



# ECG Monitor

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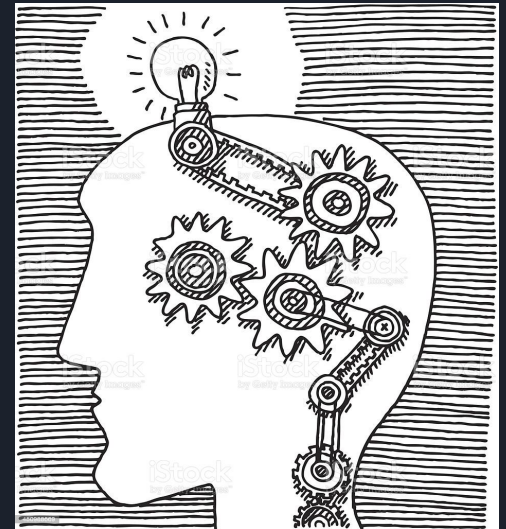


# Outline

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# Idea

- Reading ECG signal .
- Plotting the ECG signal and the bpm is measured and reported on pc and google
- Call the emergency line if the heart beats stopped

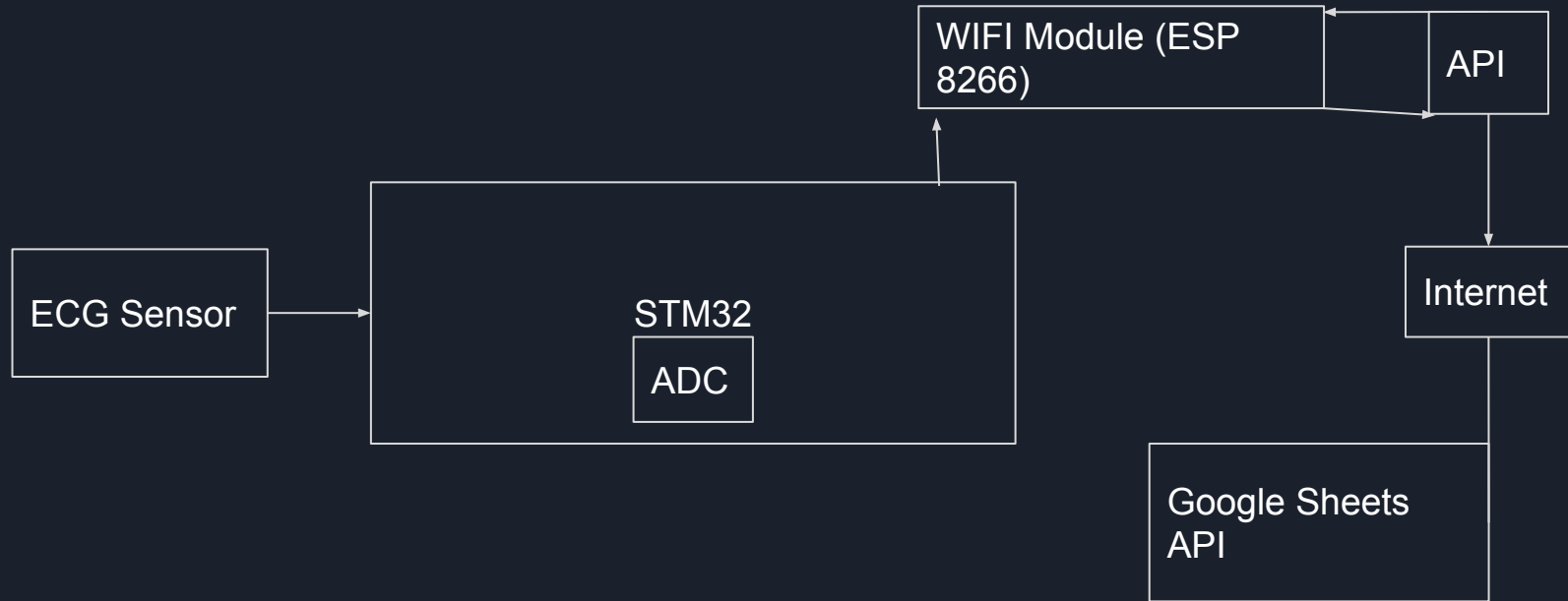




# Design Outline

- Obtain ECG waveform.
- Transmit ECG waveform to receiver
- Microcontroller will run a heart attack algorithm to detect possible heart attack.
- Microcontroller will make the user's cell phone call Emergency line if heart attack detected.

# Initial design





# Hardware components

- 1) STM32F303K8
- 2) ECG Sensor
- 3) WiFi module (ESP8266)
- 4) Serial link (UART)
- 5) USB-to-TTL



# Software components

- 1) STM32-CUBEMX
- 2) Google sheets API
- 3) Keil -MDK



GitHub repo

<https://github.com/MohamedElatroush/ECG-Embedded>