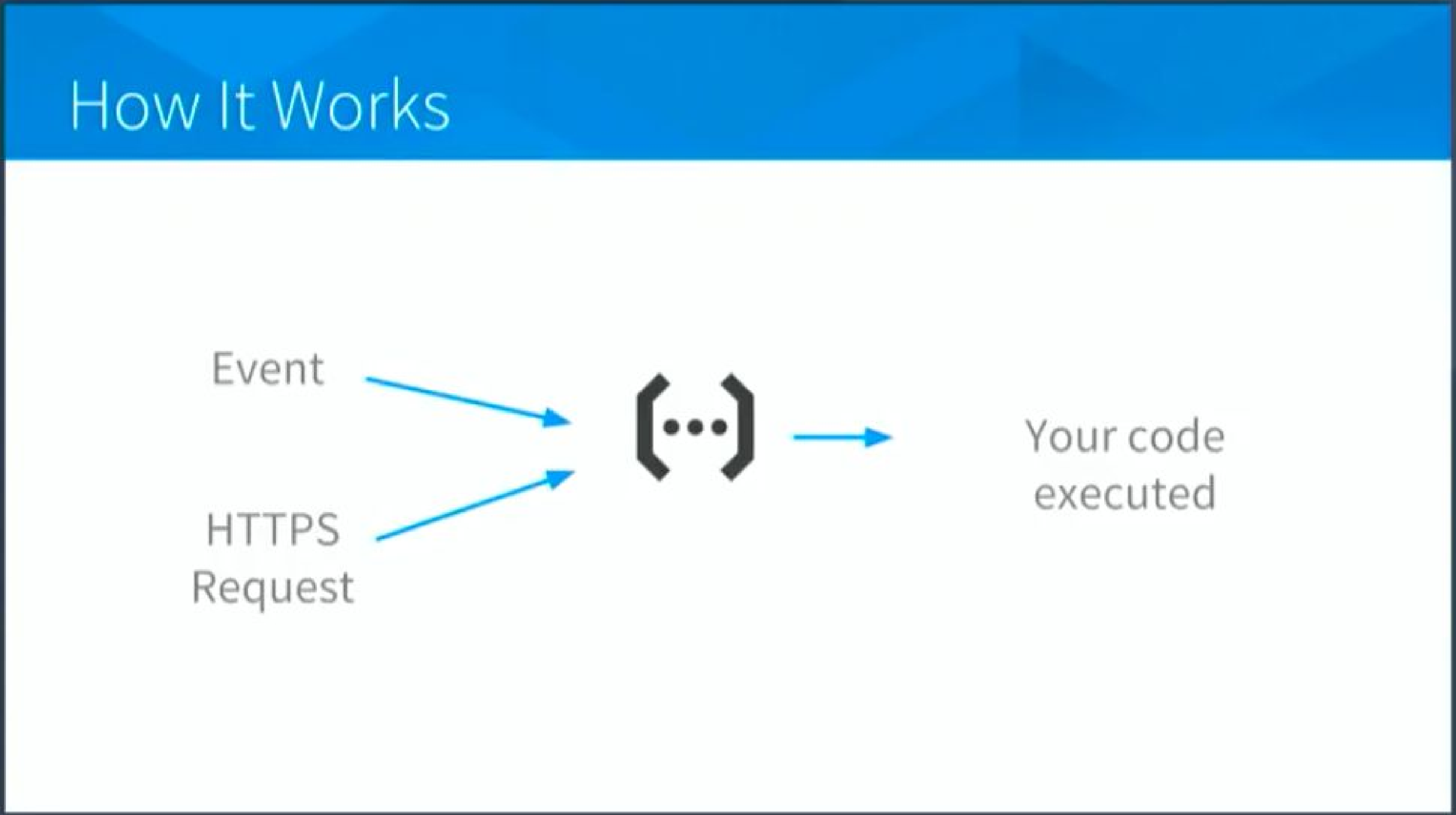
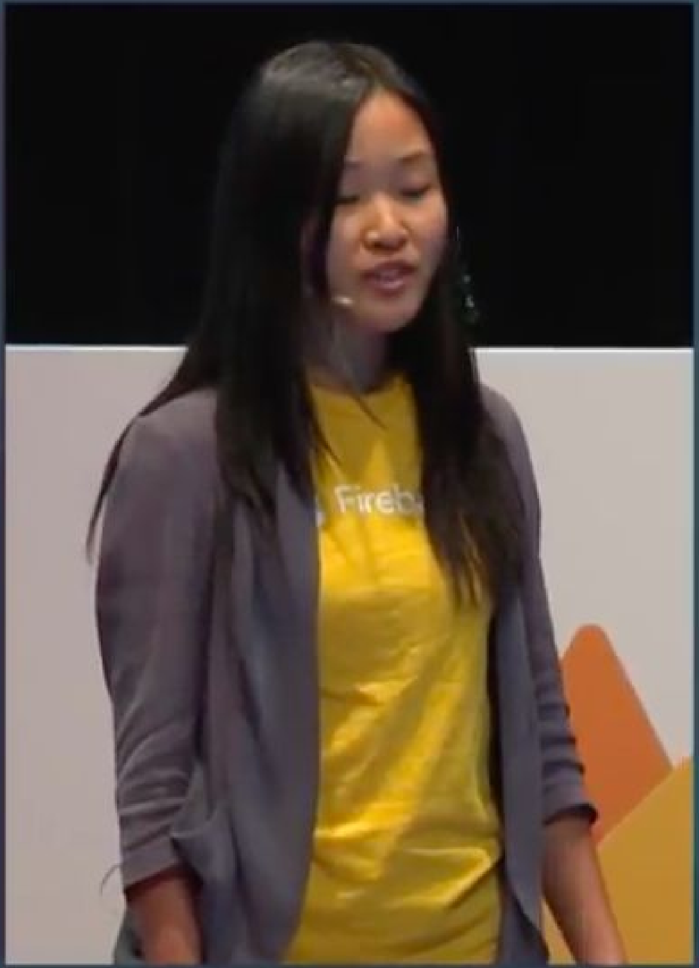


