Friday

Bluetooth Music Player with LED Strip and LCD Control

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Intro

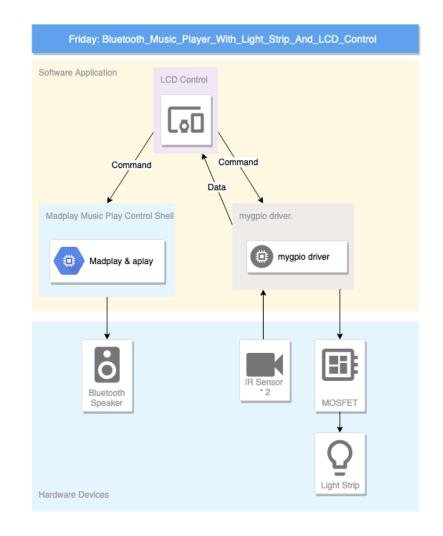
Basically, we're building a Bluetooth MP3 player with fun features.

Feature 1: automatically play music when someone steps into the room and turn off when nobody is here

Feature 2: multiple lighting modes

Feature 3: counting number of people in the room by using IR sensors

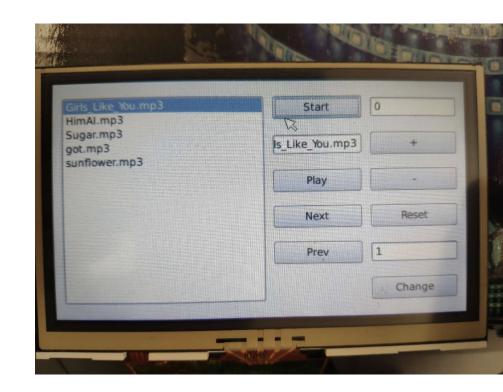
Feature 4: LCD control and display panel



LCD Control



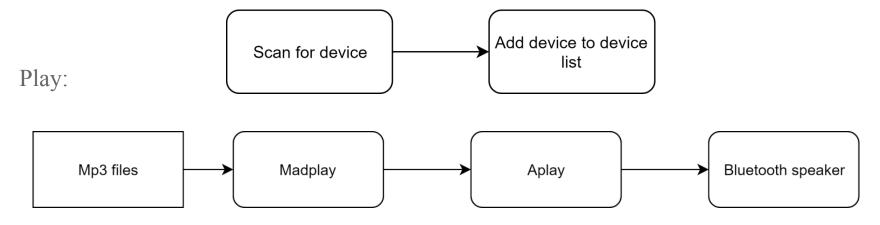
- Song List(left)
- 2. Playback Group(mid)
- 3. People & Mode Control(right)



Mp3 Decode and Play

We used madplay to decode the mp3 music files and send it to bluetooth device via aplay. Music file to be played, the sample rate as well as the start/stop control can all be done via madplay.

Configure:



Demo