



FIREBASE FOR IOS

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Overview

- ◉ What is Firebase?
- ◉ Features of the Firebase service
- ◉ Create a new Firebase project for iOS
- ◉ Configure the iOS app for Firebase
- ◉ Database
- ◉ Storage
- ◉ Authentication
- ◉ Further reading



Firebase website at
<https://firebase.google.com>

What is Firebase?

- ◉ Envolve (founded in 2011) was an API to integrate online chat into websites, service was being used to sync application data in realtime
- ◉ Real time database from Envolve was separated into another company called Firebase in April 2012
- ◉ Firebase was acquired by Google in October 2014
- ◉ Firebase is now a backend as a service (BaaS) for mobile and web platforms



old logo



new logo

Features of the Firebase service

Analytics - manage and analyze how users engage with your app

Authentication - authenticate and manage users

Database - store and sync data in real time across all devices

Storage - store and retrieve content such as images, videos, audio

Hosting - deploy web and mobile web apps

Remote Config - customize app with server-side parameters

Test Lab - test Android app on wide range of physical devices

Crash Reporting - detailed reports of errors in the app

Notifications - send message to users

Dynamic Links - get users to relevant content in the app

AdMob - show adds from Google advertisers

 Analytics

DEVELOP

 Auth

 Database

 Storage

 Hosting

 Remote Config

 Test Lab

 Crash

GROW

 Notifications

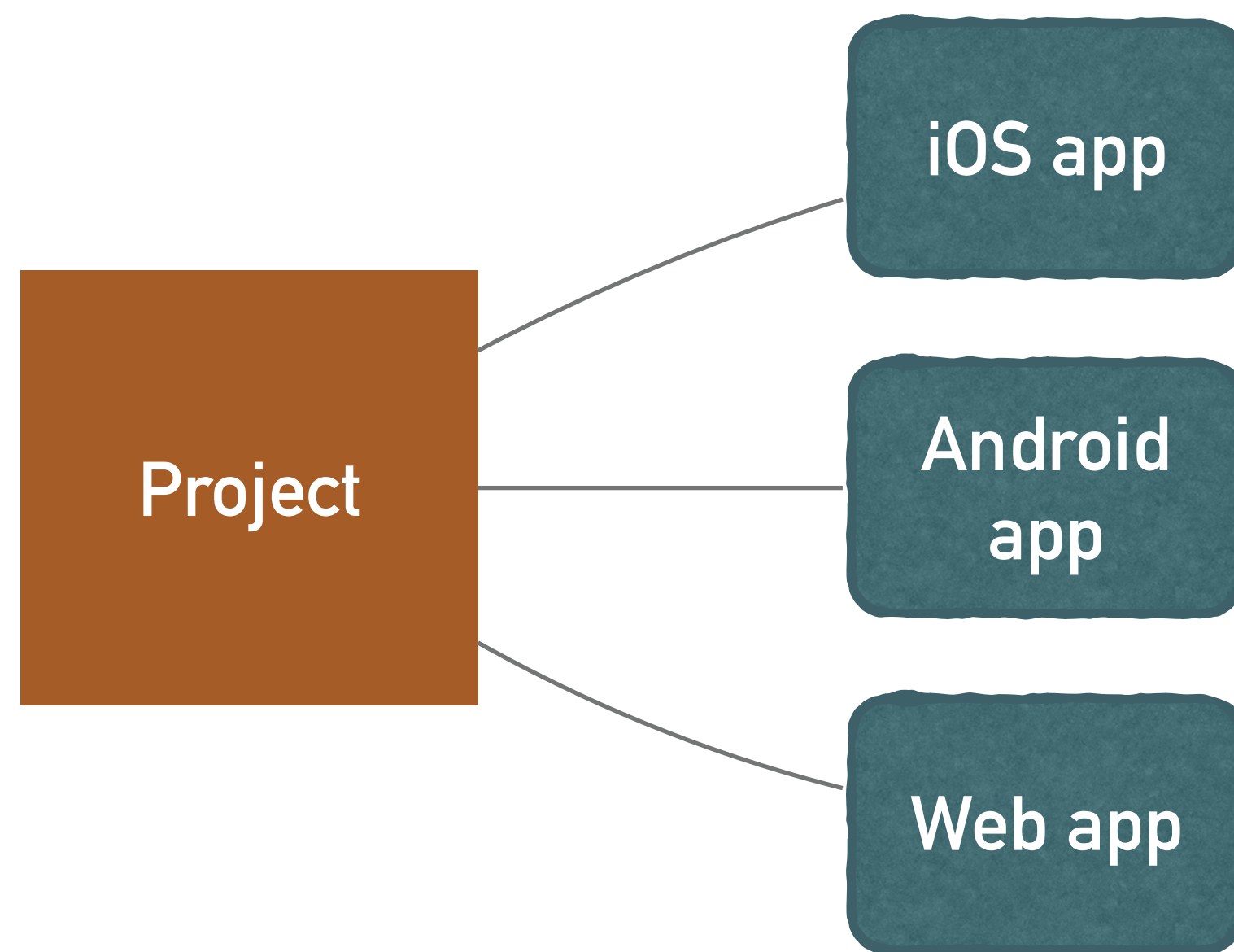
 Dynamic Links

EARN

 AdMob

Create a new Firebase project

- Create and manage Firebase projects in the web console at <https://console.firebase.google.com>
- A project consists of one or more apps
- All apps in the project use the same Firebase services



Welcome back to Firebase

Continue building your apps with Firebase using some of the resources below.

[Documentation](#) [Sample code](#) [API reference](#) [Support](#)

Your projects using Firebase

CREATE NEW PROJECT



Add Firebase to your Android app



Add Firebase to your iOS app



Add Firebase to your web app



Configure the iOS app

- Get the bundle identifier from Xcode
- Copy the Firebase config file into the Xcode project
- Use CocoaPods to install frameworks