How It Works

Event

HTTPS Request

Your code executed



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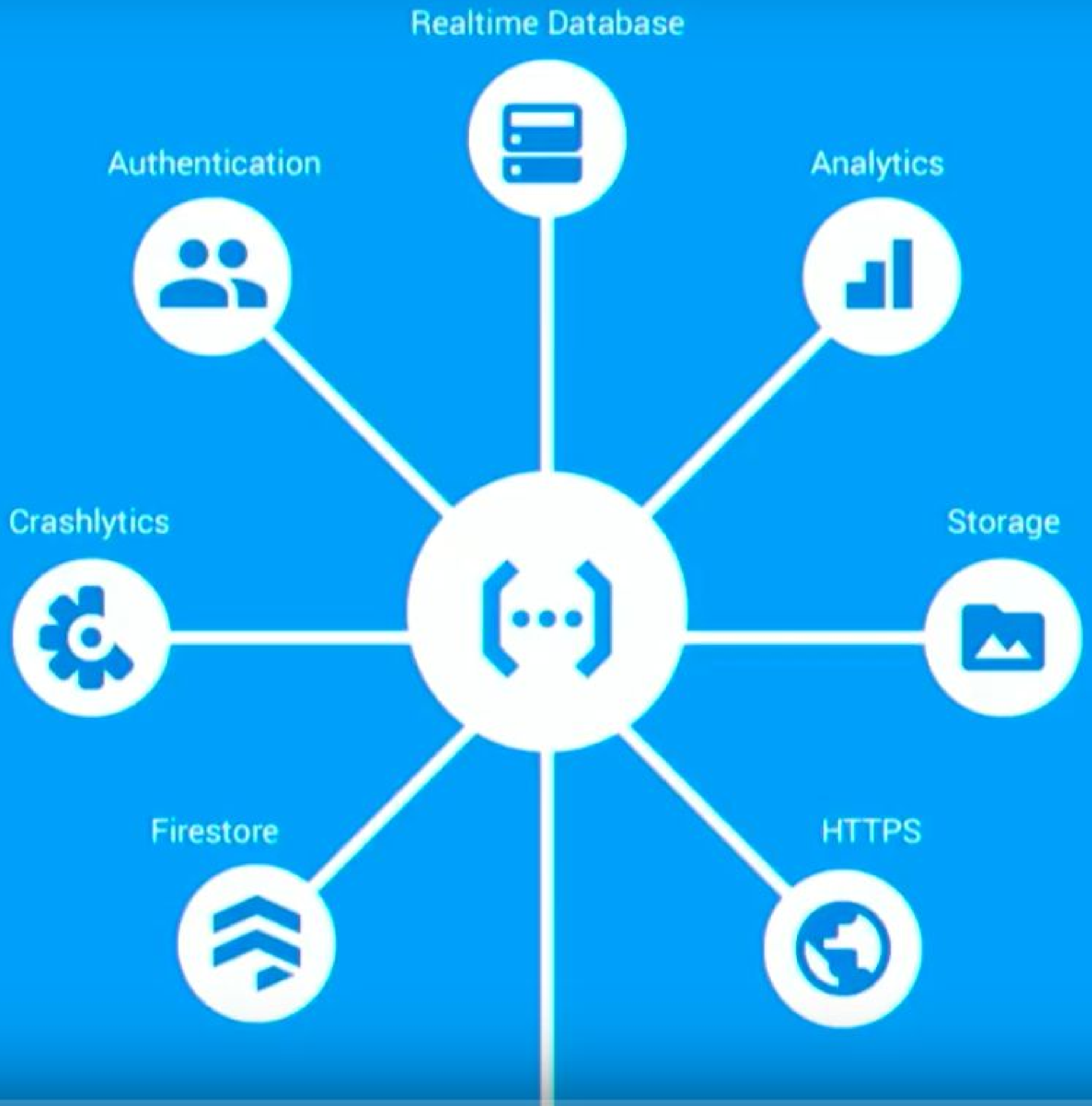


