Firebase Authentication

Android Development

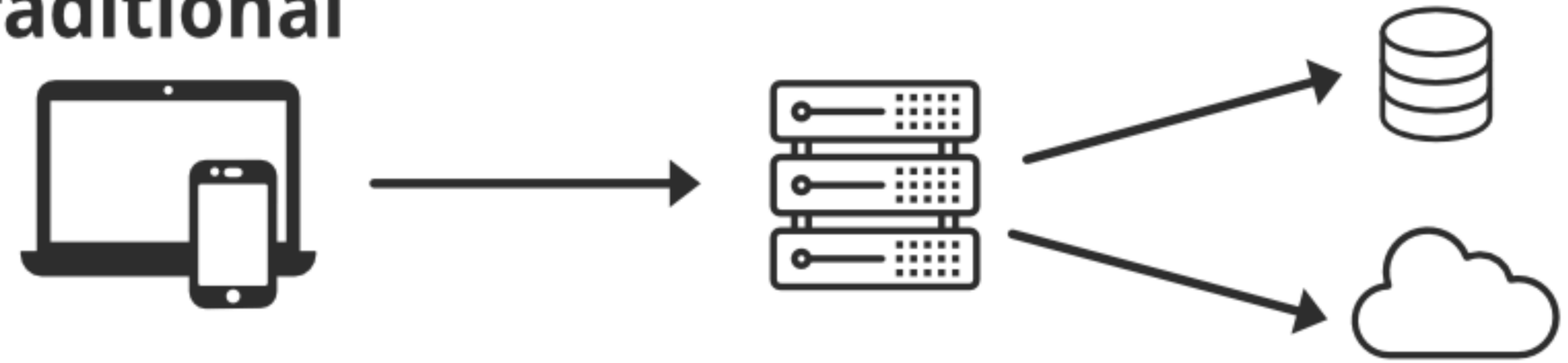
NIFR 2023

Firebase Authentication

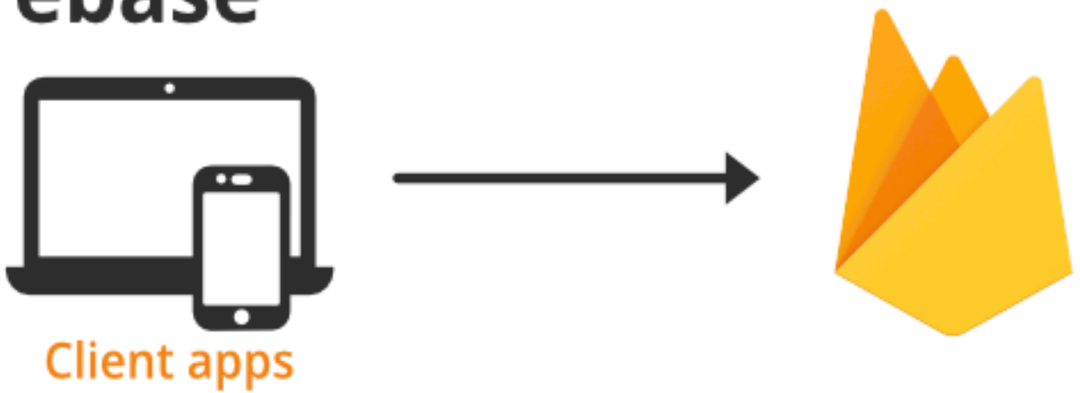
Android Development

- Firebase elaboration
- Setting up Firebase Authentication
- Implementation example
- Workshop