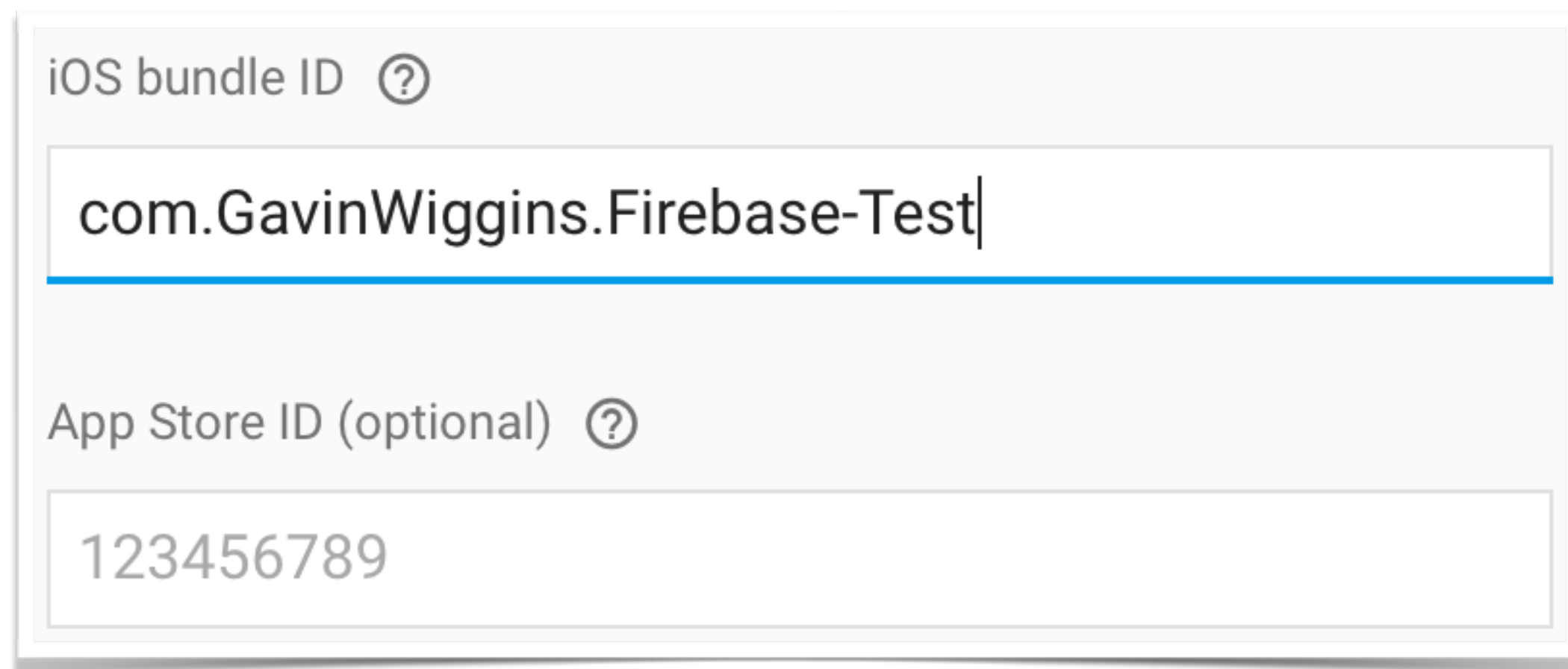


Bundle Identifier

Version

Build

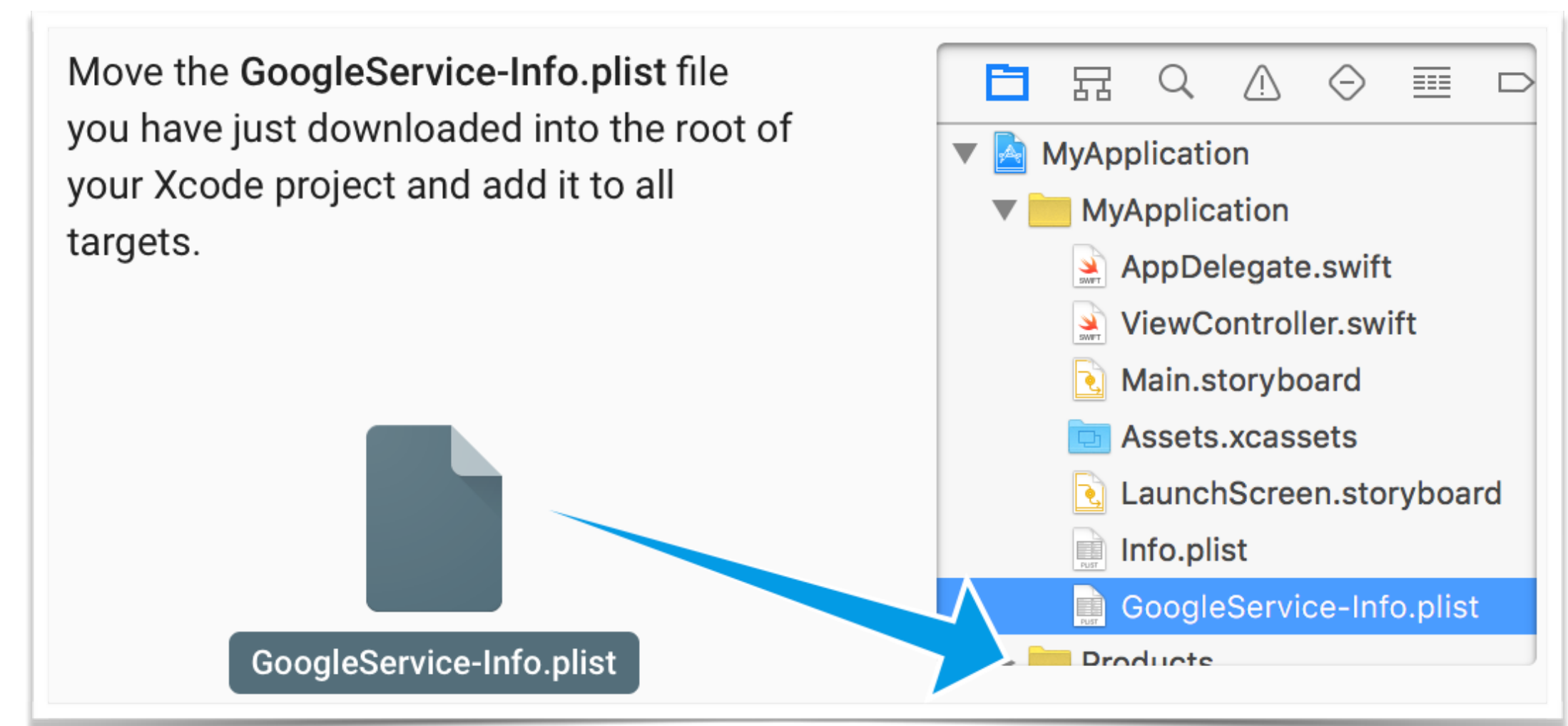
Team



iOS bundle ID

App Store ID (optional)

Move the **GoogleService-Info.plist** file you have just downloaded into the root of your Xcode project and add it to all targets.



