

MEDICAL **ASSISTANT**

Presented by: AMR FOQHA
ABD ELRAHMAN ABBOUSHI



TABLE OF CONTENTS

00

Introduction

01

Objectives

02

Components

03

Block diagram

04

Features

05

Constraints & Limitations

06

Future Work

07

Acknowledgement

00. INTRODUCTION

This project managed the timing of medicine and measured the vital signs of the patients, This project aims to assist the elderly such as those disease Al-Zhimer, and people who find it difficult to organize the process of taking the medicine.



01. OBJECTIVES

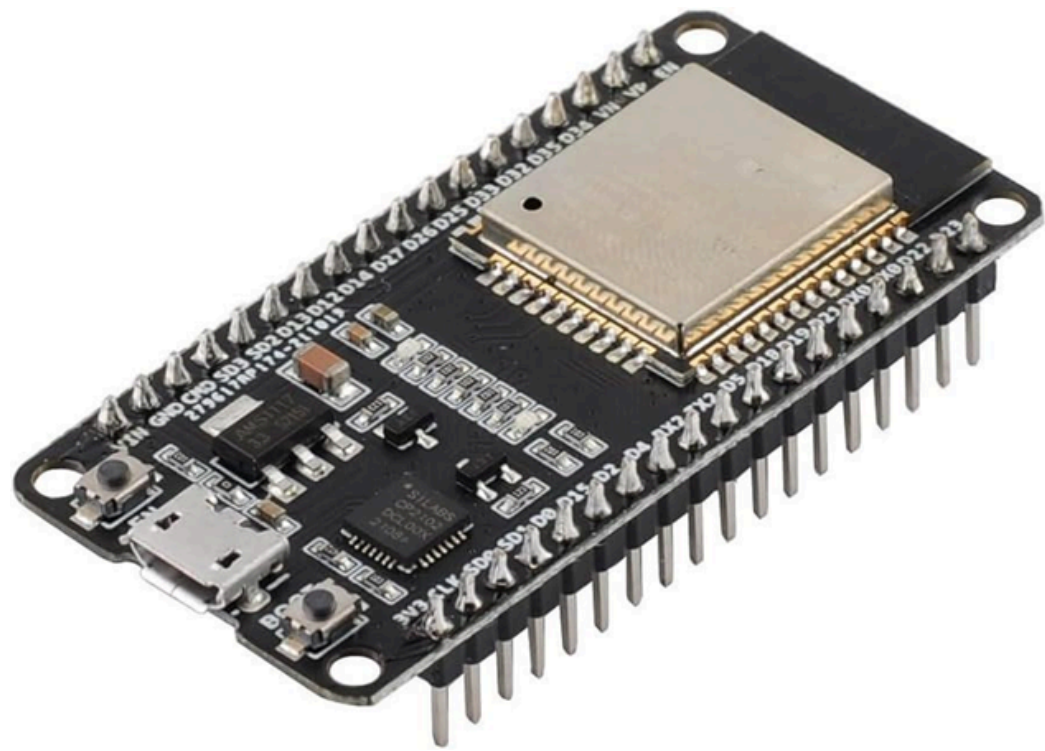
1.

The project provides a guarantee that there will be no problem in the process of regulating medication for the elderly and Alzheimer's patients in particular, which helps in taking the correct doses of medication at the correct time.

2.

The project also provides additional care for patients by examining some vital readings of patients such as heart rate, blood oxygen level, ECG (electrocardiogram) and body temperature.

