A Survey of Healthcare Applications Based on Google IoT Cloud Platfom

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INTRODUCTION

Over the years the dependency of healthcare in IoT has been increased to a great extent for the improvement of the treatment given. Based on the individual's unique characteristics IoT makes the data gathering and processing faster. The Internet of Things makes sure to provide the care services by managing to have a unique digital identity.

ROLE OF WIRELESS SENSOR NETWORKS (WSN) AND CLOUD COMPUTING

WSN are a number of small-sized battery-powered computing devices which are scattered in a physical environment. These devices posses the ability to sense, collect, monitor and display the information gathered from the environment. It is highly used in any wearable technology such as smartwatches as well as in Healthcare application.
The data gathered from these devices is then transmitted to the cloud for further storage and refinement.

KEY RESEARCH QUESTIONS

1) How to secure the privacy and security of the patient's data on the healthcare applications?
2) How to improve the confidentiality of the data?
3) How to improve the scalability and security issues of the application?

RESEARCH

The research is based on healthcare applications used in our daily lives. Along with it, different aspects were also taken into consideration such as Wireless Sensor Networks (WSN) and Cloud computing. Upon precise observation it was being noted there are several scurity threats an d privacy issues that can cause harm to the patient's valuable information. As a result, an existing countermeasure is provided to prevent these attacks from happening.

RESEARCH METHODOLOGY

A quantitative collection of information was being conducted in this research in which the content was extracted, bserved, refined and implemented in alignment to have a proper flow of information.

EXISTING COUNTERMEASURES

There are various security mechanisms in place for Wireless Sensor networks (WSN) such askey establishment and trust set up, secrecy and authentication etc which protents the patient's data from any harmful attacks. Along with it there are a number of security models in place in cloud computing such as EHR secure collection which protects the information in the cloud platform.

CONCLUSION

Based on the research there are various security mechanisms and models in place to prevent these attacks from happening. Although, the threat of evaesdropping the patient's vital sign is of more concern as it can lead to more further threats to the patient's data.

BIBLIOGRAPHY

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