

# PROJECT 03 - REMOTE KEYBOARD (ANDROID)

## GITHUB

<https://github.com/EsmailElhanash/RemoteKeyboard>

## TYPE

Android app (public code + demo video)

## DATE

[not included]

## ONE-LINE SUMMARY

An Android app that lets users create custom keyboard layouts to control a remote device. Tap to use a layout, long-press to enter edit mode. Edit mode supports building and fully customizing buttons and layouts.

## CORE USER EXPERIENCE

- Main screen: list of saved layouts
- Single tap: Use Mode (send keystrokes to the remote device)
- Long press: Edit Mode (layout builder)

## KEY FEATURES

- 1) Use Mode
  - Press buttons to send keystrokes/actions to a connected remote device
- 2) Edit Mode (Layout Builder)
  - Add buttons
  - Drag and resize freely (direct manipulation editor)
  - Rename buttons
  - Assign keystrokes/actions
  - Change icons
  - Customize colors, fonts, font size, and shadow
  - Customize background and layout styling
  - Save and reuse multiple layouts

## MY ROLE

Android Developer (main contributor)

Owned: UI implementation + editor behavior, local persistence, and app architecture.

## TECH STACK (FROM CODE/GRADLE)

- Kotlin
- Jetpack Compose, Room, Hilt, Kotlin Coroutines, Navigation, Coil, Gson, Lifecycle (ViewModel/LiveData), Espresso UI tests
- Optional build info

- compileSdk: n/a
- targetSdk: n/a
- minSdk: n/a

## **TECHNICAL HIGHLIGHTS**

- Two-mode interaction model keeps daily use simple while enabling deep customization
- Freeform drag/resize editor with a scalable data model for many button properties
- Local persistence for fast, offline-ready layout loading

## **PROOF ASSETS INCLUDED**

### **Videos**

- remote\_keyboard\_demo\_full\_720p.mp4
- remote\_keyboard\_demo\_highlight\_60s.mp4

### **Screenshots**

- remote\_keyboard\_01\_layouts\_list.png
- remote\_keyboard\_02\_open\_layout\_use\_mode.png
- remote\_keyboard\_03\_edit\_mode\_resize\_drag.png
- remote\_keyboard\_04\_icon\_picker.png
- remote\_keyboard\_05\_button\_style\_colors\_fonts.png
- remote\_keyboard\_06\_background\_customization.png
- remote\_keyboard\_07\_edit\_menu\_options.png