Realtime Database

Authentication

Analytics

Crashlytics

Storage

Firestore

HTTPS

#FIREBASESUMMIT

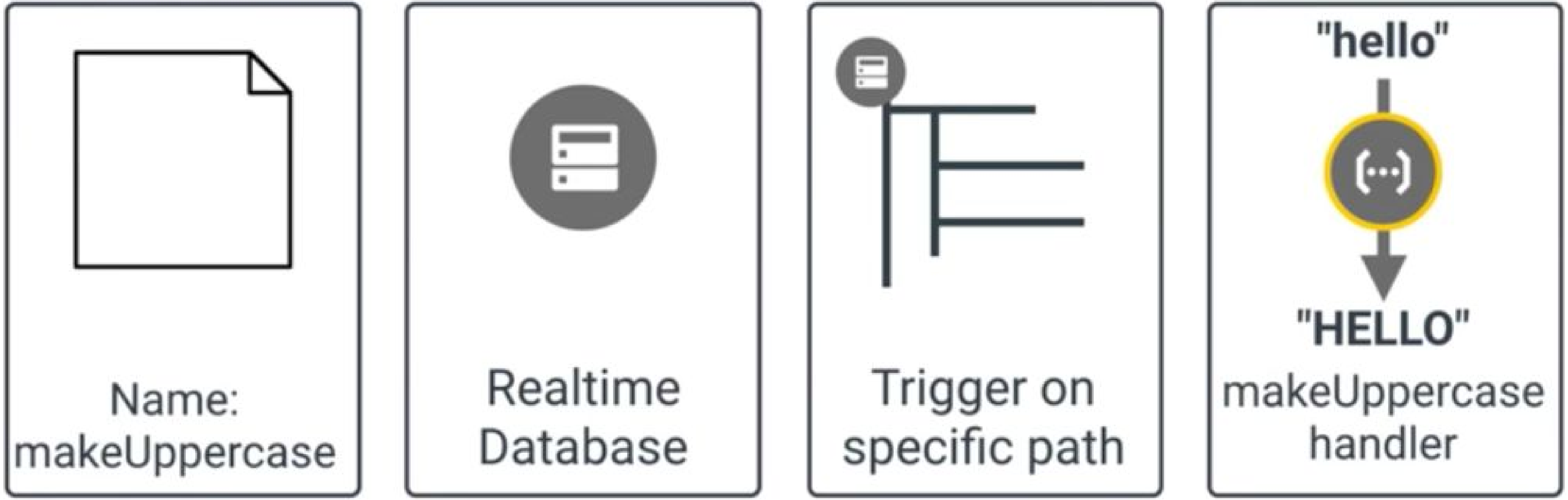
Write Production Quality Cloud Functions (Firebase Dev Summit 2017)

Let’s see it in action!

