

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