



# **RFID CARD BASED ATTENDANCE SYSTEM USING ARDUINO**

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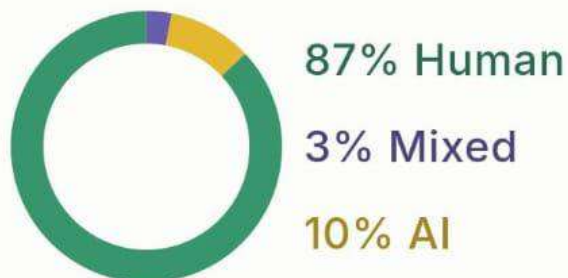
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## **ABSTRACT**

The RFID Card-Based Attendance System with Arduino is intended to automate attendance tracking in educational and organizational settings. Traditional attendance techniques, such as human roll calls, are prone to errors, inefficiencies, and fraud, including proxy attendance. The goal of this study is to create an RFID-based system that will streamline the attendance process by utilizing the RFID RC522 module and NodeMCU ESP8266 microcontroller. Using RFID technology, the system allows for real-time data capture, decreases human error, and improves operational efficiency. The system tracks attendance by scanning RFID cards, which are subsequently processed and saved on a computer for real-time monitoring. This study assesses the system's performance in terms of accuracy, speed, and usability, as well as its limitations and potential improvements. The study concluded that RFID technology is a dependable, scalable, and efficient alternative for automated attendance systems, with potential future additions such as increased security, biometric integration, and expanded offline capabilities.

## TABLE OF CONTENTS

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| <u>STATEMENT OF ORIGINALITY</u> .....                                      | i    |
| <u>SCIENTIFIC PUBLICATION APPROVAL FOR ACADEMIC INTEREST</u> .....         | ii   |
| <u>ADVISOR APPROVAL FOR JOURNAL/INSTITUTION’S REPOSITORY</u> .....         | iii  |
| <u>PANEL OF EXAMINER APPROVAL</u> .....                                    | iv   |
| <u>SIMILARITY INDEX REPORT</u> .....                                       | v    |
| <u>ABSTRACT</u> .....                                                      | vii  |
| <u>DEDICATION</u> .....                                                    | viii |
| <u>ACKNOWLEDGMENTS</u> .....                                               | ix   |
| <u>TABLE OF CONTENTS</u> .....                                             | x    |
| <u>LIST OF FIGURES</u> .....                                               | x    |
| <u>LIST OF TABLES</u> .....                                                | xi   |
| <u>CHAPTER I INTRODUCTION</u> .....                                        | 1    |
| 1.1. <u>Background</u> .....                                               | 1    |
| 1.2. <u>Problem Statement</u> .....                                        | 1    |
| 1.3. <u>Research Objective</u> .....                                       | 2    |
| 1.4. <u>Scope and Limitation</u> .....                                     | 2    |
| 1.5. <u>Methodology</u> .....                                              | 3    |
| 1.6. <u>Thesis Outlines</u> .....                                          | 4    |
| <u>CHAPTER II LITERATURE STUDY</u> .....                                   | 6    |
| 2.1. <u>RFID Definition and How It Works</u> .....                         | 6    |
| 2.1.1. <u>Biometric Device</u> .....                                       | 6    |
| 2.2. <u>NodeMCU ESP – 8266</u> .....                                       | 7    |
| 2.3. <u>Module RFID RC – 522</u> .....                                     | 7    |
| 2.4. <u>Related Work</u> .....                                             | 8    |
| 2.4.1. <u>RFID-Based Attendance System with Arduino Uno</u> .....          | 8    |
| 2.4.2. <u>IoT Implementation for Attendance System Using NodeMCU</u> ..... | 8    |
| <u>CHAPTER III SYSTEM ANALYSIS</u> .....                                   | 9    |
| 3.1. <u>System Overview</u> .....                                          | 9    |
| 3.2. <u>Function Analysis</u> .....                                        | 9    |
| 3.3. <u>Software and Hardware</u> .....                                    | 11   |