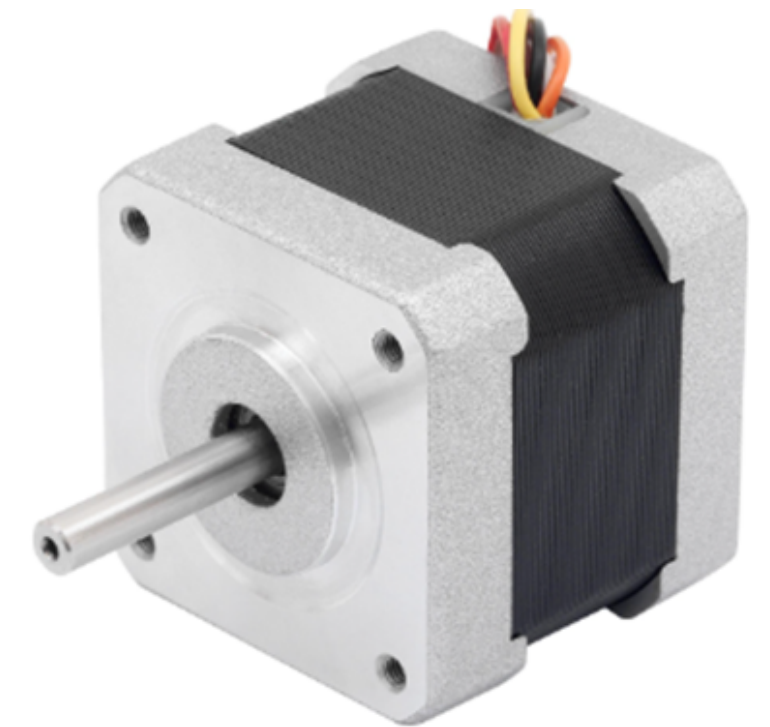
02. COMPONENTS



Esp32



Arduino Mega

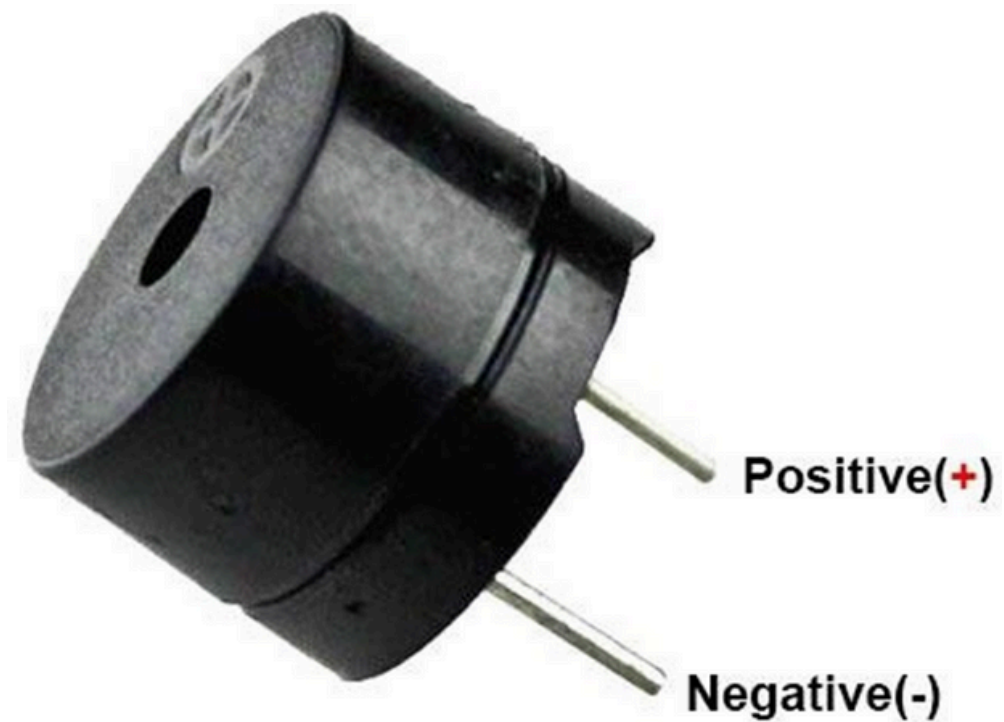


Stepper Motor

02. COMPONENTS



20x4 LCD



Buzzer



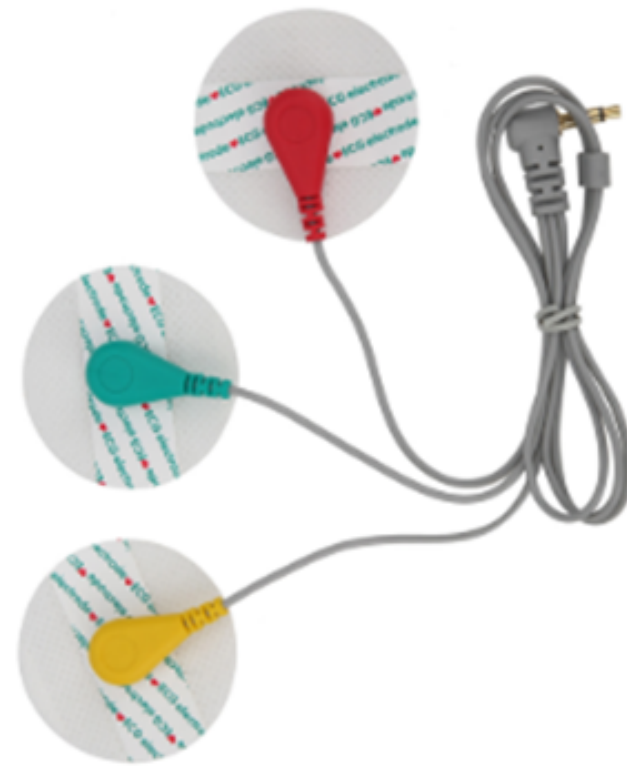
Keypad 4x4



02. COMPONENTS



Temperature Sensor



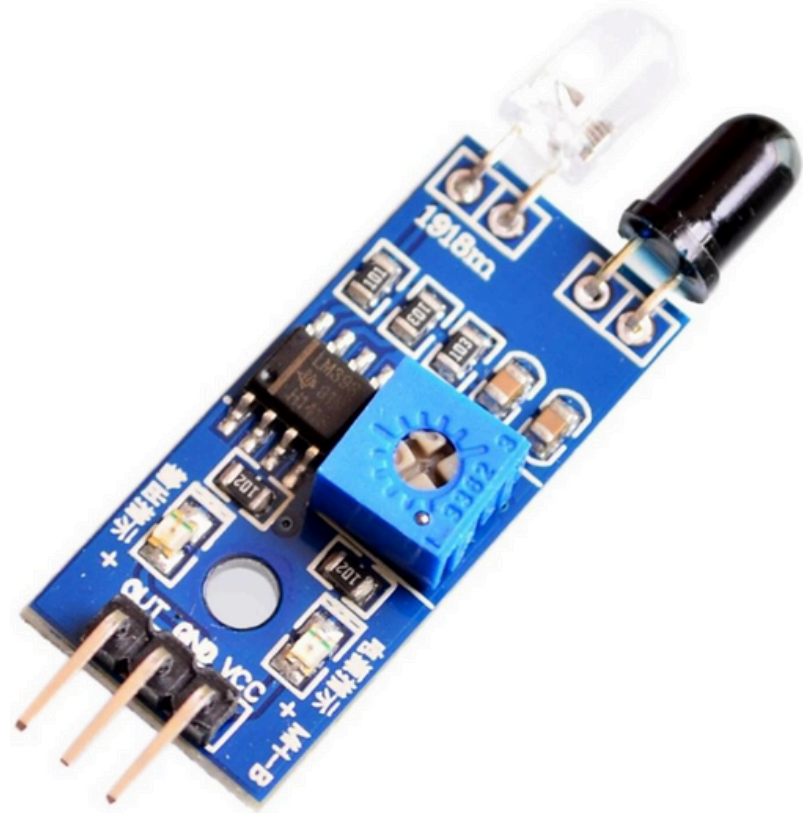