The screenshot shows a file browser view of an Xcode project named 'MyApplication'. The file list on the right includes 'AppDelegate.swift', 'ViewController.swift', 'Main.storyboard', 'Assets.xcassets', 'LaunchScreen.storyboard', 'Info.plist', and 'GoogleService-Info.plist'. A blue arrow points from a file icon labeled 'GoogleService-Info.plist' in the center to the 'GoogleService-Info.plist' file in the project's file list.

Configure the iOS app

Pod file for iOS app
with real time database.

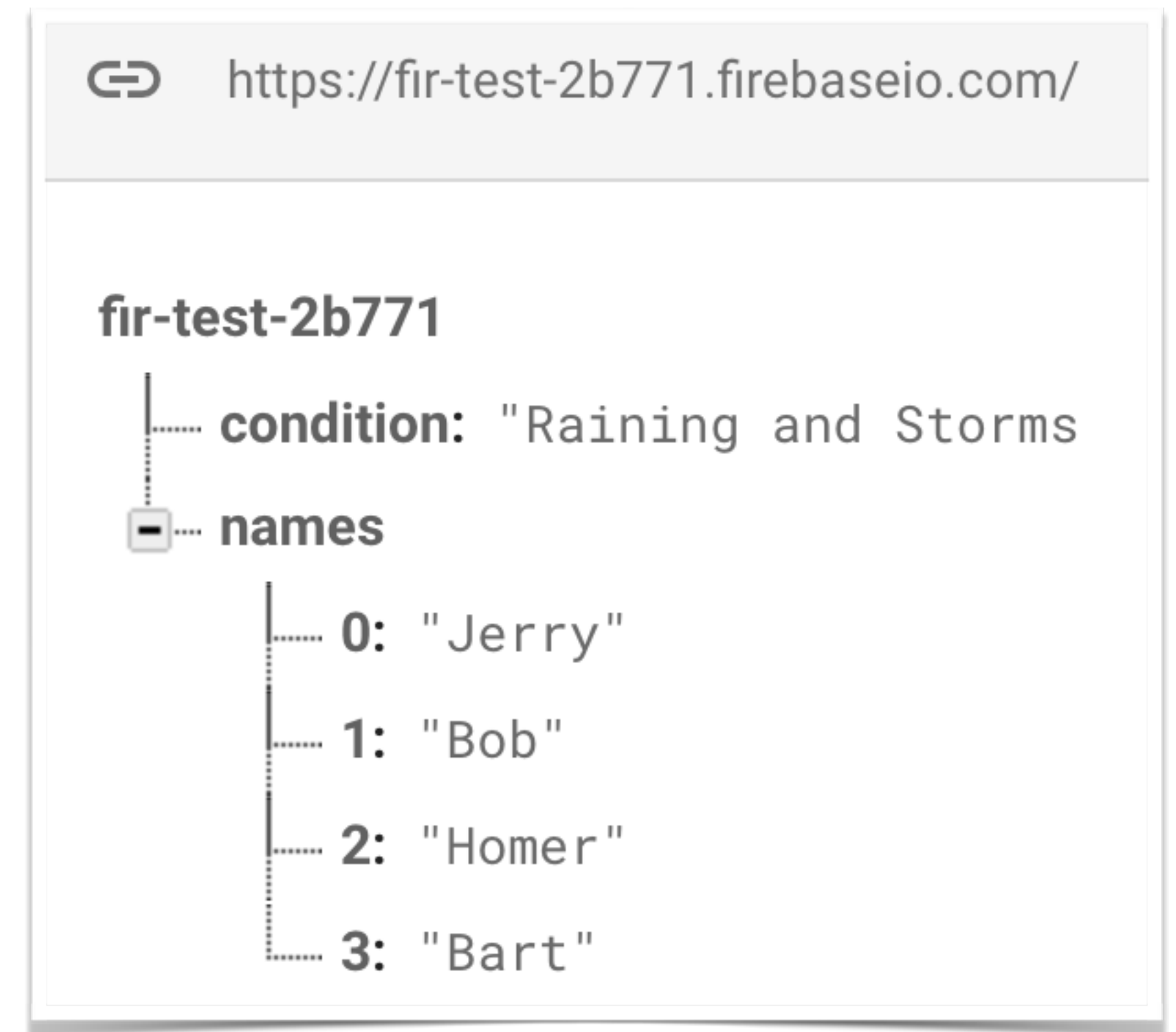
```
1 platform :ios, '9.0'
2
3 target 'Firebase-Test' do
4   use_frameworks!
5   pod 'Firebase'
6   pod 'Firebase/Database'
7 end
8
~
```