|                                               |                                    |    |
|-----------------------------------------------|------------------------------------|----|
| 3.3.1.                                        | <u>Software</u>                    | 11 |
| 3.3.2.                                        | <u>Hardware</u>                    | 11 |
| 3.4.                                          | <u>Use Case Diagram</u>            | 12 |
| 3.5.                                          | <u>Use Case Narrative</u>          | 13 |
| 3.6.                                          | <u>Swimlane Diagram</u>            | 19 |
| <u>CHAPTER IV SYSTEM DESIGN</u>               |                                    | 23 |
| 4.1.                                          | <u>User Interface Design</u>       | 23 |
| 4.1.1.                                        | <u>Homepage Design</u>             | 23 |
| 4.1.2.                                        | <u>Employee Data</u>               | 24 |
| 4.1.3.                                        | <u>Card Scan</u>                   | 24 |
| 4.1.4.                                        | <u>Absence Recap</u>               | 25 |
| 4.2.                                          | <u>Prototype System Design</u>     | 25 |
| 4.3.                                          | <u>Entity Relationship Diagram</u> | 26 |
| <u>CHAPTER V SYSTEM DEVELOPMENT</u>           |                                    | 27 |
| 5.1.                                          | <u>User Interface Development</u>  | 27 |
| 5.1.1.                                        | <u>HomePage</u>                    | 27 |
| 5.1.2.                                        | <u>Employee Data Page</u>          | 27 |
| 5.1.3.                                        | <u>Recap Absence Page</u>          | 28 |
| 5.1.4.                                        | <u>Card Scan Page</u>              | 28 |
| 5.2.                                          | <u>Prototype System Details</u>    | 29 |
| 5.2.1.                                        | <u>Wifi Connection</u>             | 29 |
| 5.2.2.                                        | <u>Card Scanning System</u>        | 30 |
| 5.2.3.                                        | <u>Handling Button</u>             | 30 |
| 5.2.4.                                        | <u>Server</u>                      | 31 |
| <u>CHAPTER VI SYSTEM TESTING</u>              |                                    | 32 |
| 6.1.                                          | <u>Testing Environment</u>         | 32 |
| 6.2.                                          | <u>Testing Scenario</u>            | 32 |
| <u>CHAPTER VII CONCLUSION AND FUTURE WORK</u> |                                    | 34 |
| 7.1.                                          | <u>Conclusion</u>                  | 34 |
| 7.2.                                          | <u>Future Work</u>                 | 34 |
| <u>REFERENCES</u>                             |                                    | 35 |

## LIST OF FIGURES

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| <u>Figure 2. 1 NodeMCU ESP - 8266</u> .....                                     | 7  |
| <u>Figure 2. 1 NodeMCU ESP - 8266</u> .....                                     | 7  |
| <u>Figure 2. 2 RFID RC – 522 and RFID Card</u> .....                            | 8  |
| <u>Figure 2. 2 RFID RC – 522 and RFID Card</u> .....                            | 8  |
| <u>Figure 2. 3 Use Case Diagram for RFID Card-Based Attendance System</u> ..... | 11 |
| <u>Figure 3. 1 Use Case Diagram for RFID Card-Based Attendance System</u> ..... | 11 |
| <u>Figure 3. 2 Swimlane Diagram for Add User</u> .....                          | 18 |
| <u>Figure 3. 3 Swimlane Diagram for Edit User</u> .....                         | 19 |
| <u>Figure 3. 4 Swimlane Diagram for Delete User</u> .....                       | 19 |
| <u>Figure 3. 5 Swimlane Diagram for Manage User</u> .....                       | 20 |
| <u>Figure 3. 6 Swimlane Diagram for View User Attendance</u> .....              | 20 |
| <u>Figure 3. 7 Swimlane Diagram for Do Attendance</u> .....                     | 21 |
| <u>Figure 4. 1 Homepage Design</u> .....                                        | 22 |
| <u>Figure 4. 2 Employee Data</u> .....                                          | 23 |
| <u>Figure 4. 3 Card Scan</u> .....                                              | 23 |
| <u>Figure 4. 4 Absence Recap</u> .....                                          | 24 |
| <u>Figure 4. 5 Fritzing Circuit Diagram</u> .....                               | 24 |
| <u>Figure 4. 6 Entity Relationship Diagram</u> .....                            | 25 |
| <u>Figure 5. 1 Homepage Interface</u> .....                                     | 26 |
| <u>Figure 5. 2 Employee Data Page</u> .....                                     | 27 |
| <u>Figure 5. 3 Recap Absence Page</u> .....                                     | 27 |
| <u>Figure 5. 4 Card Scan Page</u> .....                                         | 27 |
| <u>Figure 5. 5 Wifi Connection Requirement</u> .....                            | 28 |
| <u>Figure 5. 6 Wifi Connention</u> .....                                        | 28 |
| <u>Figure 5. 7 Read and Check RFID Card Number</u> .....                        | 29 |
| <u>Figure 5. 8 Communication with RFID reader</u> .....                         | 29 |
| <u>Figure 5. 9 Looping for UID RFID Card</u> .....                              | 29 |
| <u>Figure 5. 10 Handling Button</u> .....                                       | 30 |
| <u>Figure 5. 11 Process of Connecting to the Server</u> .....                   | 30 |

## LIST OF TABLES

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| <u>Table 3. 1 Funtion analysis for device and database server simulation.....</u> | 9  |
| <u>Table 3. 2 Use Case Narrative for Add User .....</u>                           | 12 |
| <u>Table 3. 3 Use Case Narrative for Edit User .....</u>                          | 13 |
| <u>Table 3. 4 Use Case Narrative for Delete User.....</u>                         | 14 |
| <u>Table 3. 5 Use Case Narrative for Manage User/Employee Data .....</u>          | 15 |
| <u>Table 3. 6 Use Case Narrative for View User Attendance .....</u>               | 16 |
| <u>Table 3. 7 Use Case Narrative for Do Attendance.....</u>                       | 17 |
| <u>Table 6. 1 Testing Scenario .....</u>                                          | 31 |