

Outline:

1. Components
2. Cost
3. Plan & Problems
4. Groups
5. Courses

1. Components:

- 2 – STM32
- 2 – Raspberry Pi
- Server
- Sensors
- LCD Screen
- Electrical Components

Outline:

- ~~1. Components~~
2. Cost
3. Plan & Problems
4. Groups
5. Courses

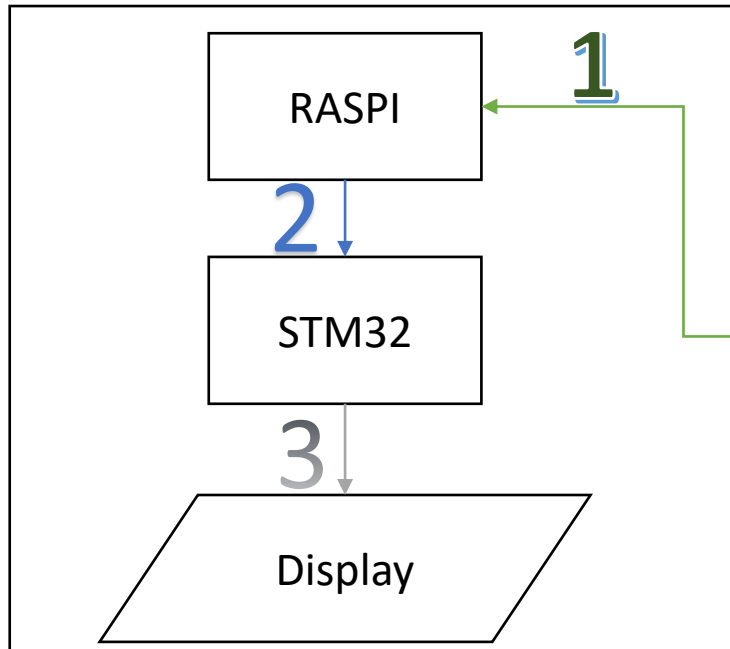
2. Cost:

- 2 – STM32 → 600
- 2 – Raspberry Pi → 0
- Server → 1000
- Sensors → 100
- LCD Screen → 50
- Electrical Components → 50

Total: 1800

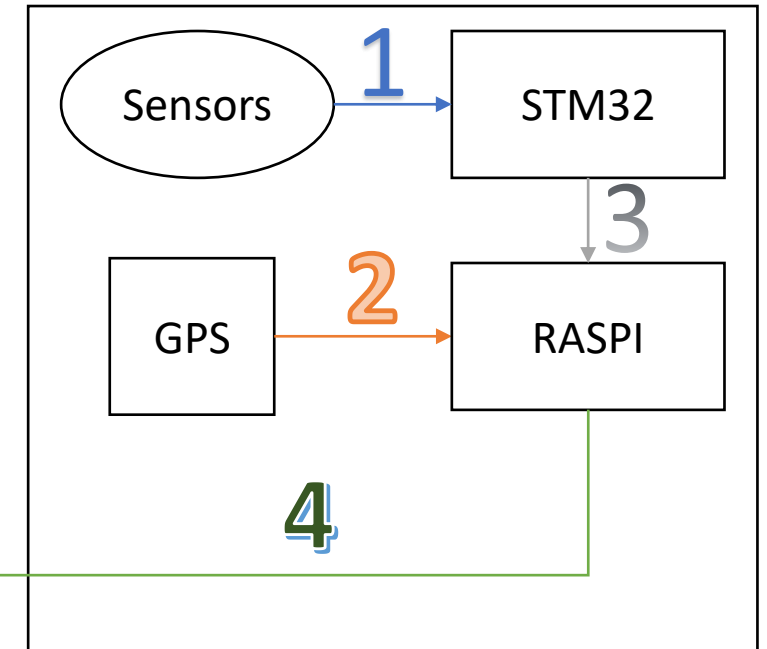
250 L.E/Person

Receiver



1. Communicate between RASPI and Server using Wi-Fi
2. Communicate between STM32 and RASPI using UART Protocol
3. Display output on LCD screen

