



# Android with Firebase: Authentication



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# Section Overview

- What we will cover in this course.
- Who is this course for & Prerequisites?
- See an overview of the Firebase Authentication feature.
- See what the final app will look like.
- Setup Android Studio Project + Required Dependencies.
- Learn How to set up a Firebase Account.
- Create and Customize Firebase Project.
- Implement Splash Screen.
- Checking Authentication State.



# Your Instructor

- Senior Android developer
- 9+ years in development
- Content creator and Instructor



# What we will cover in this course

- Firebase Authentication System.
- Signing Users with different means (email, Google, Facebook..., etc.)
- Managing user account and their profile.
- Storing user data in Firestore.
- Exploring Advanced features (multi-factor auth, custom auth system).
- Exploring integration with MVVM architecture
- Use the following tech stack:
  - Hilt DI
  - Jetpack compose
  - Jetpack navigation
  - Kotlin Coroutines.
  - And much more.



# Who this course is for & prerequisites

- Intermediate Android developers.
- Knowledge in Android app development
- Knowledge of Building UIs with Jetpack compose



# Section Summary

- Viewed what this course will cover.
- Took a tour of the app functionality.
- Saw a brief summary of the Firebase Authentication
- Created Android Studio Project with Jetpack compose.
- Created a Firebase Account and Firebase Project.
- Linked the Android App with Firebase Backend service.
- Implemented a Simple Splash Screen.
- Verified the current authentication state.





# Email and Password Authentication

Up Next





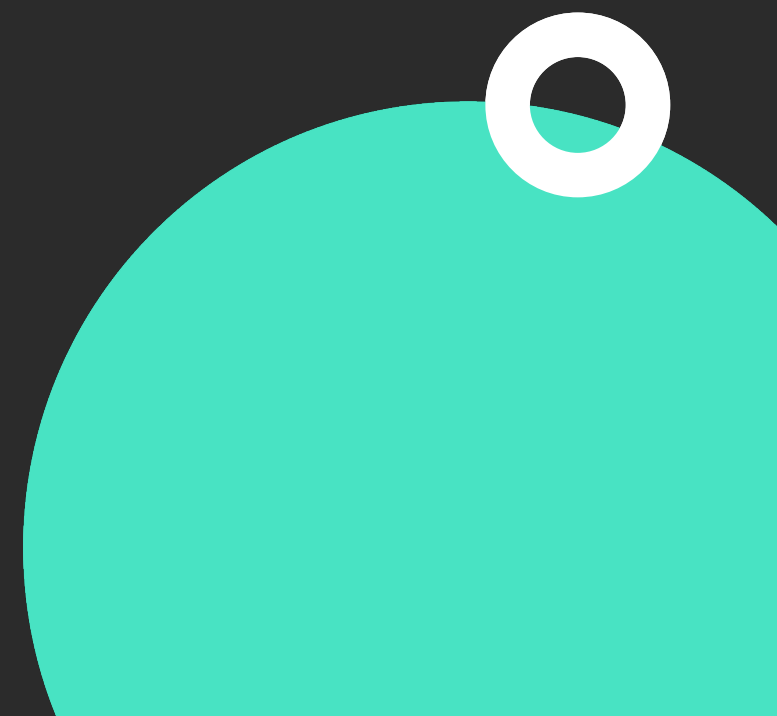
# Email and Password Authentication



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# Section Overview

- Understand How Email Authentication works.
- Implement UI Screens for Sign UP and Login.
- Implement Login and Sign Up Features.
- Code the Forget password workflow.
- Use MVVM and UDF.
- Create Auth abstractions.



# Section Summary

- Saw a brief summary of Email Authentication.
- Created Jetpack Compose UI for Login and Sign UP.
- Added Required Implementation for Email Authentication.
- Implemented a Forget password feature.
- Added the Business Logic In MVVM.
- Made abstractions that make sense.





