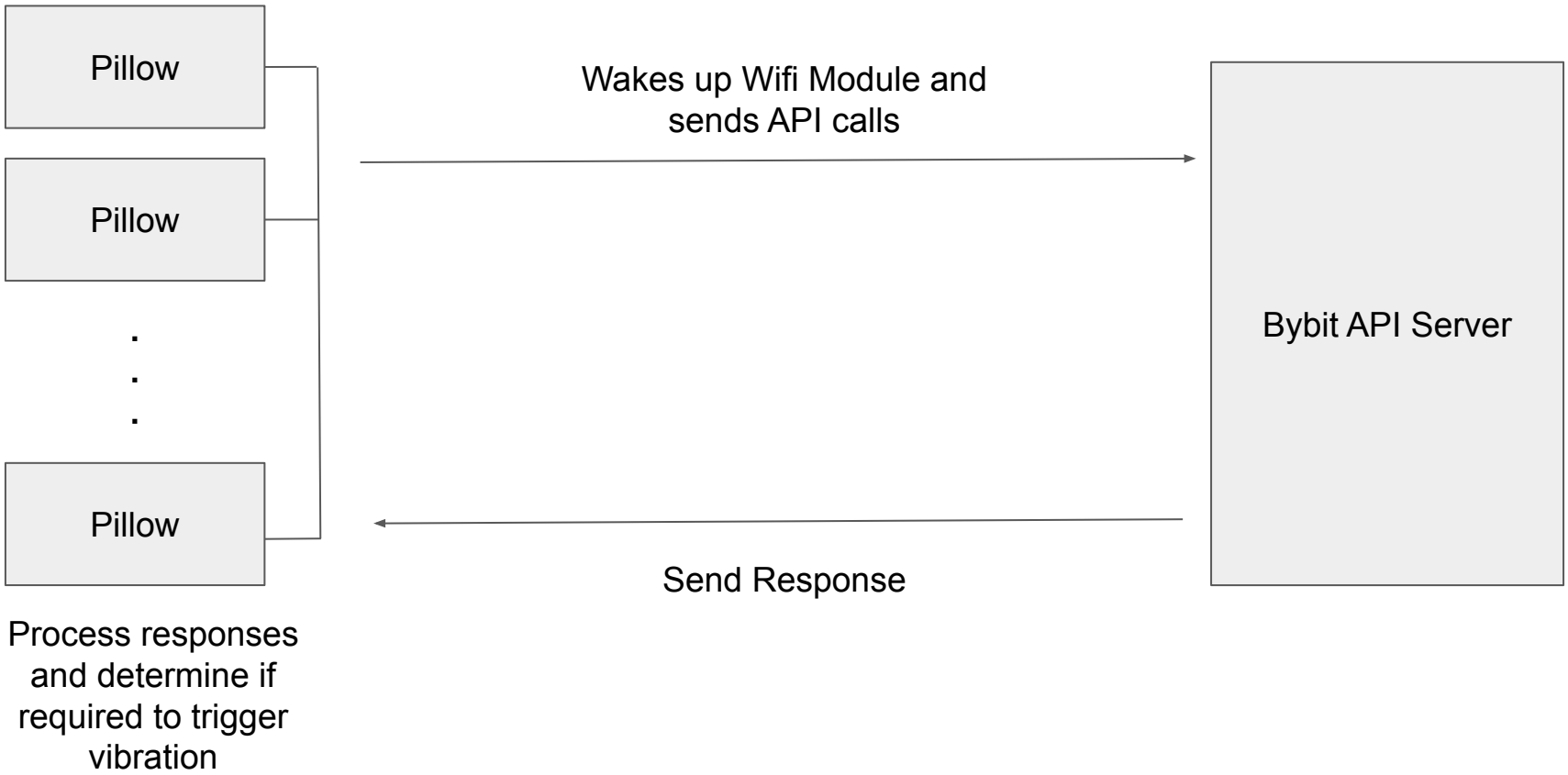
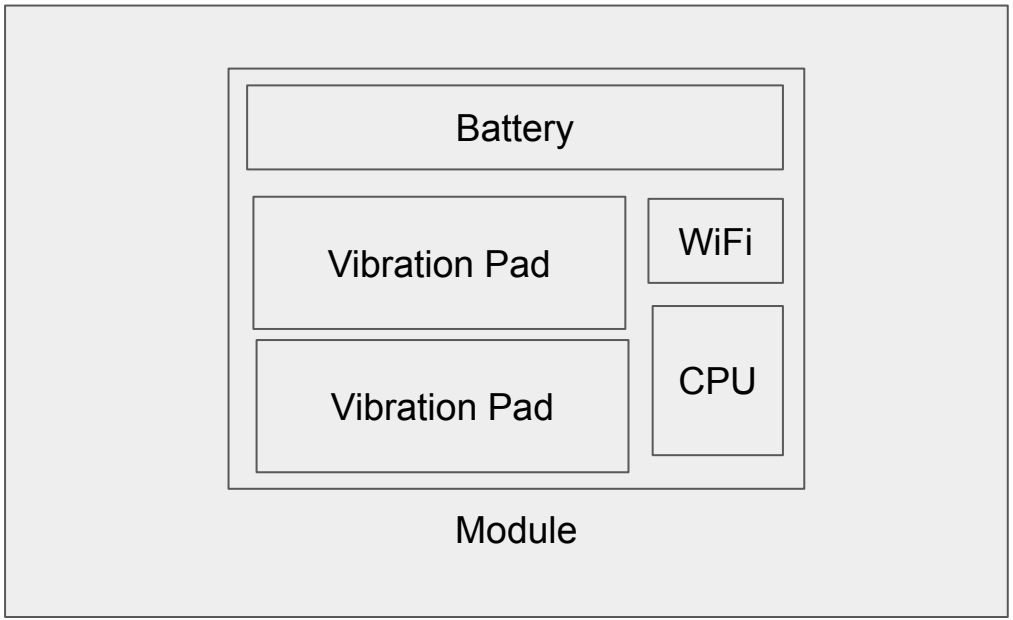
ByBit Moon Pillow