Transmitter

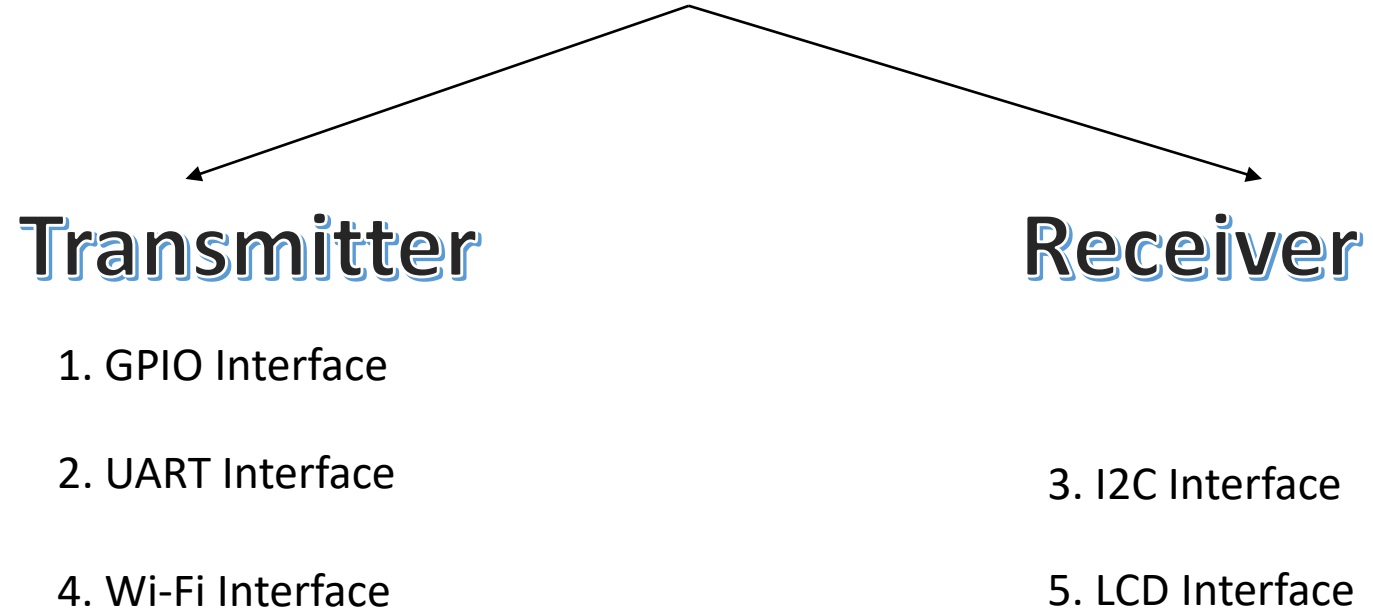


1. Interface between STM & Sensors using I2C Protocol
2. Send Data about position from GPS to RASPI using Bluetooth
3. Communicate between STM32 and RASPI using UART Protocol
4. Communicate between RASPI and Server using Wi-Fi

Outline:

- 1. Components
- 2. Cost
- 3. Plan & Problems
- 4. Groups
- 5. Courses

3.2 Summary



- Simplex VS Duplex

Outline:

- ~~1. Components~~
- ~~2. Cost~~
- ~~3. Plan & Problems~~
- 4. Groups**
- 5. Courses**

4. Groups:

Receiver

- Kirollos Emad
- Moaz Mahmoud

Server

- Ahmed Haissam
- Yomna Farid
- Yosra Mamdouh

Transmitter

- Ahmed Adel
- Ahmed Gamal
- Aya Abdelaziz

Outline:

- ~~1. Components~~
- ~~2. Cost~~
- ~~3. Plan & Problems~~
- ~~4. Groups~~
- 5. Courses

5. Courses

- Introduction on AVR
- I2C: Communication between STM and sensors
- UART: Communication between STM and RASPI
- RASPI: Wi-Fi Module
- Tutorial in Network

Outline:

- ~~1. Components~~
- ~~2. Cost~~
- ~~3. Plan & Problems~~
- ~~4. Groups~~
- ~~5. Courses~~

Comments

1. Duration → two weeks: one month
2. Technical writing and book
3. Competitions