# Implementing Home Screen

Up Next





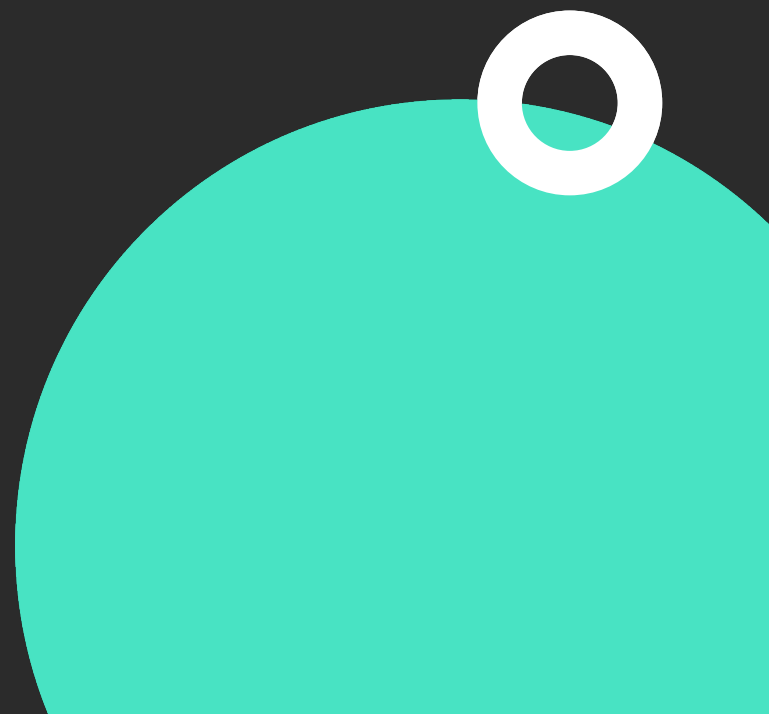
# Implementing Home Screen



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# Section Overview

- Implement a Home Screen after user authentication with Firebase.
- Access user profile data from Firebase Auth.
- Display user data on the Home Screen.
- Explore the possibility of requesting email validation for enhanced security.
- Implement Sign Out and Delete Account features for user management.



# Section Summary

- Created a Home Screen following user authentication with Firebase.
- Accessed user profile data from Firebase Auth, including:
  - name, email, and userID, and displayed it on the Home Screen.
- Explored the option of requesting email validation.
- Implemented Sign Out and Delete Account features for user management.





# Saving User Data with Firestore

Up Next





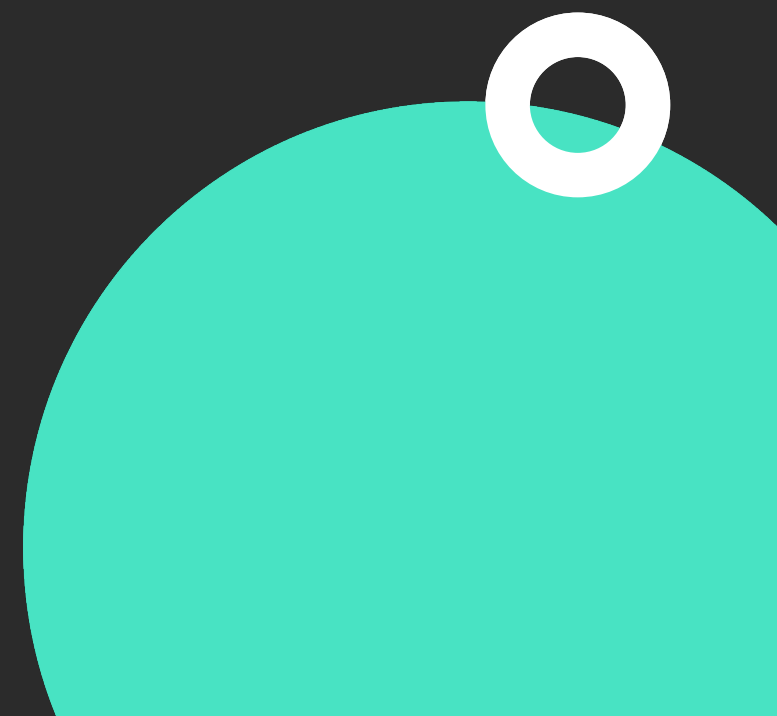
# Saving User Data with Firestore



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# Section Overview

- Explore saving and loading user data with Firebase Firestore.
- Implement a data abstraction layer for integrating Firestore.
- Showcase displaying user data on the Home Screen.
- Checkout Security Rules with Firebase Auth.



# Section Summary

- Implemented the process of saving and loading user data using Firebase Firestore.
- Addressed the limitations of Firebase Auth by saving additional user information.
- Created a data abstraction layer for seamless integration with Firestore.
- Displayed user data on the Home Screen.
- Gained a solid understanding of how to save and load user data with Firestore.
- Got basic understanding of Security Rules.





