App Development

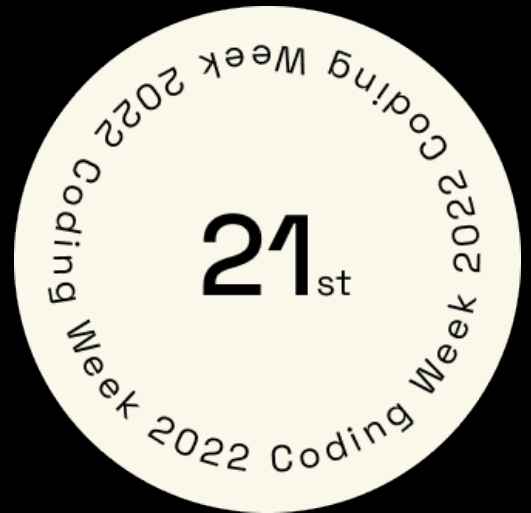Coding Week 2022 Coding Week 2022 Coding Week 2022 Coding Week 2022 Coding Week 2022

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App Development

Android Studio

We will be using Android Studio as our preferred IDE for Android App Development
Download and Install Android Studio from here: Download Android Studio and SDK tools | Android Developers
Guide for Installating Android Studio: Install Android Studio | Android Developers

Android Basics Course

To understand the basics of Android App Development, we will follow Google's official course on App Development with Kotlin
Note: Kotlin is the preferred language for Android Development, so we will use Kotlin in this tutorial. Though, if you are familiar with Java and want to complete the task using Java, you are free to do so
Course link: Android Basics in Kotlin course | Android Developers
Unit 1: Complete all 4 pathways
Unit 2: Complete all 3 pathways
Unit 3: Complete the first 2 pathways (others are optional)

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Although it is recommended to complete the entire course, if you are constrained on time, you can complete specific pathways mentioned above in order to complete the Coding Week task.

Local Data Storage

We need our app to store data permanently even when the app is closed. We can store this data online using services like firebase or locally in the phone's internal storage. Follow the below playlist to learn about Room Databases to store data locally on the device.
(1) ROOM Database - Kotlin - YouTube : First 6 videos (others are optional)

Firebase (Optional)

Firebase is a powerful cloud tool offered by Google which provides various services like authentication, database, storage, cloud functions etc. We can add users and authentication to our app by using firebase:
Firebase Auth - Link
Instead of storing data locally on the device, we can use firebase firestore to store data on the cloud, so that we can access the data for a user on multiple devices.

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Firebase Firestore: (1) Build a Complete Android App with Firebase - Full Course with Kotlin - YouTube

The developer websites for Android and Firebase will be a great resource for your learning journey. You will find documentation for all the code, guides, tutorials and a lot more here.

Links for developer websites:
Android Developers
Firebase

If you are stuck somewhere, then we are always there for help on the Coding Club Discord server.

Note: Android Development using Kotlin is just one of the ways to do App Development, if you are familiar with Flutter, React Native or Android Development using Java, then you are free to complete the Coding Week task using any one of these technologies.

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Make sure to go through the material carefully to ensure that you perform well in the task. ↑

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