

Android killer project

Software specs:

- newoskrnl.exe: 350KB of size.
 - C++ kernel.
 - Made for less restrained platforms with those CPU: RISC-V, ARM, AMD64, POWER
 - Firmware agnostic.
- phonkrnl.exe
 - C kernel.
 - Designed for embedded use, like a dumbphone.
- coreboot.elf: 25K of size.
 - C ROM
 - Platform agnostic

Must be capable of:

- Running without virtual memory/memory protection enabled.
 - This applies to the lower model of the product line.
 - We need an ESP32 based phone then.
 - We need to adapt that, in order to utilize the kernel, os and apps.
- Take advantage of the platform's strong points, and keep the cons in mind.
- Must be able to read aNewFS partition.
- Must be EPM formatted.
- The output graphics must be relevant to the device physical size.

Core apps of a phone, also known as essential or default apps, are fundamental applications that provide basic functionality expected by users. These apps are typically pre-installed on the device and cover a range of everyday tasks. Here's a list of the most common core apps found on modern smartphones:

1. **Phone/Dialer:** Used for making and receiving calls. It typically includes a contacts list, call history, and voicemail features.
2. **Contacts:** Manages the user's address book, storing contact details such as phone numbers, email addresses, and other personal information.
3. **Messages (SMS/MMS):** Handles sending and receiving text messages (SMS) and multimedia messages (MMS).
4. **Email:** Allows users to send and receive emails. It often supports multiple email accounts and includes features like push notifications and folder management.
5. **Web Browser:** Provides access to the internet, allowing users to browse websites. Common features include tabbed browsing, bookmarks, and incognito mode.
6. **Camera:** Captures photos and videos. It typically includes various modes and settings for different types of photography.
7. **Photos/Gallery:** Manages and views photos and videos stored on the device. It often includes basic editing tools and organizational features.
8. **Calendar:** Manages appointments, events, and reminders. It often integrates with email and other apps to sync events.
9. **Clock:** Provides alarm, timer, and stopwatch functionalities. It also includes a world clock feature to show time in different cities.

10. **Calculator:** Performs basic arithmetic and sometimes includes scientific calculator functions.
11. **Notes:** Allows users to create and manage notes, lists, and reminders. Some versions include voice recording and organizational features.
12. **Weather:** Provides current weather conditions, forecasts, and weather alerts.
13. **Settings:** Allows users to configure and manage device settings, including connectivity options, display preferences, security settings, and app management.
14. **File Manager:** Enables users to browse, organize, and manage files stored on the device, including internal storage and external SD cards.
15. **Music Player:** Plays audio files stored on the device. It often includes features like playlists, equalizers, and offline playback.
16. **Video Player:** Plays video files stored on the device, supporting various formats and providing playback controls.
17. **Maps/Navigation:** Provides location services, maps, and turn-by-turn navigation. It often includes features like traffic updates, points of interest, and offline maps.
18. **App Store:** Allows users to browse, download, and update apps and games. Examples include Google Play Store on Android and App Store on iOS.
19. **Messaging Apps:** Instant messaging apps like WhatsApp, Facebook Messenger, or iMessage (iOS) are often considered core apps due to their widespread use.
20. **Voice Assistant:** Virtual assistants like Google Assistant, Siri, or Bixby that provide voice-controlled features and integrations with other apps and services.
21. **Health/Fitness:** Tracks physical activity, workouts, and health metrics. Examples include Google Fit and Apple Health.