# Implementing Different Auth Providers

Up Next





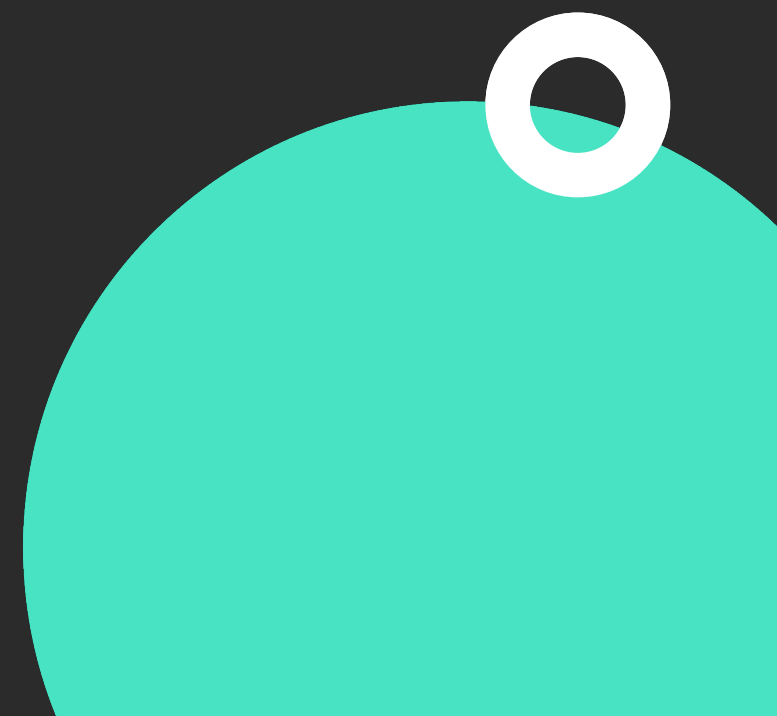
# Implementing Different Auth Providers



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# Section Overview

- Learn various authentication providers for diverse login options.
- Understand the setup and implementation logic for each authentication provider.
- Demonstrate the process for different Auth providers such as:
  - Anonymous Auth.
  - Google.
  - Facebook.
  - Twitter.
  - Phone Number.
- Check how to do provider setup for each method.



# Section Summary

- Explored diverse authentication providers for versatile login options.
- Covered setup and implementation logic for each provider, such as Facebook, Google, Twitter, and more.
- Gained a solid understanding of setting up and implementing each authentication method.





# Advanced Feature with Firebase Authentication

Up Next





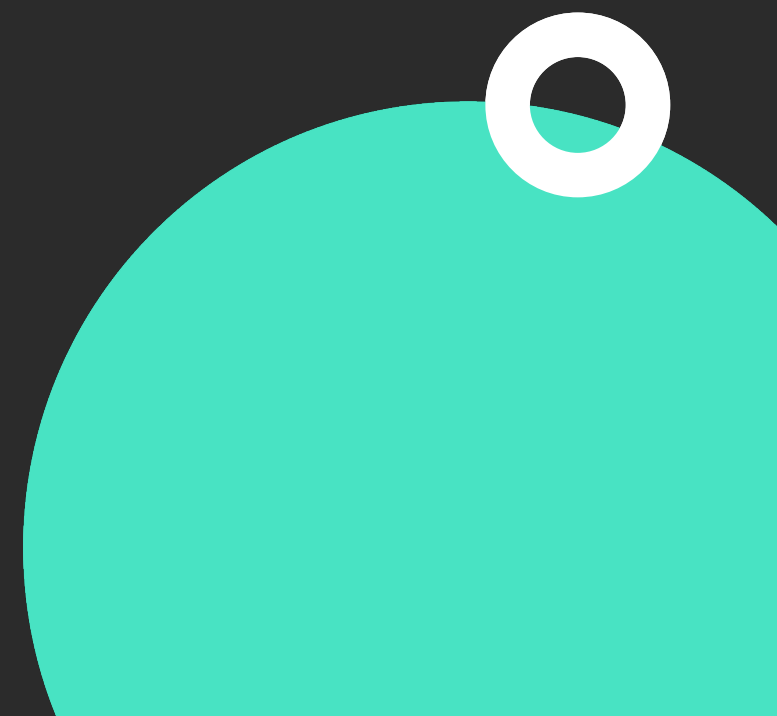
# Advanced Feature with Firebase Authentication



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# Section Overview

- Explore Ready-Made FirebaseUI Auth User Interface.
- Implement Multifactor Authentication.
- Learn how to create a customized authentication system using Firebase.
- Check Emulator Suite by Firebase.



# Section Summary

- Saw how to implement Firebase UI (View Based System)
- Implemented Multi-Factor Authentication using Firebase Auth.
- Viewed how to create a Custom Auth system with Firebase.
- Added Emulator Suite for testing with Local Firebase Version.





# Wrapping UP

Up Next





# Wrapping Up



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# Wrapping Up

- Project Wrap-up.
- Thank you for taking this course.
- This course is only a key.
- Let us know for any feedback or question you have!





# Your turn to Practice!

Up Next

