SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUT205 – INTERNET OF THINGS IN AUTOMOTIVE SAFETY

II YEAR /IV SEMESTER

Unit 5- Internet of Things in Automotive Safety

Topic : Biometric Car Opening System

CONTENT

- Introduction
- Components
- Working
- Benefits

1. What is ESP 8266?

2. What is Serial Communication?

INTRODUTION

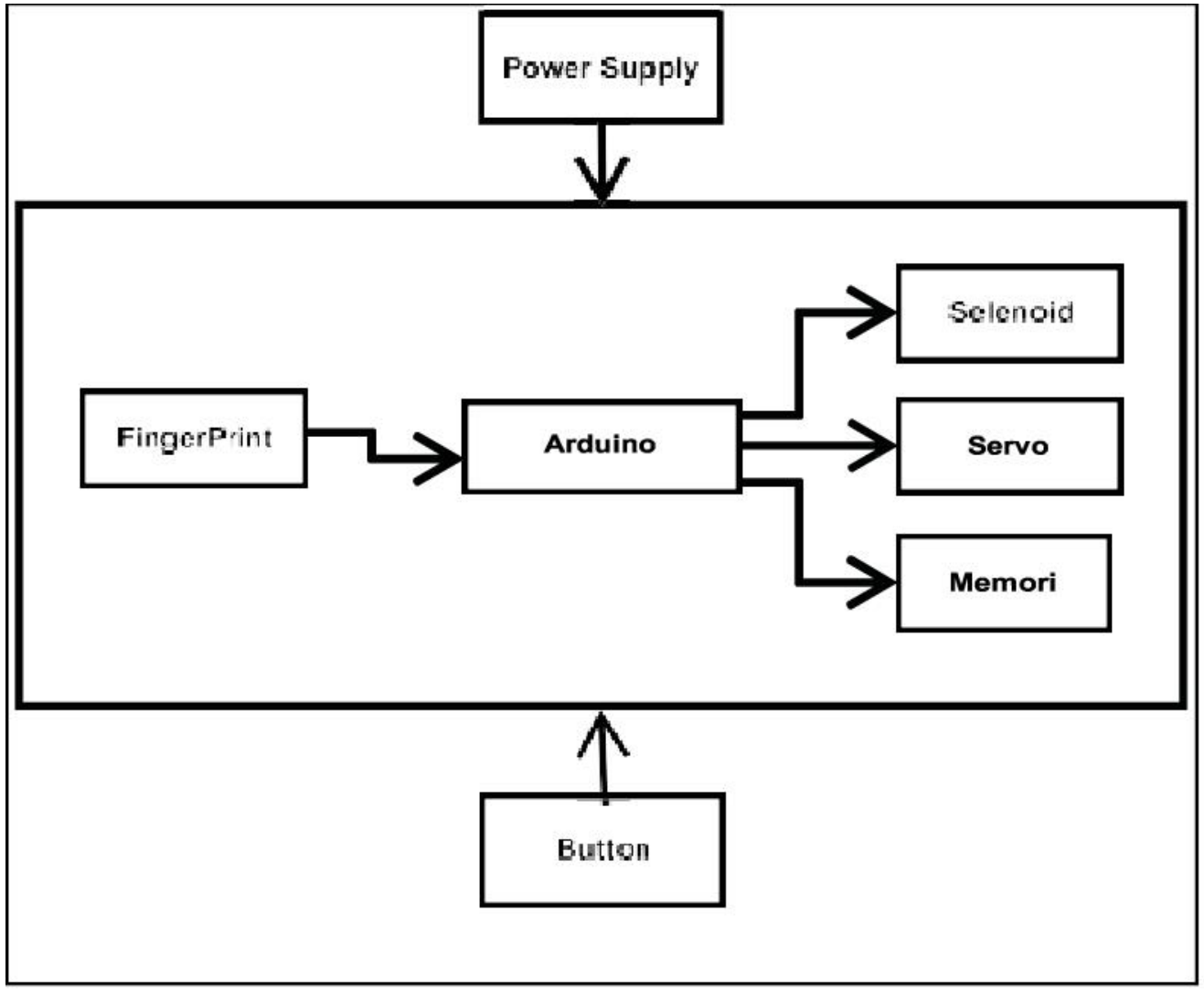
- The automobile industry is unveiling modern cars equipped with advanced technological features.
- These latest features are more reliable and also increase user's convenience. The biometric car entry system is one such feature.
- It is an advanced fingerprint technology in cars that allows users to unlock or start the car by thumb impression
- Biometric door locks are devices that allow you to unlock your door with the combination of a fingerprint.

COMPONENTS

- Arduino UNO
- Sparkfun CAN-BUS Shield
- Fingerprint Sensor
- Arduino IDE (For Programming)

WORKING

- The sensor works on the simple principle of detecting the current flow of the user's hand.
- The user has to place the finger over the fingerprint sensor located at the front or back of the door handle.
- The sensor detects the fingerprint and matches it with the encrypted information stored in the controller. Once the information is verified, the door will be unlocked.
- After successfully opening the door, drivers can operate other major functions such as ignition start with the help of a fingerprint.


Power Supply
Selenoid
FingerPrint
Arduino
Servo
Memori
Button

BENEFITS

- Security and Safety
- Exclusion of Keys
- Comfort

Task

1. Mention the components used in this system

2. Advantages of biometric car opening system?

REFERENCE

- https://www.dubizzle.com/blog/cars/biometric-car-entry/
- https://www.hackster.io/rajeevvelikkal/biometric-car-entry-true-keyless-car-298928

THANK YOU !!!