GP 4M SV2

Implementing the Bootloader based on UART protocol

Trying to configure the ESP8266 as a wifi module

Sending the App code using UART protocol to the Bootloader

Implementing Timer1, ICU, and Ultrasonic Drivers and Testing it

Implementing Timer 2-3-4-5 and DC Motors Drivers and Testing it

Implementing Servo Motor Module and ADC Driver and Testing it

Testing the Servo Motor with the Ultrasonic and DC Motor

Testing the IR Transmitter Module and IR Receiver Module

Implement a simple fire base to upload the binary file

Understanding the principle of Bootloader

Testing the Bootloader packet commands

Understanding the principle of FOTA

Understanding the principle of V2V

Testing the DC Motor with Ultrasonic

Testing the Optocoupler Speed Sensor

Integrating the Fire Base with the FOTA

V2V communication using IR spectrum

Testing the Line Follower Sensor

Getting the hardware needed for the Vehicle

Project Manager

TASK

Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

V2V Test cases Presntation

_Intake3_FOTA_5	
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Understanding how the Raspberry Pi works and its configuration in order to use it as a Host

Lane Keeping system Application / Complex Lane Keeping Application / Simple Autonomous RC

Connect the raspberry pi to the server and use it to download the hex file from the server

Integrating the bootloader with the FOTA and testing the functionality together

Implementing Speedometer Module and IR Transmitter Module and Testing it

Project Start: 10/6/2023

END

10/14/2023

10/7/2023

10/10/2023

10/12/2023

10/14/2023

10/22/2023

10/17/2023

10/18/2023

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10/9/2023

Display Week:

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10/6/2023

10/6/2023

10/8/2023

10/11/2023

10/13/2023

10/15/2023

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10/18/2023

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Evervone

Ahmed Ihrahim

Mostafa / Mahmoud

Everyone

Mahmoud Salah

Mostafa Khalil

Ahmed Ibrahim/ Mostafa Khalil

Evervone

Everyone

Maisara / Omar / Ahmed

Mostafa / Mahmoud

Ahmed Ibrahim

Maisara Rashad

Omar Abou Zaid

Maisara Rashad

Ahmed Ihrahim/Maisara Rashad

Ahmed Ibrahim/Maisara Rashad

Ahmed Ibrahim/Maisara Rashad

Mostafa Khalil

Ahmed Ibrahim / Mostafa Khalil

Maisara Rashad / Ahmed Ibrahim 100%

Maisara Rashad / Ahmed Ibrahim 100%

Moustafa Khalil / Omar Abou Zaid 100%

Ahmed Ibrahim / Mahmoud Salah 100%

Omar Abou Zaid / Ahmed Ibrahim 100%

Maisara Rashad / Omar Abou zaid 100%

10/23/2023

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

10/16/2023

10/30/2023

11/6/2023

11/13/2023

