Wireless Answer Pad with Result via SMS Facility

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Abstract:- **Wireless technology is in highest demand because of its various features. Every industry is trying to capture its benefits. This paper deals with the idea of automation of traditional examination procedure with the help of wireless technology.**

In this concept every user will have its own Electronic Answer Pad. This answer pad is a combination of keypad and display, so that user can enter and view the selected answer of a particular question from a given question paper. Once the exam is over, all the answers of users will be sent to server system via RF MODULE, the server system will then analyze the answers with the pre loaded answer sheet, in order to generate the results of all users. The result will also be sent to users via SMS instantly.

I. INTRODUCTION

Now a day's area of handheld devices using embedded system is having increasing demand in the embedded systems. This paper presents such handheld device which can be used in examination system. The current examination systems are complicated. Lot of preparation has to be done before the examination like setting the question papers, printing question papers, scheduling, conducting .The purpose of this system is reduce the time and errors in examination systems.So In this paper the idea of wireless technology is explained so as to reduce the complexity in traditional examination system

II.SYSTEM SPECIFICATIONS & REQUIREMENT

System Specification:-

ELECTRONIC ANSWER PAD

1. Matrix keyboard

2. ARM7 microcontroller

3. LCD

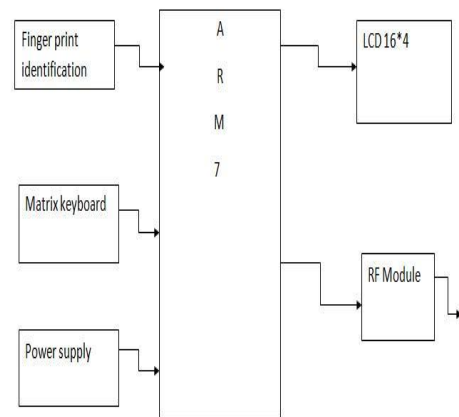4. Fingerprint identification module

5. Power supply

Block Diagram :-
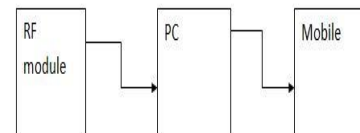

Fig.1 Electronic answer pad

Fig.2 Server system

SERVER SYSTEM

1. RS232 standard

2. Mobile

3. PC

4. RF Module

III.BLOCK DIAGRAM DESCRIPTION

1.Electronic Answer Pad:

This is a hand held unit, which will act as answer pad for all users. It will contain a keypad with various keys like option keys A, B, C, D etc to select the answer, OK, DELET in order to enter or modify the selected answer

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of a any question in order to view the question number and selected answer this answer pad will also contain a display unit, also in order to send the result it will use the Zigbee module

2.Zigbee Module:
Zigbee technology is the low power consumption technology,, it can be use for long range data transfer. We are using Zigbee module in order to transfer and receive the user data from answer pad.

3.Microcontroller
It is the heart of the entire system and used for data analysis and storage. It will capture the all the answers feed by users and will do the comparison with standard answers enter by system operator

IV.WORKING

It can be classified in following modes

1. Electronic Answer Pad
In this mode user will enter answers for all the questions in exam paper with the help of option keys available on answer pad. He will be able to see the question number and the answer entered by him on the display attached to the answer pad. He can also modify the answers if necessary. The microcontroller will store this data and will continually send it to the server system with the help of Zigbee module attached to the system
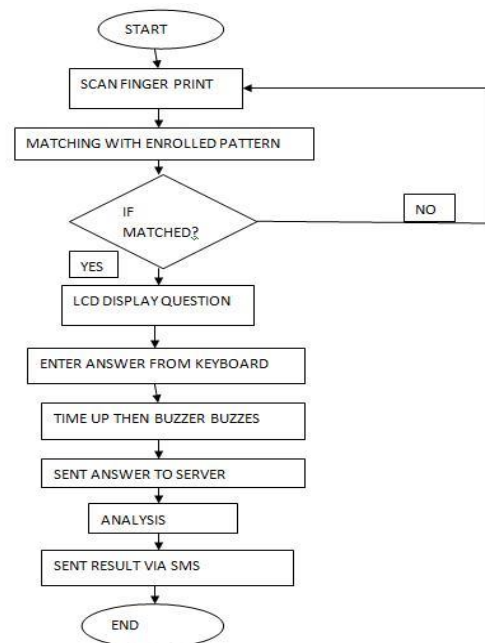
2. Server System
In this mode the server system will receive the data from zigbee module. It will store it in the controller and compares it with the reference answer sheet. Once this is done it will generate the result for all users and send it to the PC via serial communication.

v.SOFTWARE DESIGN

Algorithm:-
1. Start
2. Candidate scan the finger print on finger print reader.
3. Finger print entered will matched with the enrolled fingerprint.
4. If not detected then go to step 2 and if matched question paper will unlock and display on LCD.
5. User answer the question on keyboard.
6. When time up Buzzer Buzzes.
7. Answers are sent to server via RF module.
8. Answer compare with original answer.
9. Result sent to candidate via SMS facility on registered mobile no.

FLOWCHART:

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ADVANTAGES:

- Highly flexible

- Quick response time

- Fully automate system thus Reduces human efforts

- Robust system

- Less Corruption

- Time saving approach

DIS-ADVANTAGES:

- Circuit complexity

APPLICATIONS:

- Examination center

FUTURE SCOPE:

- With the help of internet we can increase the scope of this system.

- By the use of face recognition and CCTV we can increase the security of the system.

- With the help of graphical display and touch screen we can increase the efficiency of the system.

VI. RESULT

Examination will start only when the fingerprint of candidate is matched. After matching of the fingerprint examination will start and candidate will be able to see the questions on screen and attempt it.

VII. CONCLUSION

By using this wireless answer pad with SMS facility we can reduce the complexity in today's examination systems. By using this answer pad we can increase the the security. Students can get the answers immediately after examination.

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