ECG Sensor



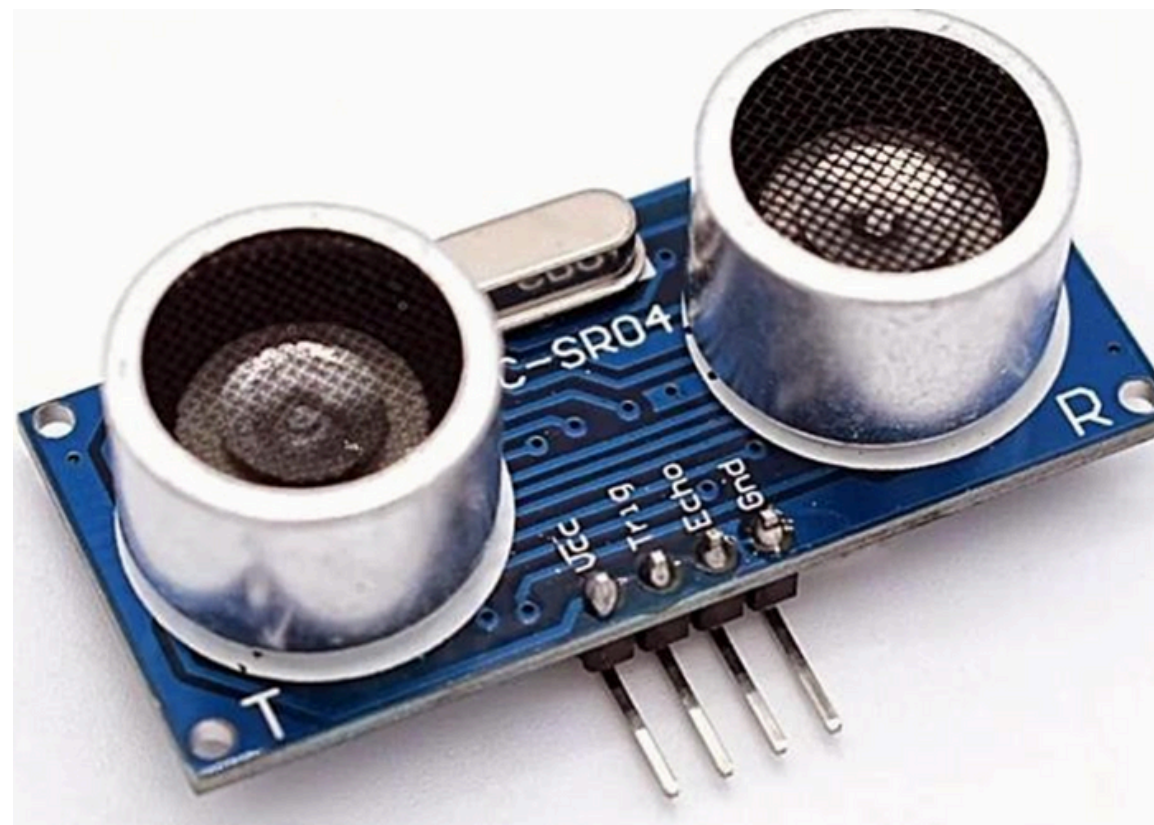
MAX30100



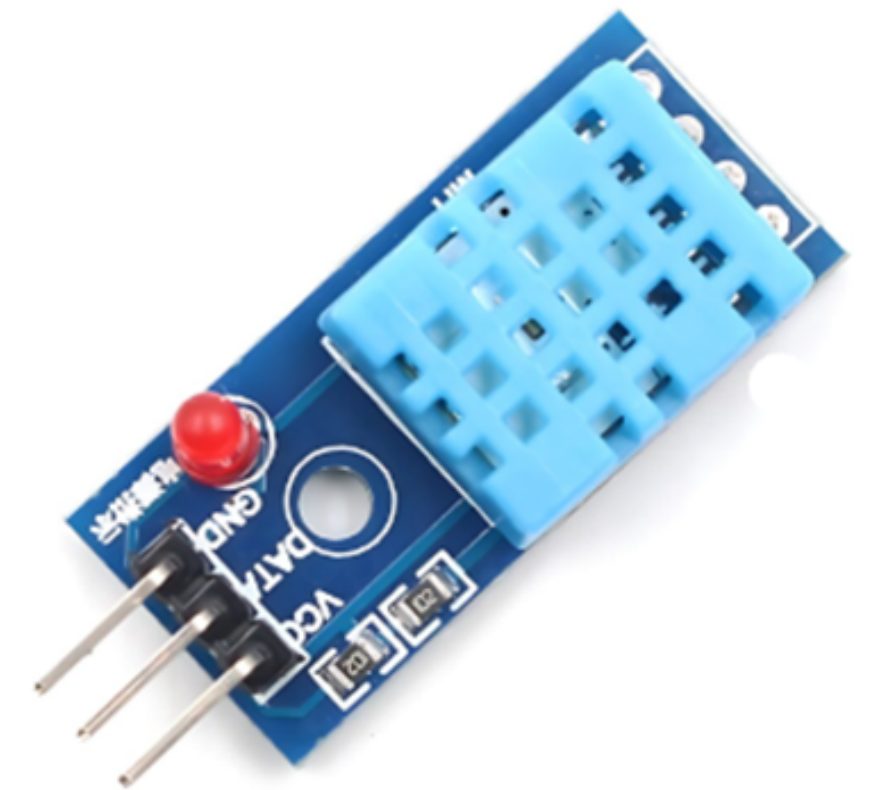
02. COMPONENTS



IR Sensor



Ultrasonic Sensor



DHT Sensor



02. COMPONENTS



Different type of wires



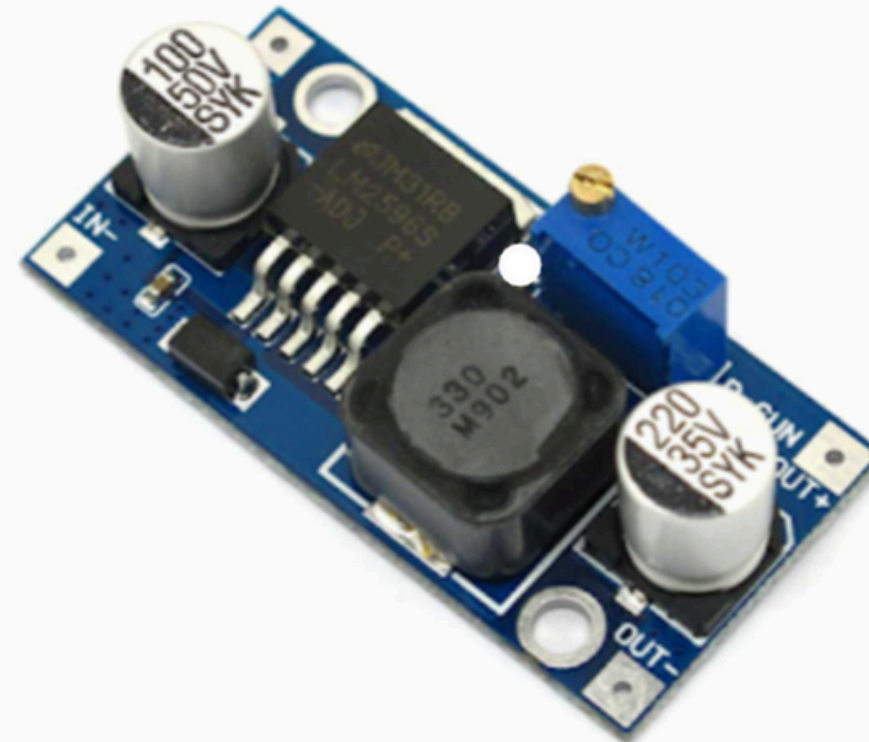
RTC



H-bridge