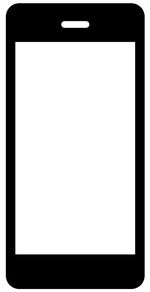
Traditional

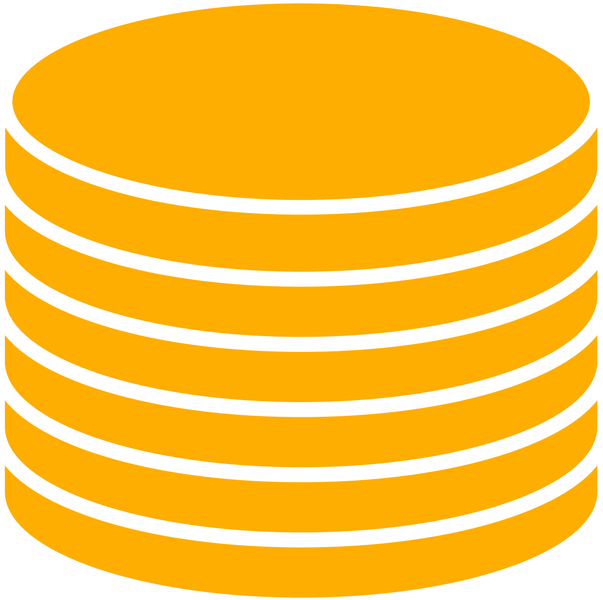


Firebase

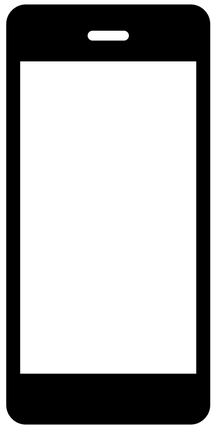


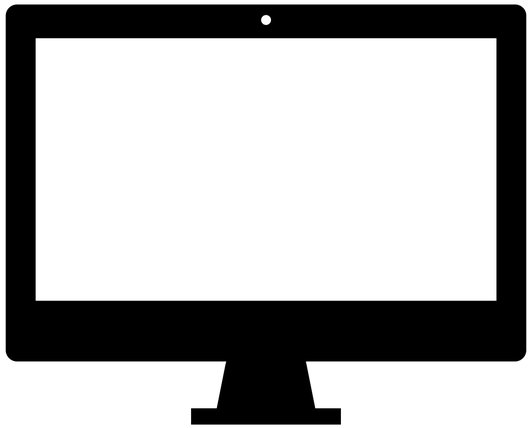
Client apps

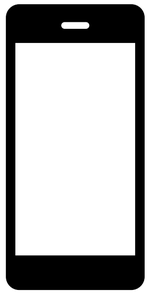


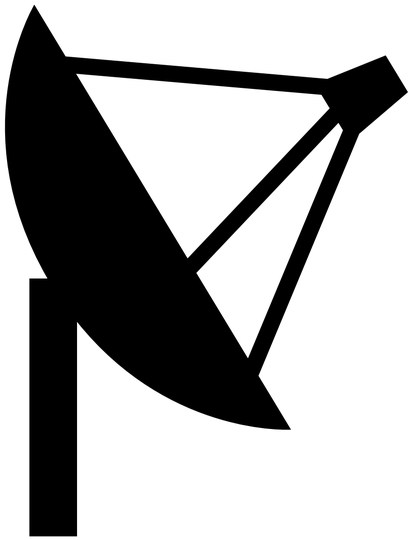


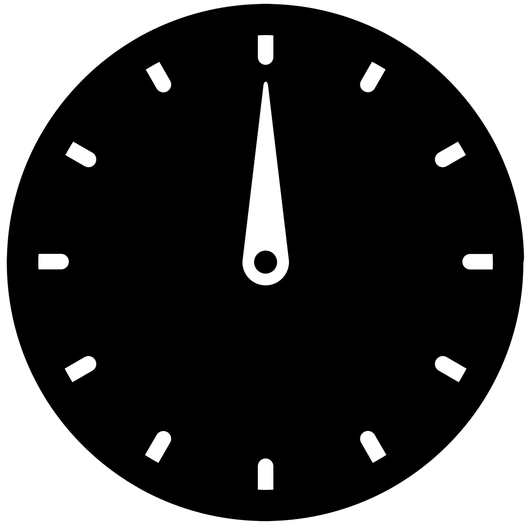
VS











Authentication

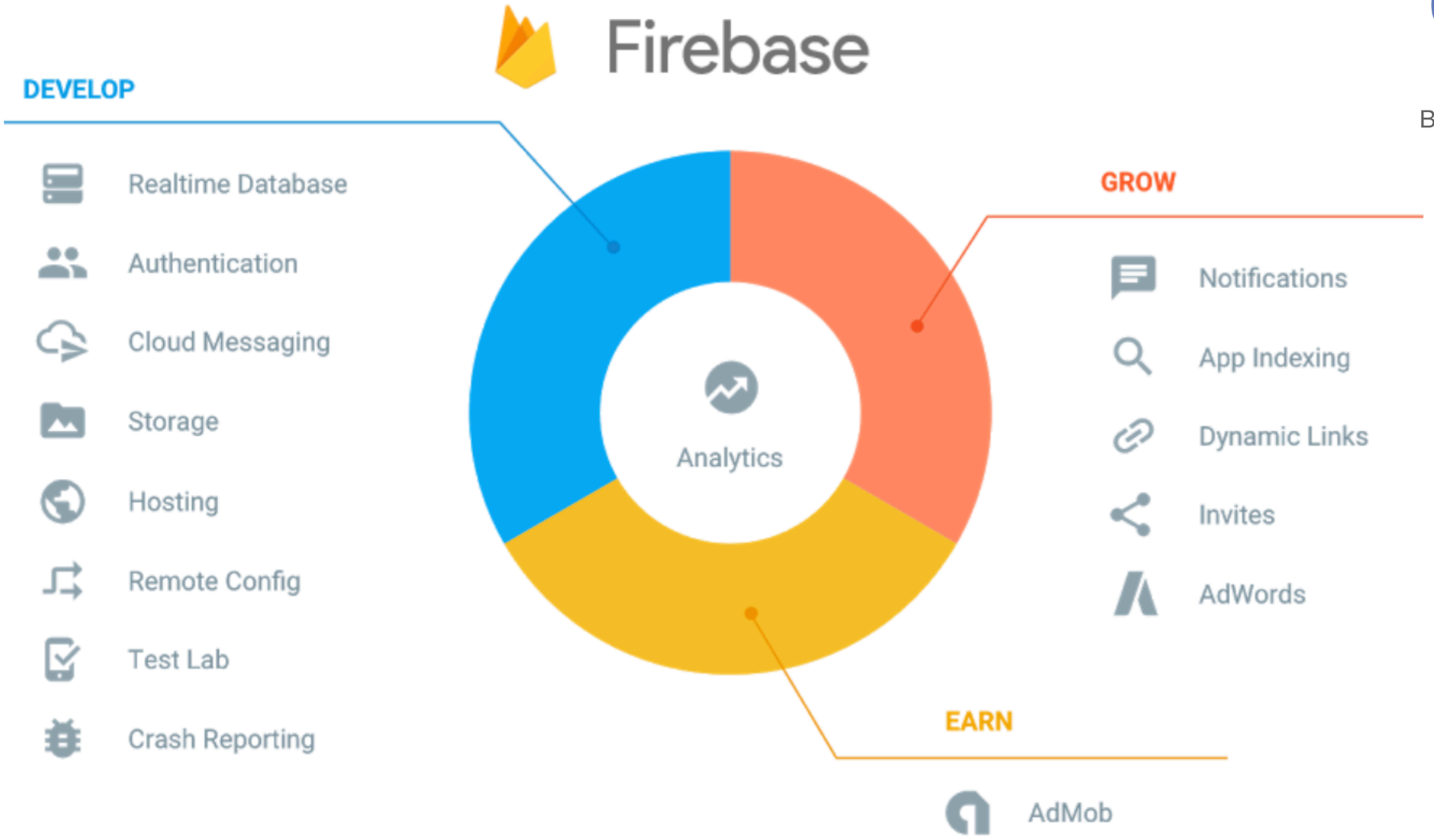
