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IOT Based Smart Lock Door System

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Abstract: ***Security describes protection of life and property. The safety in the house is very important. Besides the traditional method door that used a key can be easily open by not authorized person or burglar if they have the right key. This will allow them to steal the entire valuable thing in the house. Nowadays the telecommunication technologies become wider and more new features exist to make human life better This project will use a Bluetooth feature in mobile phone to automatically open the door so that Bluetooth technology syncs your phone directly with the lock. It wills automatic open if authorized person is detected. The door will open for a certain delay and the door automatically closes within this time. IOT based smart door lock using 4x4 MATRIX MEMBRANE TYPE KEYPAD-16 KEYS, ARDUINO UNO, RELAY MODULE.***
Keywords: 4x4 Matrix Membrane Type Keypad-16 Keys, Arduino UNO, Relay Module.

I. INTRODUCTION

The purpose of an Android-based smart door locking system is to deter intrusion, trespassing, and unlawful access. Common targets for illegal entry, trespassing, and intrusion include banks, business offices, financial institutions, jewellery stores, and government organizations.

Occur. Typically, the intent behind these kinds of actions is to steal valuables, cash, jewellery, or papers for personal benefit. The Android-based smart door locking system's goal is to offer a clever way to get around these obstacles and offer a workable solution. All physical objects are operated by smart systems in the modern smart life. That example, we use our phones to control our water heater, air conditioner, lights, fans, and other appliances. We also use our phones to fully run our cars' smart features, such as lock and unlock.

Block Diagram Of The Proposed System

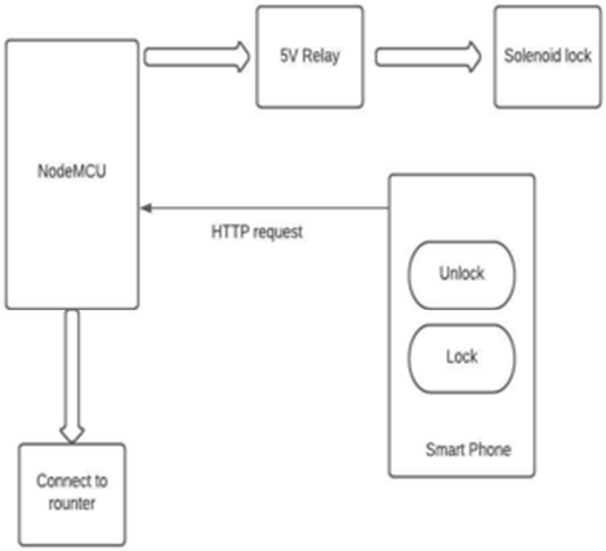

Fig.2.2

II. LITERATURE SURVEY

Numerous sophisticated automated door locking systems have been created and are widely utilized in a variety of settings, including businesses and organizations. RFID technology is used in some of these automated door locking systems (Radio- frequency identification). The RFID reader finds and verifies the user-friendliness.

The reader detects the card's radio frequency when it is brought close to it, allowing for verification. The Key drawback of these systems is their high cost. Over time, numerous control methods have been developed to thwart unwanted access. The protection of our lives and belongings is the primary reason that locks are installed in our offices, schools, homes, and other buildings. Therefore, having a practical method of accomplishing this is crucial. My group and I have put into practice a

III. METHODOLOGY

Build the programming for the esp-32 Arduino board in Module 1.
Module 2: after that, a smartphone connects automatically and is configured by following the programming.
Module 3: The Arduino board instantly connects this mobile device to the hardware coding.
Module 4: Configure the Blink application by following the programming instructions and matching the Blink authentication character to the Blink character in the programming [if this character does not match, the smartphone circuit will not function]. For the highest level of security, use the power supply to power the hardware.
Module 5: At this point, your smart lock system is fully operational, highly secure, and user-friendly.
Results: The smart lock system was fully operational with a configured smartphone.

. Flow Chart Of The System

Fig.2.3

IV. CONCLUSION

One important way that an Internet of Things (IoT)-based smart digital automated system helps people is by lowering their workload and integrating interactive technology into daily life. We are adding a tiny bit to the massive efforts being made to enhance and simplify our lives with our initiative, Smart Doors.