Cloud Functions. Udacity Firebase in a Weekend.

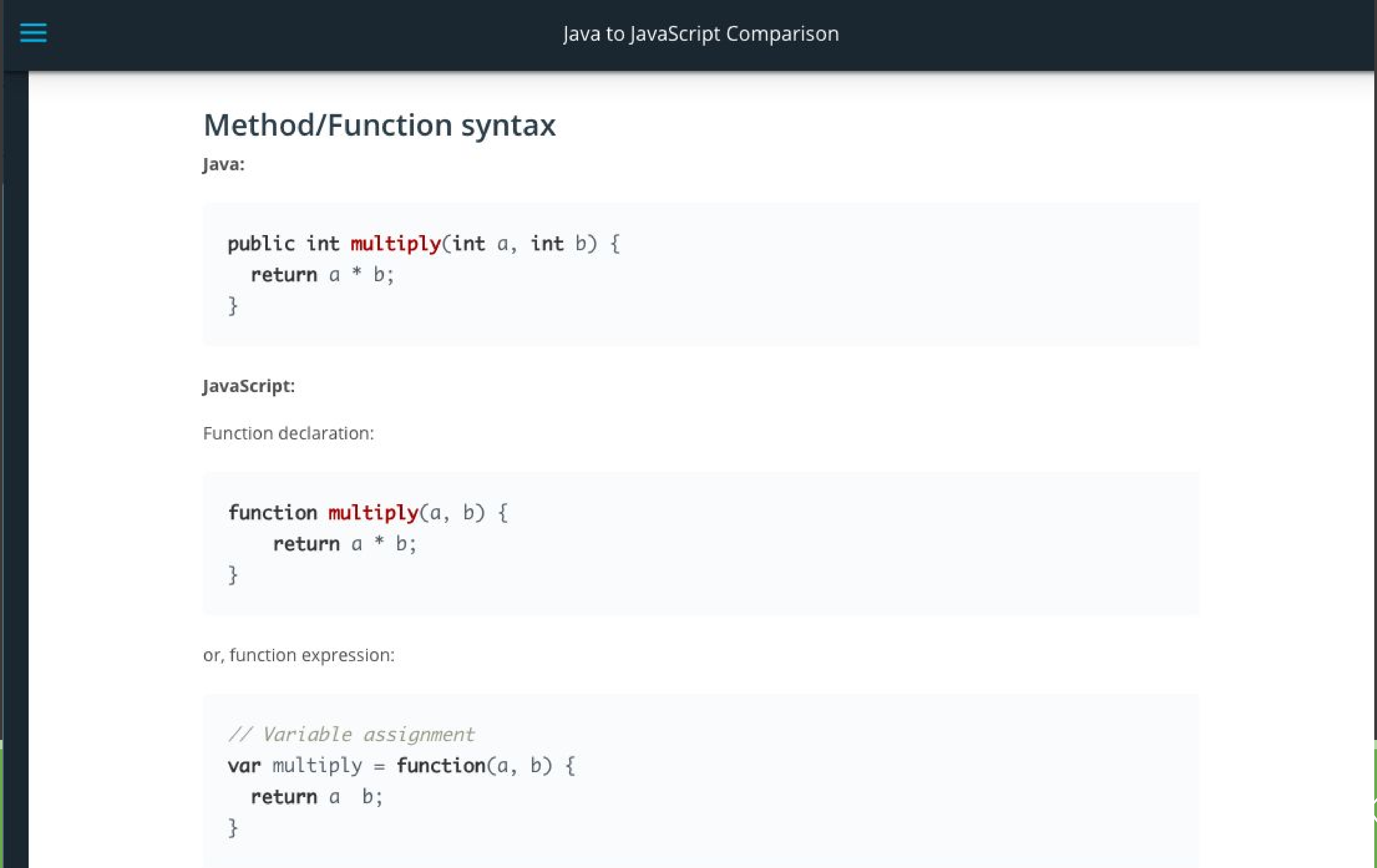
Implementation Steps

EXAMPLE:



Name	Service	Conditions	Event Handler
Name: makeUppercase	Realtime Database	Trigger on specific path	"hello" "HELLO" makeUppercase handler

Firebase CLI



Java to JavaScript Comparison

Method/Function syntax

Java:

```
public int multiply(int a, int b) {
  return a * b;
}
```

JavaScript:

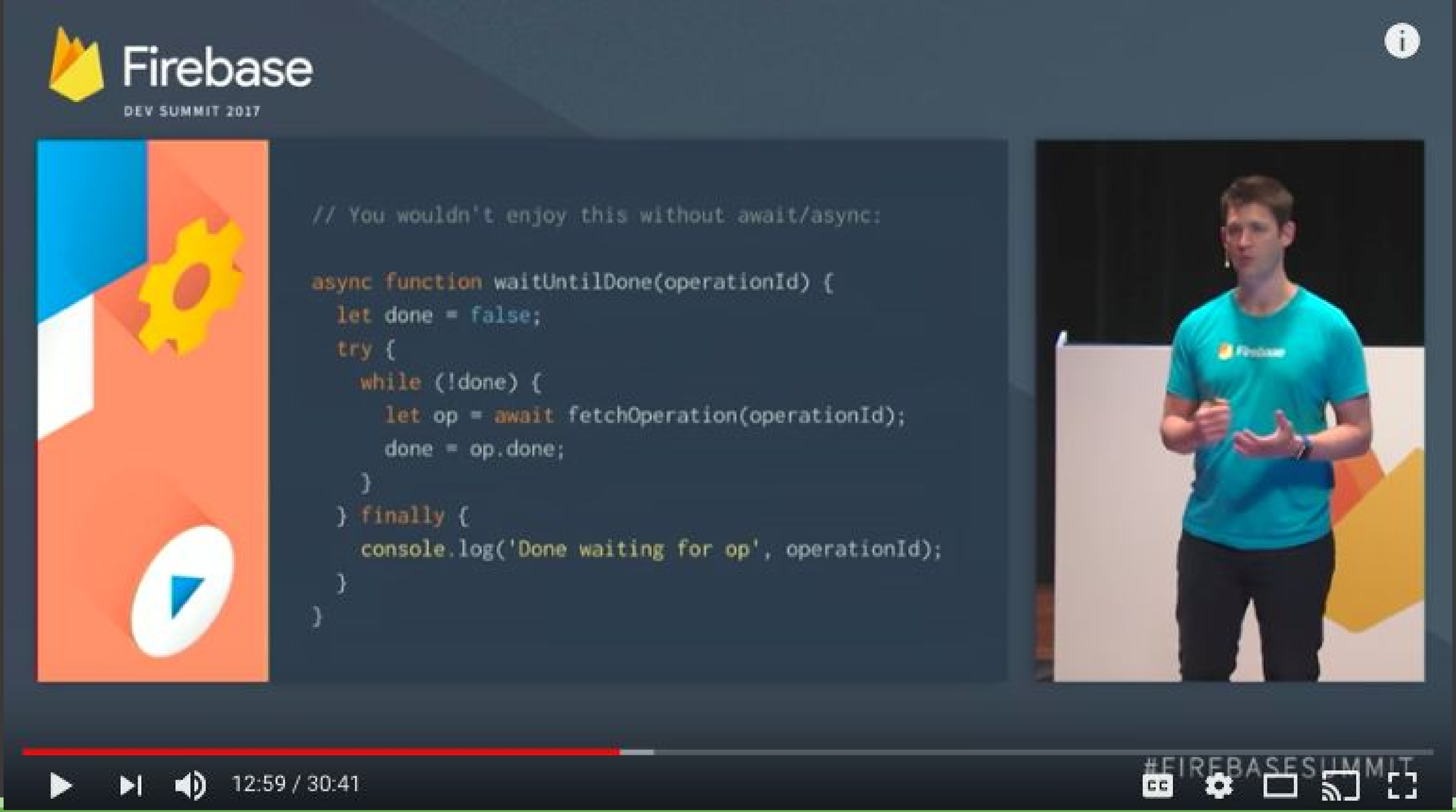
Function declaration:

```
function multiply(a, b) {
    return a * b;
}
```