Initialize Firebase in
the AppDelegate.

```
9 import UIKit
10 import Firebase
11
12 @UIApplicationMain
13 class AppDelegate: UIResponder, UIApplicationDelegate {
14
15     var window: UIWindow?
16
17     override init() {
18         FIRApp.configure()
19     }
20
21     func application(application: UIApplication, didFinishLaunchingWithOptions
22         return true
23     }
24 }
```

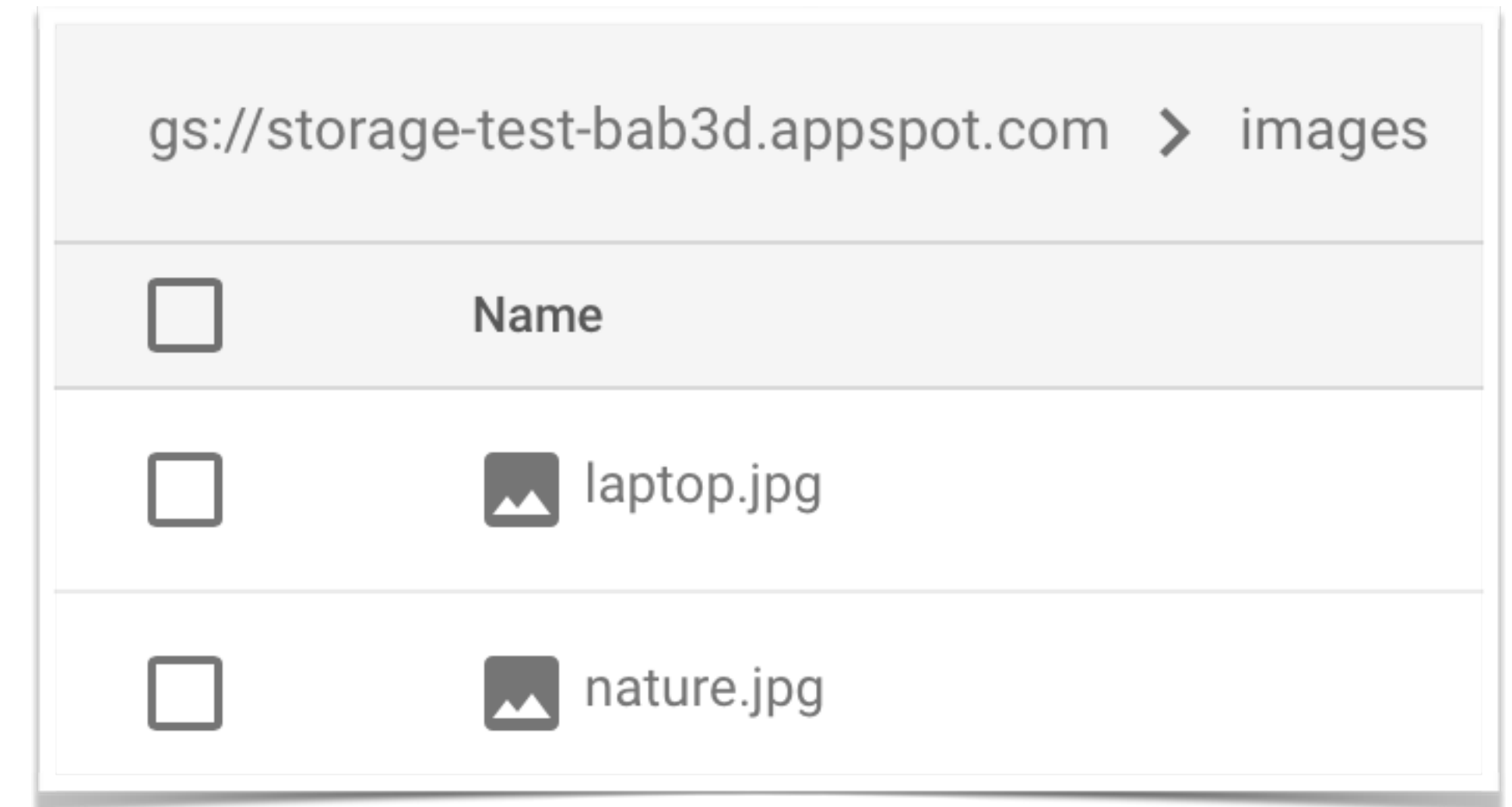
Database – Store and sync data in real time

- NoSQL cloud database, data stored as JSON
- All clients share one database and automatically receive new data
- Control read/write access to database
- Persists data to disk when offline, by default 10 MB cache for synced data
- Requires the following pods
‘Firebase’
‘Firebase/Database’
- Database documentation at <https://firebase.google.com/docs/database/>









Storage – Upload and download user-generated content

- Store images, audio, videos, etc.
- Data stored in Google Cloud Storage bucket
- Set access controls for individual files or groups of files
- Requires the following pods
 - ‘Firebase’
 - ‘Firebase/Storage’
- Storage documentation at <https://firebase.google.com/docs/storage/>