Users | Sign-in method | Templates | Usage | Settings | Extensions NEW

Search by email address, phone number, or user UID

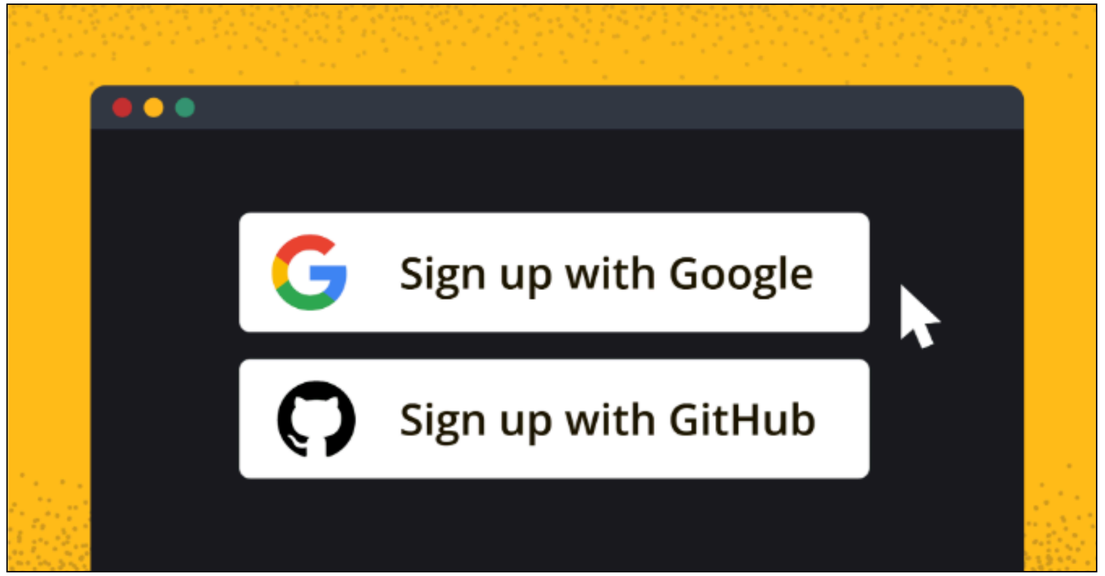
Add user

Identifier	Providers	Created ↓	Signed In	User UID
hehsad@asdasd.dk	✉	Mar 24, 2023	Mar 24, 2023	DdzG3lYdF0geFEu5BtE7uOJqzNJ2
username@asdasd.dk	✉	Mar 24, 2023	Mar 24, 2023	s9R5s4ZwJtbPD76HdcqO4KevgRa2