02. COMPONENTS



Stepper motor driver

DC-DC buck converter

RFID



02. COMPONENTS



FAN



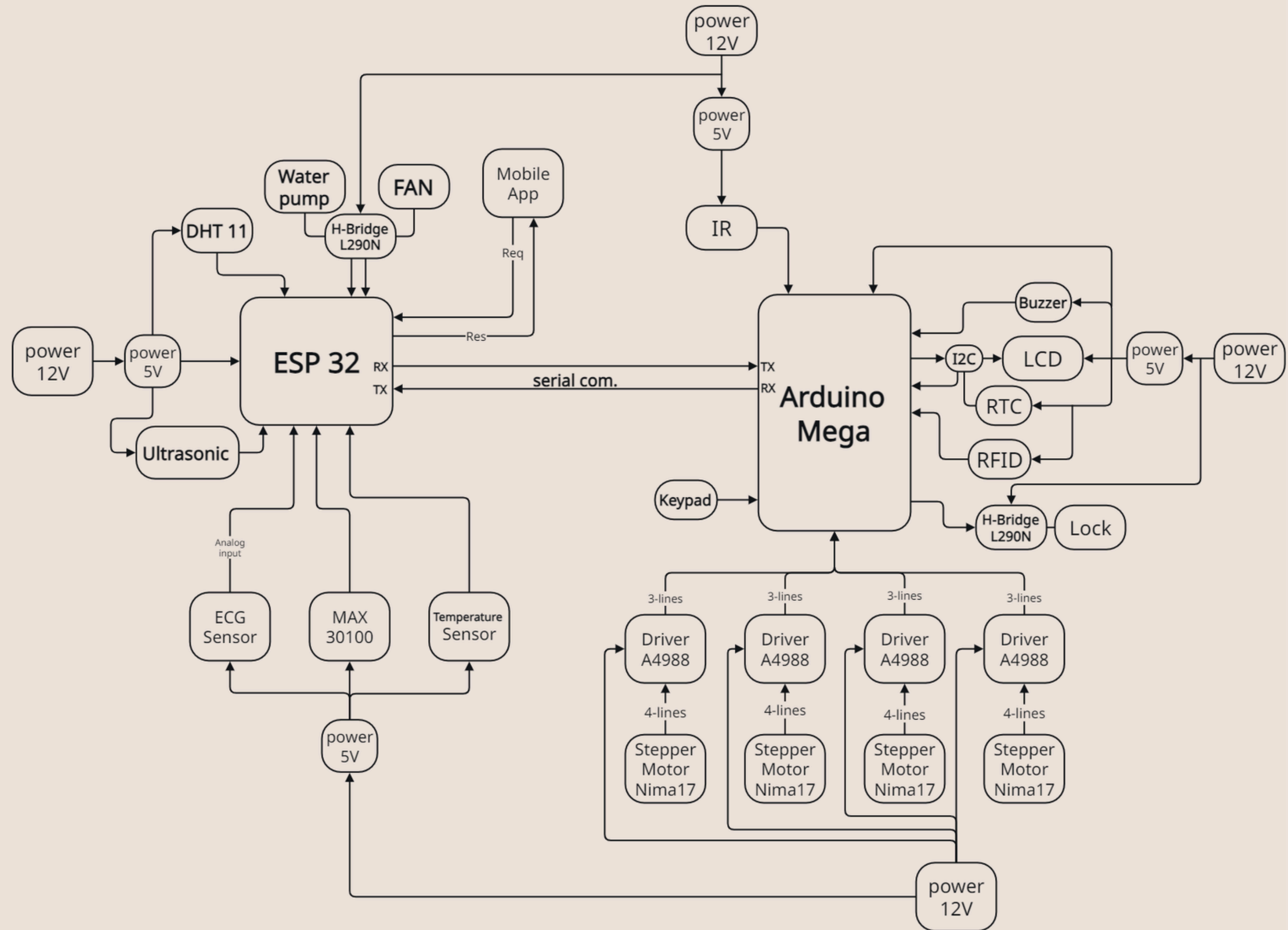
Water pumb



Push button



03. BLOCK DIAGRAM



04. FEATURES

01 Measure vital signs: Temperature ,SPO2 , Heart rate ,ECG.

02 Schedule Medicine Time by mobile app.