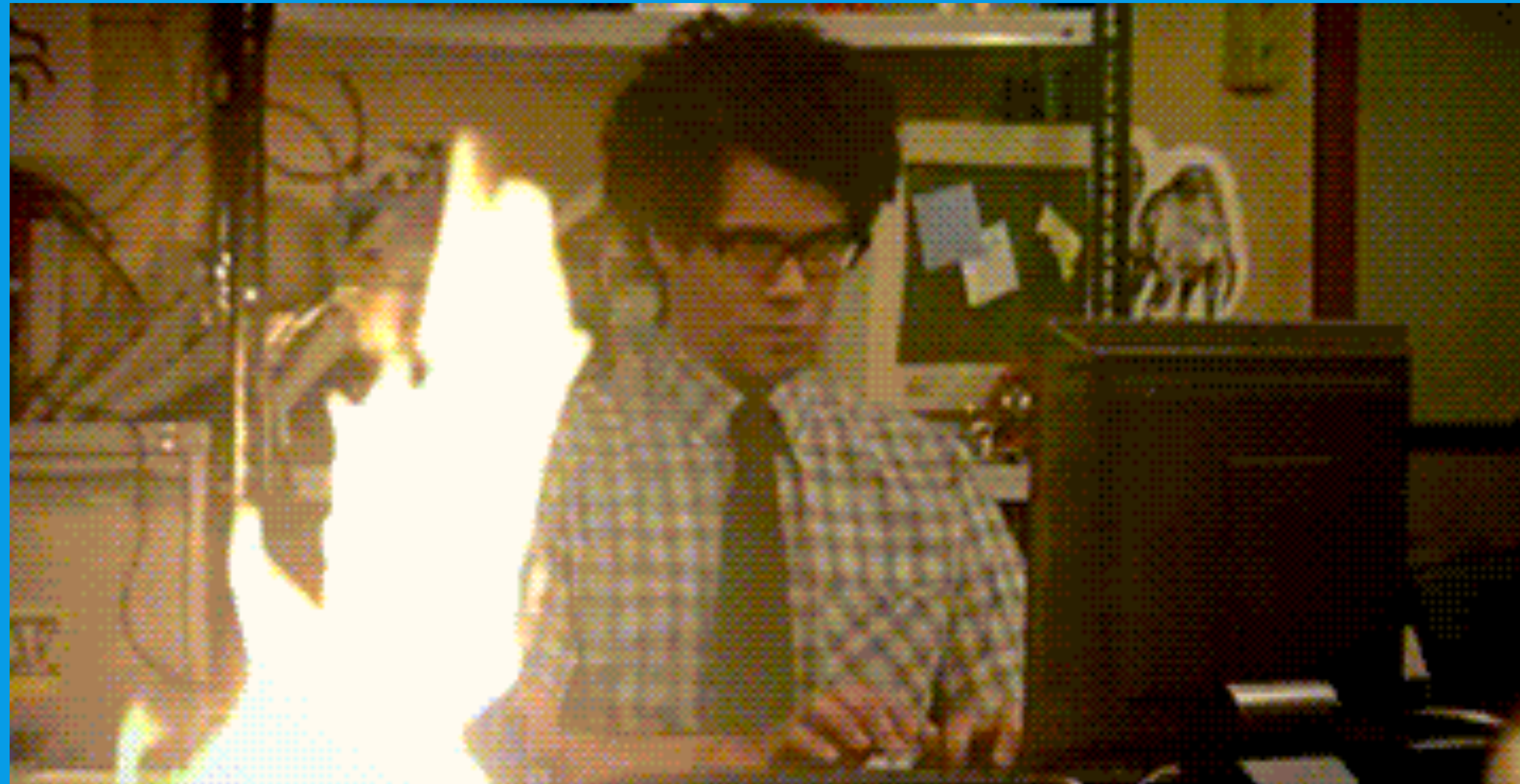


Authentication – Sign in users to your app

- Sign in with Google, Facebook, Twitter, and GitHub accounts as well as Email/Password
- By default, authenticated users have read and write privileges
- OAuth 2.0 and OpenID Connect support
- Temporary anonymous accounts can be upgraded to regular account
- Requires the following pods
 - ‘Firebase’
 - ‘Firebase/Auth’
- Authentication documentation at <https://firebase.google.com/docs/auth/>

Sign-in providers	
Provider	Status
 Email/Password	Enabled
 Google	Disabled
 Facebook	Disabled
 Twitter	Disabled
 GitHub	Disabled
 Anonymous	Disabled

Demo time...



Further reading...

Firebase website - <https://firebase.google.com>

Samples - <https://firebase.google.com/docs/samples/>

YouTube - <https://www.youtube.com/user/Firebase>

Firebase GitHub - <https://github.com/firebase>

Firebase iOS Codelab Swift

<https://codelabs.developers.google.com/codelabs/firebase-ios-swift/#0>