or, function expression:

```
// Variable assignment
var multiply = function(a, b) {
  return a  b;
}
```

kers

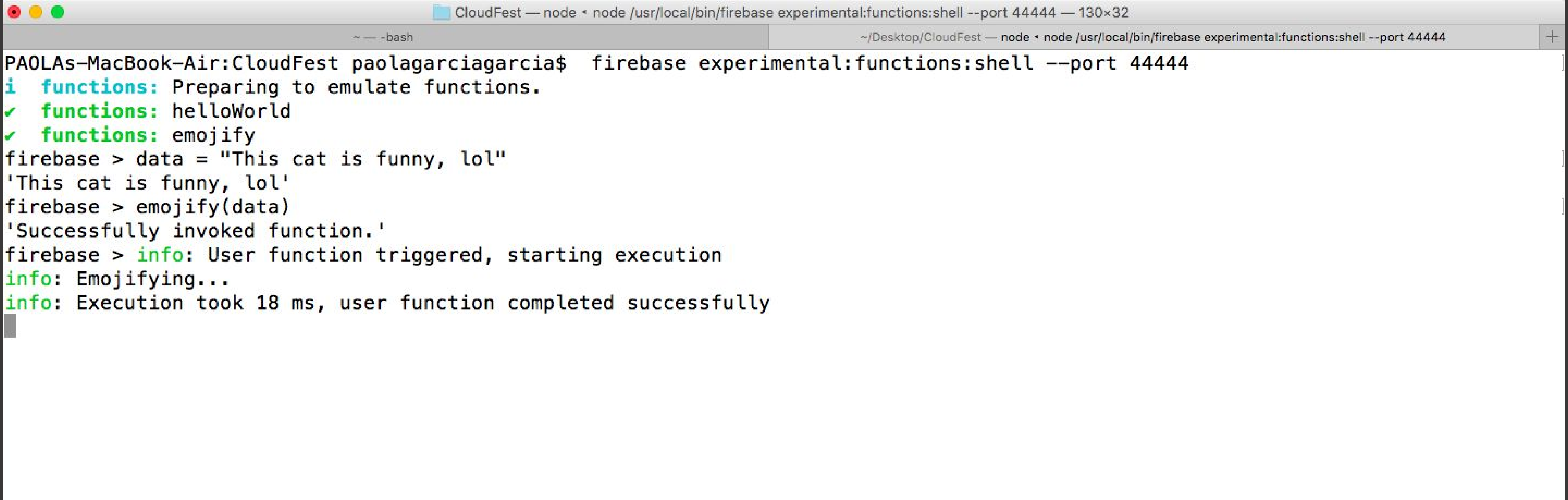


```
// You wouldn't enjoy this without await/async:

async function waitUntilDone(operationId) {
  let done = false;
  try {
    while (!done) {
      let op = await fetchOperation(operationId);
      done = op.done;
    }
  } finally {
    console.log('Done waiting for op', operationId);
  }
}
```