03 Tank and pump water to help patient drink water.

04 Request medicine by different way : one from mobile app and the other by Keypad &LCD.

05 FAN & Sensors to Providing suitable environment for drugs.

06 Lock & card reader to protect the children form take medicine.



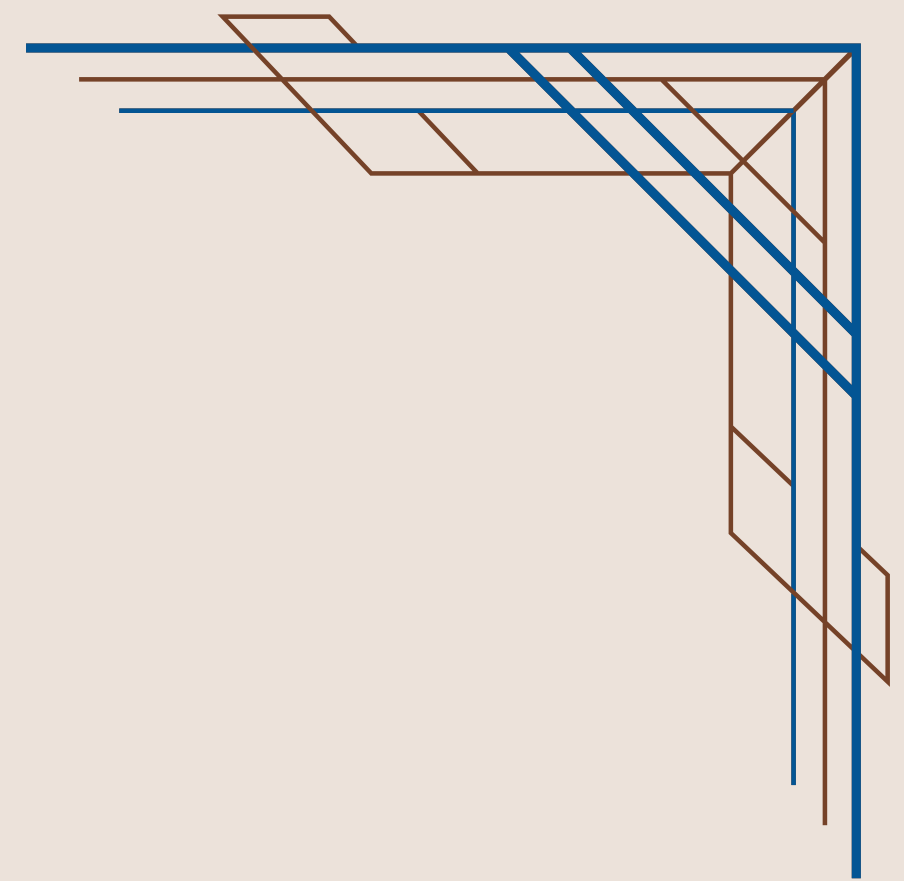