Technical Design Specifications

BASIC OVERVIEW



BASIC PILLOW OVERVIEW



Core components:
Battery - preferably rechargeable
WiFi
Microcontroller (CPU)
Vibration Pad x 2
Piezo buzzer for audio feedback

Potential Software:
Embedded Linux
Web server

Bybit pillow user flow on Miro

https://miro.com/app/board/o9J_lxR-OWE=/?userEmail=dunjiu.ang@tbwa.com&track=true&utm_source=notification&utm_medium=email&utm_campaign=add-to-board&utm_content=go-to-board

Bybit pillow technical flow (updated on 20 Aug 2021)

1. User receives box with pillow

2. User reads instructions on box
    - Take the pillow out of the box
    - Charge the batteries / put in batteries
    - Power on the device by pressing switching it to “configuration mode”
        i. User will receive feedback from pillow (either beep sound or green light)
    - Scan QR code located on pillow to connect to pillow’s Wifi
    - Scan another QR code located on pillow to access configuration web page
    - User should see a webpage with instructions and fields to enter
        i. Wifi name
        ii. Wifi Password
        iii. Encryption standards
        iv. Connect button
        v. Test connection button - vibrates pillow

3. Once connection is successful
    - Display that connection is “Active”
    - Bring user to “Configuration page”
    - Once setup is done, instructions on page to tell user to switch pillow to “Monitoring mode”
    - User will receive feedback via the beeper when its switched to “Monitoring mode”

Triggers

- Price spike or plunge by more than 3% in the last 5 mins
- Price spike or plunge by more than 5% in the last 1 hour

Scenarios

Price rise or drop by more than 3% in the last 5 mins

1st	2th	3th	4th	5th	6th	7th
100	102	102	101	102	102	97.97
Upper: 100 Lower: 100 Switch to monitoring mode, the first value retrieved is set as the upper and lower value	**Upper: 102** Lower: 100 102 is replaced as the upper value as it is greater than previous upper value	Upper: 102 Lower: 100	Upper: 102 Lower: 100	Upper: 102 Lower: 100	Upper: 102 **Lower: 101** As 100 moves outside the 5 minute block, it is replaced with next lowest value found within the 5 minute block	**Trigger dropped by 3% or more** Upper: 97.97 Lower: 97.97 Once triggered, upper and lower values are set as the triggered value

List of Crypto and its mapping

The list of crypto that can be selected will be fixed and mapped to a particular pair on the exchange.

BTC - Bitcoin	BTCUSDT
ETH - Ethereum	ETHUSDT
BIT - BitDAO	BITUSDT
ADA - Cardano	ADAUSDT
BNB - Binance Coin	BNBUSDT
DOT - Polkadot	DOTUSDT
Doge - Dogecoin	DOGEUSDT
LTC - Litecoin	LTCUSDT
SOL - Solana	SOLUSDT
XRP - XRP	XRPUSDT

Bybit Pillow

Webpage for WIFI connection setup

Every minute:

- Wakes up and connects to the Wifi
- Call an API on the server to check if it needs to trigger “Vibration”
- Goes back to “sleep” to save power

User Stories for Bybit Pillow (hardware)

As a user

I want to switch the pillow to “configuration mode”
So that it will broadcast the access point and i can access the configuration page on my mobile phone by scanning the QR code

I want to switch the pillow to “monitoring mode”
So that it will stop broadcasting the access point and put the Wifi module to sleep and wakes it up every minute to perform trigger checks

I want to switch the pillow to “off”
So that I can save battery power when it is not in use

I want to see some indication that the pillow is working
So that i can be sure that it is running

User Stories for Bybit Pillow (software)

As a user

I want to read documents such as T&C and other such documents on the web site
So that I can find out more on the pillow and the terms

I want to setup my wifi access information
So that the pillow can connect to the internet

I want to select the tokens i am interested in and select one or more pre-set triggers for them
So that the pillow will vibrate when the trigger conditions are met

I want to test the connection between the pillow and the vibration module
So that I know that the the vibration module is working

I want to put the pillow into monitoring mode
So that I can save batteries by allowing the wifi module to sleep 60 seconds between each trigger check