#### Firebase on Android

#### USER EMAIL AUTHENTICATION AND VERIFICATION



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### Module 1.1: Getting Started





Register Users

Verify Email Addresses

• Sign-in Users

Manage User Account Properties



- Purchase a domain
- Build a website to manage users
- Implement an authentication system
  - OAuth1.0
  - OAuth2.0
  - Another Token-Based System



- Purchase a domain
- Build a website to manage users
- Implement an authentication system
- Security
- Scalability

# **Firebase Authentication**







**Cloud-Based** 

**Android** 

IOS

Web





User Management
Database
Hosting
Crash Reporting
Push Notifications
Cloud Functions



Authentication

**Email registration** 

Login

**Verification** 

Managing user accounts





- No domain needed
- No server needed
- No cumbersome OAuth requests
- No worries about security
- No problems with scalability
- Way less time

# What's the Catch?

- 1. How much does it cost?
- 2. What makes it so secure?

#### How Much Does It Cost?



Free to start

Firease.google.com/pricing/

#### What Makes It so Secure?



Google product

2048 keys for the SSL certificates

Sign tokens with SHA256 HMAC Signatures

BCrypt for password storage



# Module 1.2: Prerequisites



#### Prerequisite Skills

Some Android experience Zero Firebase experience





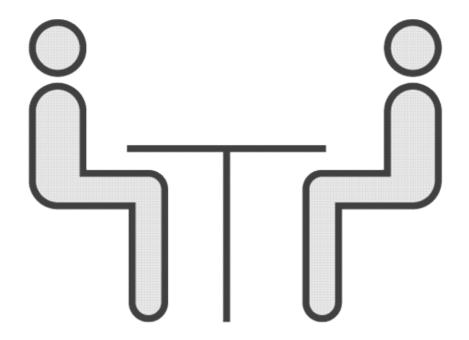
- Android Version 26
- Firebase Version 11.0.4
- Android Studio Version 2.3
- Firebase SDK
- Google Play Services SDK

#### Module 1.3: The Story Behind The App

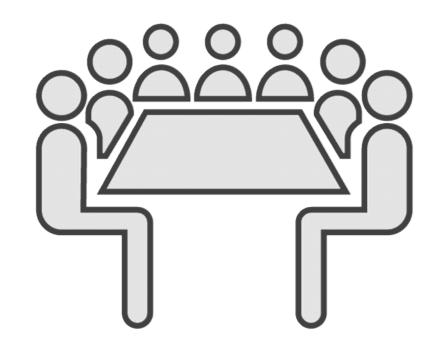




















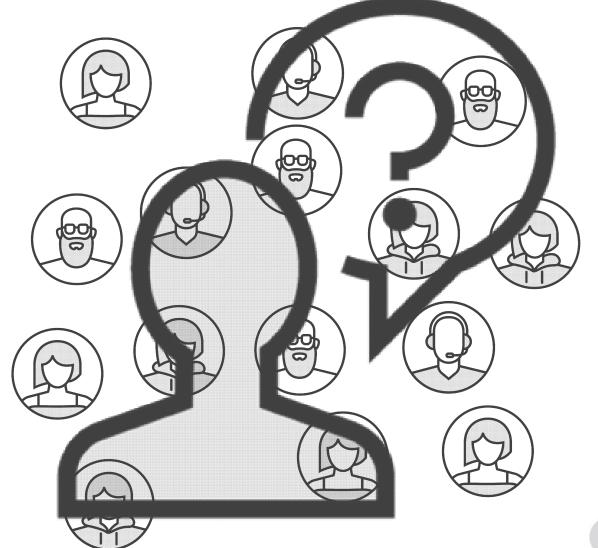














Secure (allow only employees)

Highly scalable

Minimize development cost and time



#### Secure (allow only employees)



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#### Is Firebase The Right Choice?



**Absolutely!** 



#### Module 1.4: Complete App Demo



#### Demo



Note to Paul: This space will be occupied by an onscreen demo of the application