



HEALTH WELLBEING

Dip. di Ing. dell' Informazione, Elettronica e Telecomunicazione (DIET)

Description

WISE is a wearable device designed for the elderly, capable of sending notifications via an app as soon as it detects a fall. It lights up when it recognizes certain sounds and it signals when it's time to take medication. This device is affordable and comfortable, aimed at improving the daily lives of seniors with hearing impairments and memory loss. Additionally, it provides greater security for both the user and their caregiver, offering updates in real-time.

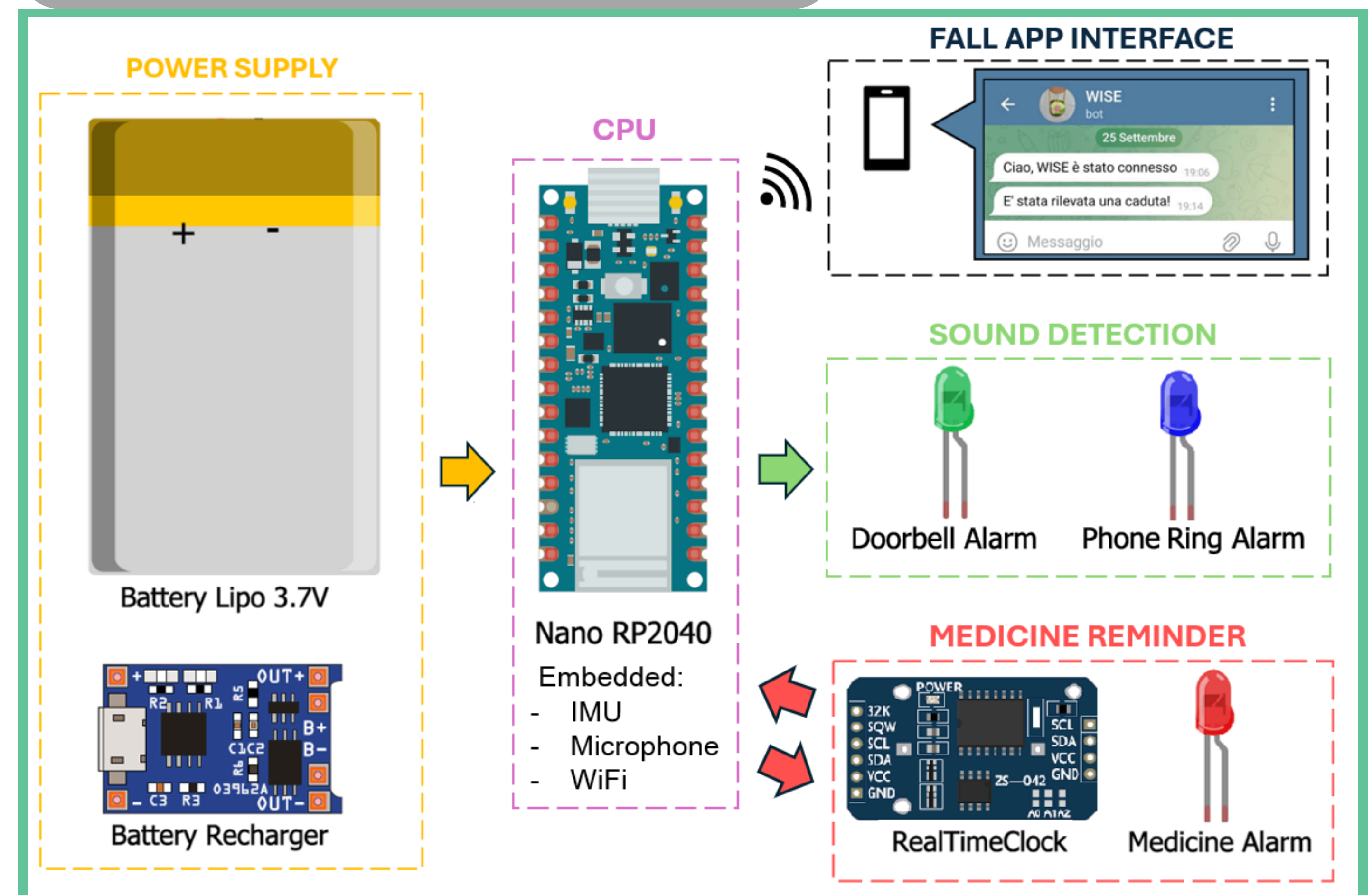
Design prototype



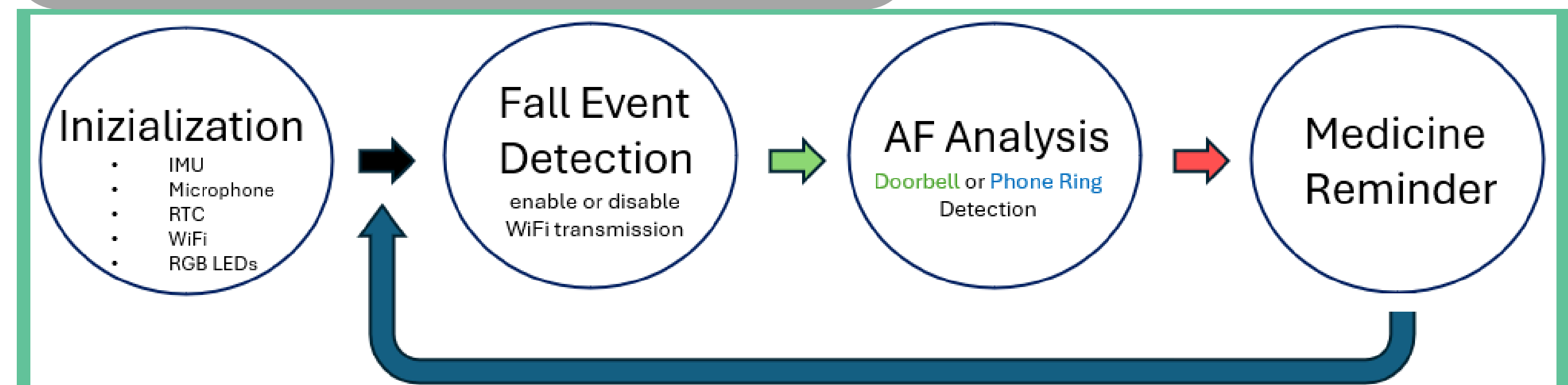
Future developments

- Extend Fall App Interface
- Enhance the versatility of Sound Detection

System level architecture



Software algorithm



Power consumption

Component	Supply	Ah (sleep mode)	Ah (active mode)
CPU	3.7 V	10 mAh	20* mAh
RealTimeClock	3.3 V	0.1 mAh	0.1 mAh
Generic Alarm	3.3 V	//	5.2 mAh
Total	//	~10 mAh	25.3* mAh

* Wi-Fi abilitato ma non attivamente trasmettendo dati, altrimenti è pari a 80 mAh.

Wellbeing Intelligent Supportive pendant for Elder

WISE

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