SMART HEALTH CARD

TEAM- MUSKATEERS.

MEMBERS- *Soudri Sai Vishnu, Prerana Shenoy, Bhavika Arigala, Manasa Potta, Arjun Suresh, Shridhar Raj.*

CONTENTS

CHAPTER 1

ABOUT THE ORGANISATION

1 TEQUED LABS

Tequed Labs (Opc) Private Limited is an unlisted private company incorporated on 22 January, 2018. They aim towards research and product development in fields like IOT, Machine Learning and App development. They are known to conduct workshops in different colleges and participate in national and international events/competitions.

CHAPTER 2
INTERNET OF THINGS

2 INTERNET OF THINGS

The “Internet of things” (IoT) is taking the world by storm and becoming an increasingly growing topic of conversation both in the workplace and outside of it. It’s a concept that not only has the potential to impact how we live but also how we work.

TO facilitates communication, data flow, device management, and the functionality of applications we need a complete platform which is called IoT platform. And it’s an very important part of IoT ecosystem.

There are over 300 IoT platforms as of last year and this number continues to grow. The IoT platform market is growing at a compound annual growth rate (CAGR) of 33% and is expected to reach a $1.6 billion market size in 2021.

The IoT Platform becomes an essential enabler, a means of gathering and making sense of the data, while the real value will come applying the resulting insights to create great IoT services (e.g., predictive maintenance) for connected businesses. In coming days, we will see the creation of entirely new industries that build business models solely on IoT da

CHAPTER 5
INTRODUCTION

5 INTRODUCTION

Automation systems in hospitals and medical centers serve the purpose of providing an efficient working environment for healthcare professionals. Access to accurate health data quickly is one of the main functions of these systems. To fulfill these requirements, these systems should contain an information network that acquires processes and stores patient information. There can be many sources that the information related to the patients can be obtained from: the patient himself, results of tests applied to patients, online patient monitoring systems, doctors' diagnoses for patient illnesses and previously stored patient information. In addition to the symptoms of a suspected illness, it's important for the doctor to be able to retrieve patient's previous information during his examination .

Portable media can play a key role in sharing limited amount of patient specific information, which in turn, may provide important data to a hospital automation system .The patient can carry the media with him/her anywhere and any time and present it to the doctor at the time of consultation. The media selected for the above purposes should be cheap, easy to use, carry and update with new information and shouldn't get damaged easily. "Smart card" appears as the most

suitable medium to be used in healthcare information systems when such requirements are considered.

Smart cards can be described as portable integrated devices that store and process data. Speed, security and portability properties make smart cards a potential tool in healthcare systems.

CHAPTER 6

WORKING

6 WORKING

Every patient is given a RFID(Radio Frequency Identification) tag. A RFID reader is used to detect it, upon which all the medical history and basic details of the patient are extracted out of the server and only the hospital is allowed to add new medical information, diagnosis of the patients illness and view previously stored information.

Furthermore, when the RFID tag is detected a SMS is sent to the emergency contacts using Webhooks in IFTTT app.

Fig6.1 RFID reader

Fig6.2 RFID tag

CHAPTER 7
COMPONENTS

7 COMPONENTS

1. RFID Tags
2. RFID Readers
3. Node MCU

CHAPTER 8
ADVANTAGES

8 ADVANTAGES

- Previous records cannot be edited by anybody.
- Many mishaps occurring due to false information can be avoided.
- Relatives of the patient need not be present for the history.
- The card can also be linked to Aadhar and medical insurances.
- It can be used in any hospital.

CHAPTER 9
CONCLUSIONS

9 CONCLUSION

A smart health card has been successfully developed that stores necessary information of the patient with the RFID tag provided.

It also sends a SMS to the emergency contacts when the RFID reader detects the tag.

CHAPTER 10
REFERNECES

10 REFERENCES

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