Rows per page: 50 1 – 2 of 2


Firebase
DEVELOP
Realtime Database
Authentication
Cloud Messaging
Storage
Hosting
Remote Config
Test Lab
Crash Reporting
Analytics
GROW
Notifications
App Indexing
Dynamic Links
Invites
AdWords
EARN
AdMob

B/SaaS
Backend as a service



ML Kit
for Firebase

Firebase
Hosting

Google AdMob

Kotlin+KTX Android | Java Android

```java
FirebaseUser user = FirebaseAuth.getInstance().getCurrentUser();
if (user != null) {
    // User is signed in
} else {
    // No user is signed in
}
```

MainActivity.java

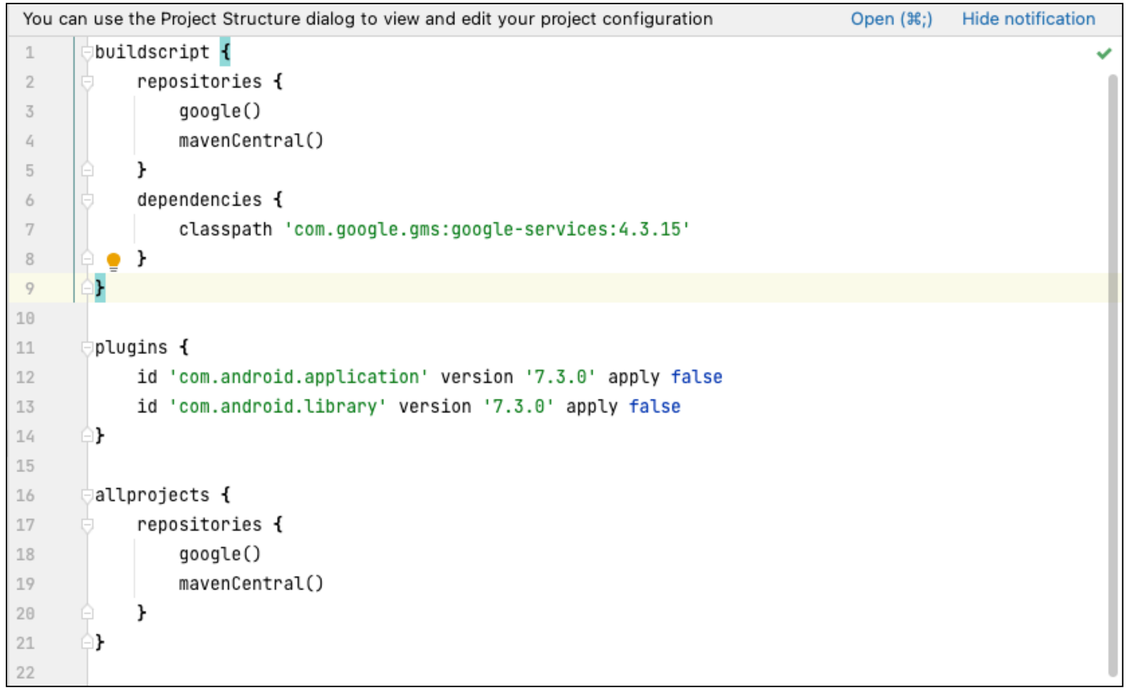
Password:
ADMIN123
Hashing+Salt
Password:
nak(SdnL”€n389

Authentication

Setup

- Configuration can be tricky but makes development **much** easier
- 3 main things to remember:
  - Dependency management in gradle
  - Connection by Google Services - google-services.json
  - Setting up the project on firebase console

Gradle Scripts
build.gradle (Project: firebase)
build.gradle (Module: firebase.app)
gradle-wrapper.properties (Gradle Version)
proguard-rules.pro (ProGuard Rules for firebase.app)
gradle.properties (Project Properties)
settings.gradle (Project Settings)
local.properties (SDK Location)


You can use the Project Structure dialog to view and edit your project configuration
Open (⌘;)
Hide notification
buildscript {
repositories {
google()
mavenCentral()
}
dependencies {
classpath 'com.google.gms:google-services:4.3.15'
}
}
plugins {
id 'com.android.application' version '7.3.0' apply false
id 'com.android.library' version '7.3.0' apply false
}
allprojects {
repositories {
google()
mavenCentral()
}
}

Add Firebase to your Android app

1 **Register app**

Android package name

com.company.appname

App nickname (optional)

My Android App

Debug signing certificate SHA-1 (optional)

00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:0

Required for Dynamic Links, and Google Sign-In or phone number support in Auth. Edit SHA-1s in Settings.

Register app

2 Download and then add config file

3 Add Firebase SDK

4 Next steps

Be aware

Why my project will not work on your computer

google-services.json