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V. ACKNOWLEDGMENT

A camera sensor is used in this system to capture the face, and an image matching algorithm is used to detect the authenticated faces. Only the person whose face is matched can open the door. This system Fingerprint sensor is used to capture the finger and matching algorithm will be used to detect the fingerprint.

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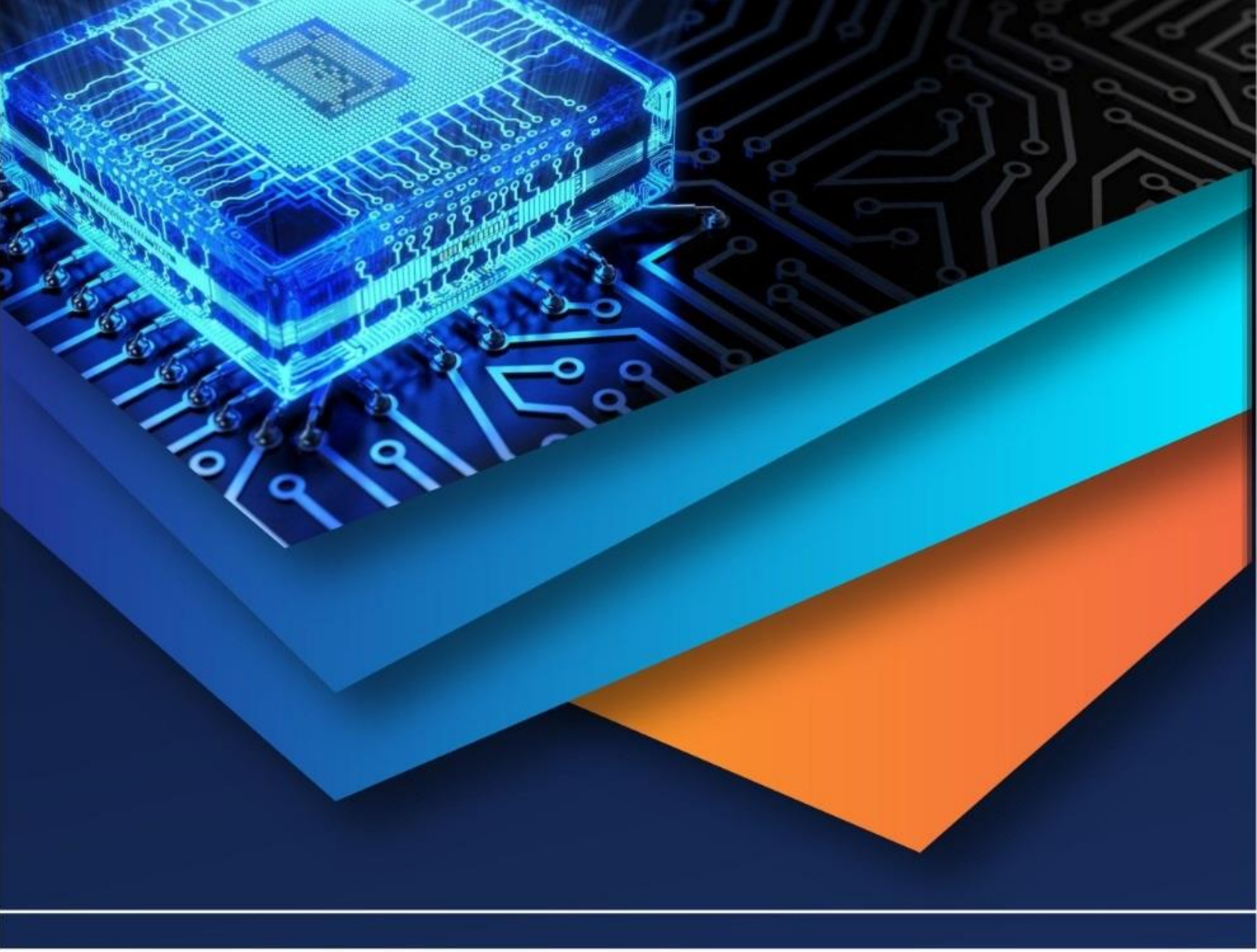

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