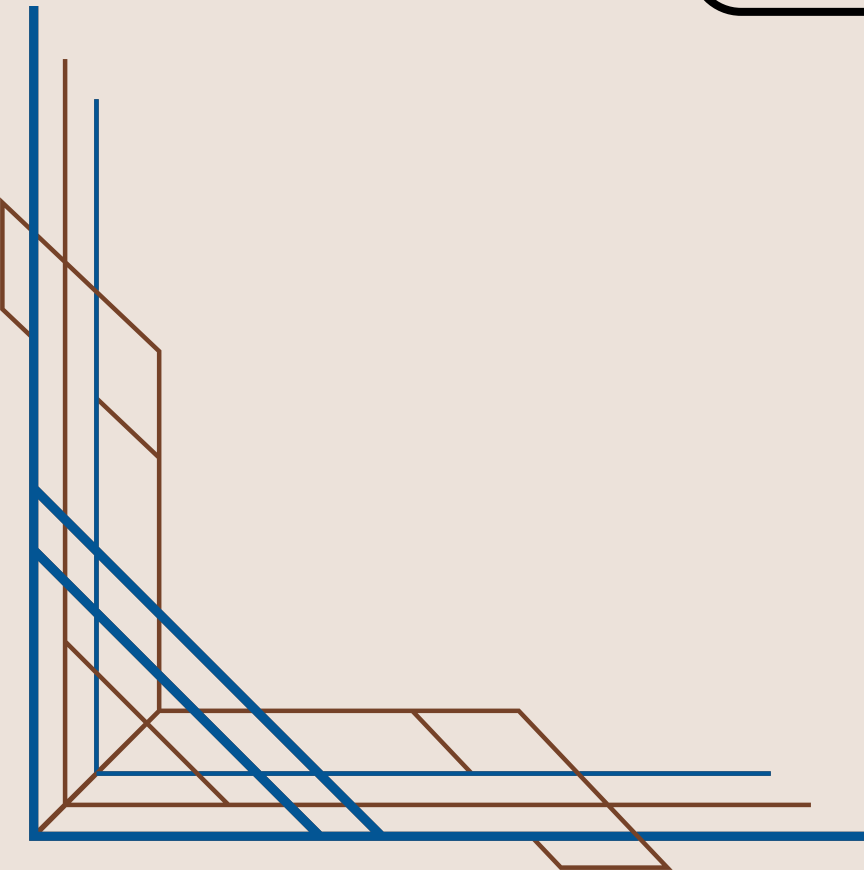
05. CONSTRAINTS & LIMITATIONS

1.
Budget & Cost.

2.
Simple and
Functional Design.

3.
Designing on 3D
Printer.

4.
New Component.



06. FUTURE WORK

1.

Add more sections for each medicine to store more pills & different types of medicine.

2.

When the patient performs his vital tests and these readings are abnormal, project calls the emergency room and gives the patient the appropriate medication pill.

3.

Give the patient more than one pill in the day if this require in his medical prescription.



Thank you

ANY QUESTIONS ?

