

Smart Pill Box (SPB)

Tuesday, January 17, 2023 6:11 PM

Parts:	Cost:	Description:	Link:
Raspberry Pi 4B		Microcontroller	
7-inch touch screen		7-inch touch screen	
		Speaker	
		Mini Camera	

Specifications:

- Multiple Compartments
 - Led showing when it is time to take them.
 - Speaker ringtone to remind user to take medicine
- Lockable
- Store medicine for 7 days of the week
 - Morning, noon, and evening
- User interface
 - Touch screen
 - Use it to unlock and access pills
 - Take photos before and after
 - Saved in database (remote cloud server)
 - Notification sent to caregiver after completion

Optional:

- Face recognition or finger print
- Cloud server to store medication data and connect to caregiver
- Mobile app to allow medication schedules and view medication info
- Recognition of pill types and quantity images taken by the camera

Major Components:

- Hardware
 - Compartments
 - Box Design
 - Housing for Raspberry Pi
- Software
 - Remote Cloud Server
 - User Interface (UI)
 - Notifying Caregiver
 - Photo Capture
- Electrical
 - Components (Pi, Camera, Speaker...)
 - Locking/Unlocking Mechanism
 - LED Lighting