

Anne Medic

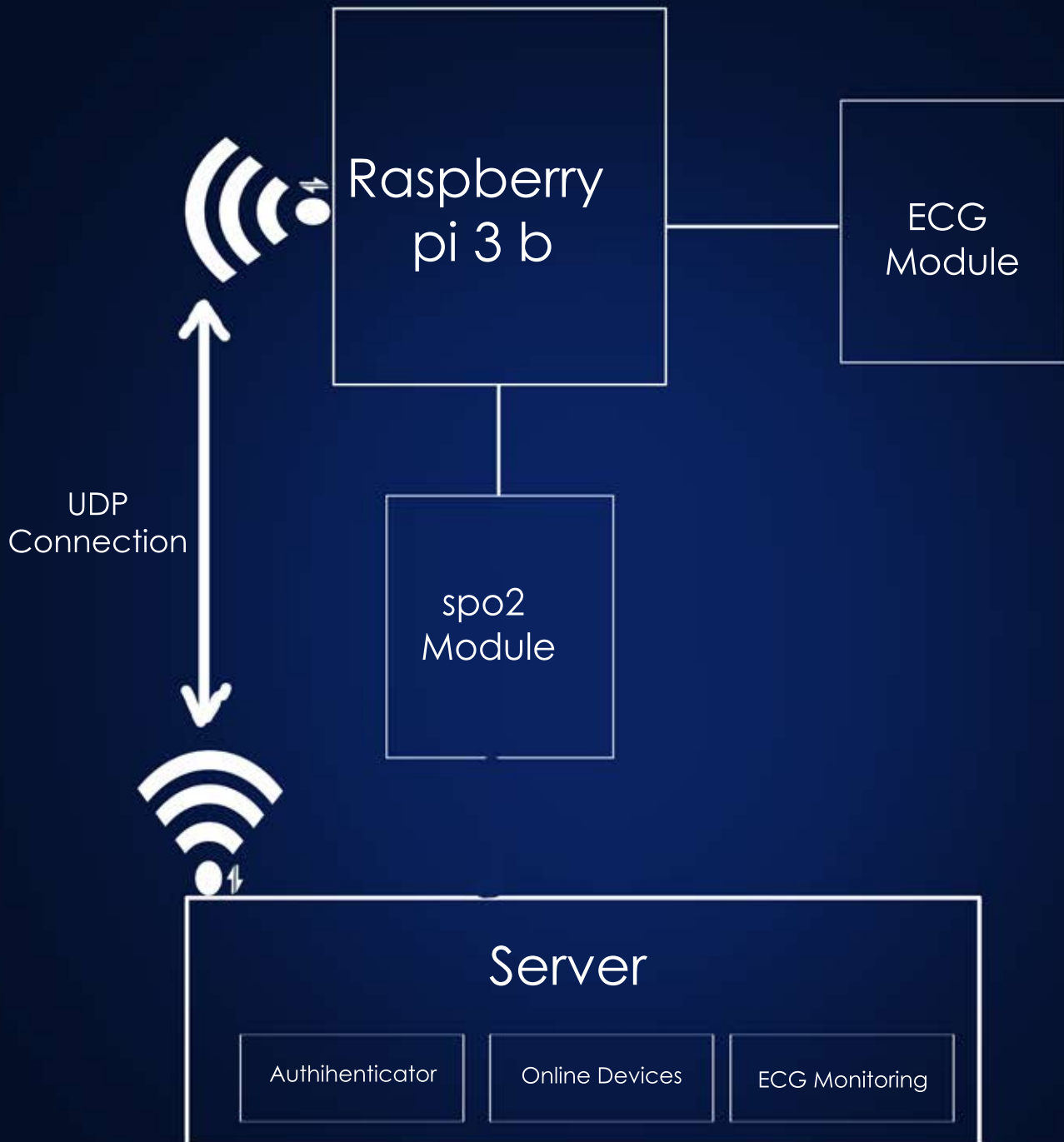
Advanced Remote Medical Monitoring System

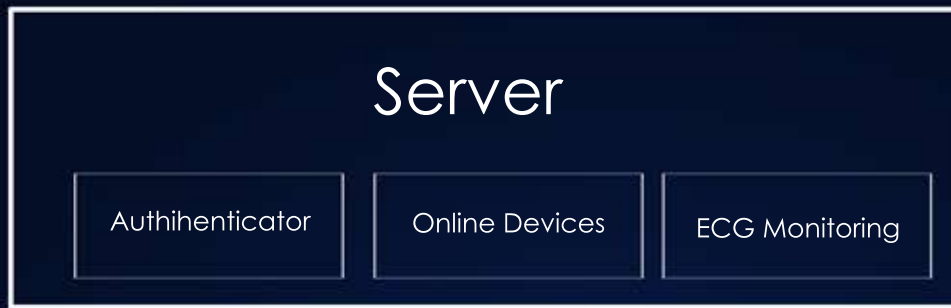
Software Design V1

MCU-Server part B

19-oct-2022

First Prototype





the server will only has three stages , 1 is the Authihentication , second is display online devices , 3 monitoring the ECG Graph after selecting the desired device

COMMUNICATION Protocol :

This will be our standard frame protocol

Start Byte	Device Address	CMD	Size	Data
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- Start Byte : will Be constant **0x94** .
- Device Address : represent the device number .
- CMD : is the command varies according to the opereation which we want to perform .
- size : is the size of the next incomming bytes .
- Data : is the data which we want to send to the other side of our system .

First Prototype Commands

1 - 0x01 refers to WHO Online OR Which Device is Online

Start Byte	0xff	0x01	0	Null
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2 - 0x02 is The respond Of Who Online Command and it means I AM ONLINE

Start Byte	Device Address	0x02	0	Null
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3 - 0x03 is Emergency Action from MCU to Master Server

Start Byte	Device Address	0x03	0	Null
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4 - 0x04 is LowBattery Action from MCU to Master Server

Start Byte	Device Address	0x04	0	Null
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5 - 0x05 is Stop Request From The Master Server to the MCU

Start Byte	Device Address	0x05	0	Null
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First Prototype Commands

6 - 0x06 is used for Monitoring



- In this command the data field is divided into 12 bytes which will be sent by mcu device to the Master Server Module , the first 2 bytes is the ECG readings and The next byte is the heart rate value ,net is blood oxygen percentage,Respiratory rate Non invasive Blood Preasure and Temprature is the last byte .
- this command Will be used for Monitoring as the Mcu Will send it every new change in those readings .

The next prototype Features :-

- 1- Add Patient Name and details feature to the database
- 2- Add stop request for the MCU
- 3- Add Tge small display to our MCU devices
- 4- Fix Bugs

THANK YOU