Test Functions locally

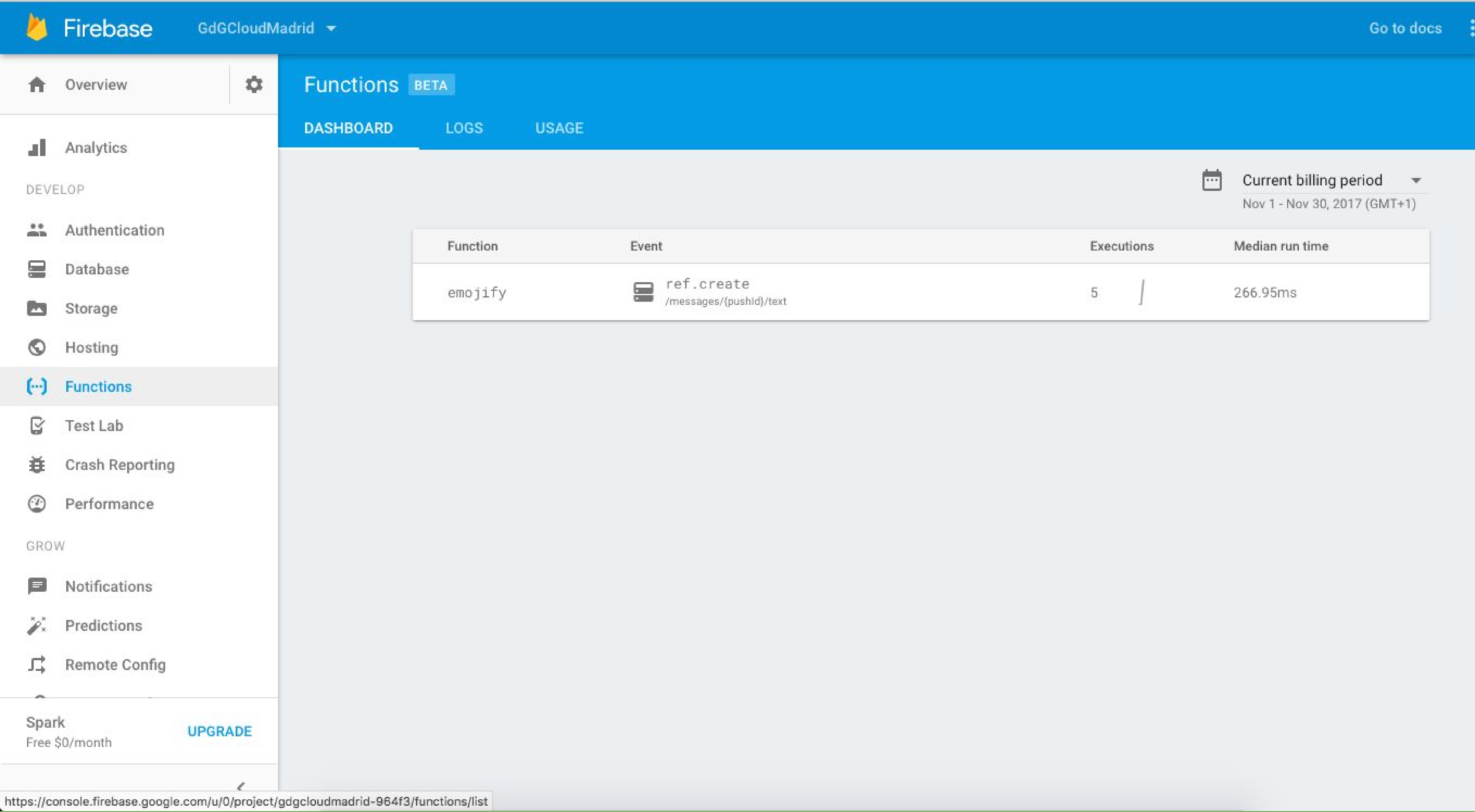
```
>> firebase serve --only functions
>> firebase experimental:functions:shell
```



CloudFest — node ◂ node /usr/local/bin/firebase experimental:functions:shell --port 44444 — 130×32
~ — -bash
~/Desktop/CloudFest — node ◂ node /usr/local/bin/firebase experimental:functions:shell --port 44444

```
PAOLAs-MacBook-Air:CloudFest paolagarciagarcia$  firebase experimental:functions:shell --port 44444
i  functions: Preparing to emulate functions.
✔  functions: helloWorld
✔  functions: emojify
firebase > data = "This cat is funny, lol"
'This cat is funny, lol'
firebase > emojify(data)
'Successfully invoked function.'
firebase > info: User function triggered, starting execution
info: Emojifying...
info: Execution took 18 ms, user function completed successfully
```

```
>> firebase deploy
```



Current billing period

Nov 1 - Nov 30, 2017 (GMT+1)

Function	Event	Executions	Median run time
emojify	ref.create /messages/{pushId}/text	5	266.95ms

Gracias!!!!
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