

## E-Health Glance System

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**Abstract** - The project objectives are to assist the medical industry and government to administer its topics much more efficaciously through using a card-based mechanism that will maintain the complete health records of a person in a unique card assigned to that person himself or herself. This card will be scanned and viewed through portals created via us at places where the person will be needed to show his or her medical fitness or where he or she needs to show the information of his or her previous medications and ailments so that his further treatment can be carried out based on the details of how his body responded to certain clinical assistance in the past scenarios. This proposed e-health card system aims to improve efficiency, get the right of entry to, and accountability of healthcare services. The thesis presents research, design, and implementation of e-health card-based solutions that can be used to integrate and coordinate with heterogeneous IT environments. Using the e-health card, all patient's data, doctor's prescription, patient's present, and previous health history could be accessible through PDA by the relevant parties. To conduct the thesis, we've observed a qualitative research method that includes a survey among the potential parties and gathering relevant data from the existing e-health card system in different countries. The thesis aims to propose a PDA-based e-health card system using a smart card for patient identification which would improve the overall health care system.

**Keywords:** Data storage, Data security, E-Health, Health history management, Data availability, Efficiency.

### 1. INTRODUCTION

Today there are various problems in the health - care sector in India and this system may help us to overcome these problems using ICT facilities such as e-Health cards. It will make a huge difference and improvement in India's health sector, where mobile technologies and communication have been developed at a rapid rate. India has now a strong base and presence in the IT sector. Today we see most of the doctors casually prescribe medicine on handwritten paper and giving inappropriate suggestions to make the laboratory tests to the patients to verify what diseases they have. Patients also lose their previous prescription paper as they are not properly kept or get damaged over time and also the laboratory test reports

are not properly stored which are the most important parts of treatment which will make the doctor's task of verifying their previous diseases more tedious and to make decisions. Local pharmacies are selling medicine with or without prescription from doctors. So, the abuse of selling medicine that affects the general people's suffering from different diseases and young generations getting addicted which is spread out over the country. The E-health Glance System (EHGS) is an electronic information system which can be implemented in the Health Ministry. EHGS will create an effective and more efficient supervision system over population's healthcare by creating e-health records covering, administrative and medical information and by providing the citizens with e-health glance cards. The E-Health Glance System provides a record of previous health issues and acts as a source of permit seeker to the card owner by the easy and secure access to the data stored within the card in any required place to avoid pandemics like Covid-19 and various varieties of health issues which may prevent health-related issues to a particular person or a society. The database created can be used in various sections and parts of medical studies and medical solutions. By providing the glance system, the person may get permission to deal with day-to-day health interactions. The E-health Glance System includes the permits for a particular patient so he or she may avoid spreading the diseases in the future like COVID-19 and the pandemic situations.

### 2. LITERATURE SURVEY

#### 2.1 Electronic health-card system: S. Habibullayev; K. Ibadul-layev; R. Hasanov:

The electronic health-card system (EHCS) is an electronic information system implemented in the Ministry of Health sector. Application of the EHCS has created an effective and efficient supervision system over population's healthcare and disease by creating e-health records covering administrative and medical information and by providing the citizens with e- health cards. The E-Health card system provides proper and exact checkup to the card owner by the easy and secure access to the data stored within the card and the web in any required place.

**2.2 Analysis of an eHealth Care System with Smart Card Based Authentication: Kuo Hui Yeh; N. W. Lo; Tzong Chen Wu; Ta Chi Yang; Horng Twu Liaw:**

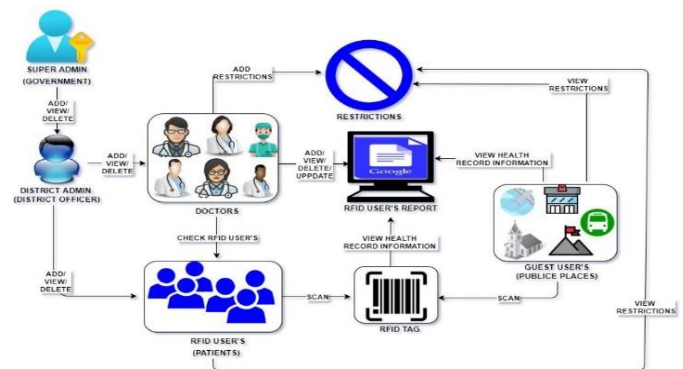
In recent years, smart card-based authentication has been adopted in the electronic health care and medical services in which the user and administrator can agree a robust session key based on human-memorable passwords with the hospital server. In this paper, we investigate the robustness of an eHealth care system with smart card-based authentication mechanisms. This research is from International Journal of Innovative Computing, Information and Control in 2011, and its outstanding contribution and rigorous analysis make itself one of the most promising techniques in the research area of secure eHealth care services. However, it still exists spaces for security enhancement, therefore, we present the analysis of this research and de-liver contributions in the design of the secure eHealth care application development.

**2.3: Electronic health card: Opportunities and challenges: Hamid-Reza Firoozy-Najafabadi; Ahmad Habibzad Navin:**

In recent years, information, and communications technology (ICT) has been able to penetrate in the various fields of medical science and healthcare and has an important role in improving social health. In this regard the electronic health card (EHC) project has been introduced that is a replacement for insurance booklet and some countries have implemented EHC system. Electronic health card will have many benefits including reducing the number of clerical and paper processes, reducing costs, reducing medical errors, more accurate follow-up of cases, integrity of patient information, eliminating the problem of illegal prescriptions, etc. Of course, this card also has challenges and obstacles. This paper first introduced the electronic health card and its benefits. Then the challenges of implementing this system will be examined and we will provide solutions for some of these challenges.

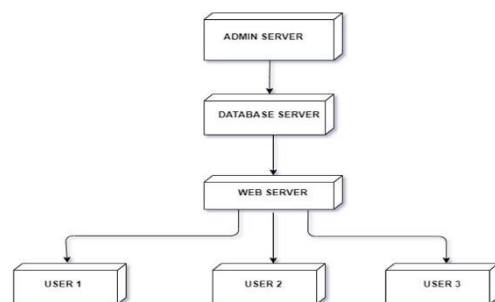
**3. SYSTEM DESIGN AND IMPLEMENTATION**

This system contains three main phases. First phase consists of issuing of the E-Health Card. The second phase consists of adding data and updates into the account related to that E-Health Card. And the third phase consists of viewing of that data by the users or the authorities. The technologies used for creating this system are Java, html, CSS and MySQL. This system is made up of 5 main modules consisting of Super Admin, District Admin, Doctor, RFID Holder (User), Guest User (Public Places).



**Fig-1:** Architecture diagram

The E-Health Glance System is an electronic card system which will have a web server through which the operations on the patient's data are done. The data itself is stored in the servers in the form of Electronic Medical Records. The medical records can be accessed by authorized medical authorities through the web interface. Every person having a health card will have a unique card ID by which the data is stored on the server. This data can be seen by authentication with card having RFID tag so that the data can be accessed easily by using the card. The medical staff can insert data and records through the web interface. The patient can overview his health data on the application which fetches the same data from servers with the Id and password authentication. The data can be edited by the authorized data editors in case of data any record insertion errors. The information can be further used for studies and medical development.



**Fig-2:** Deployment diagram

### 4. RESULT

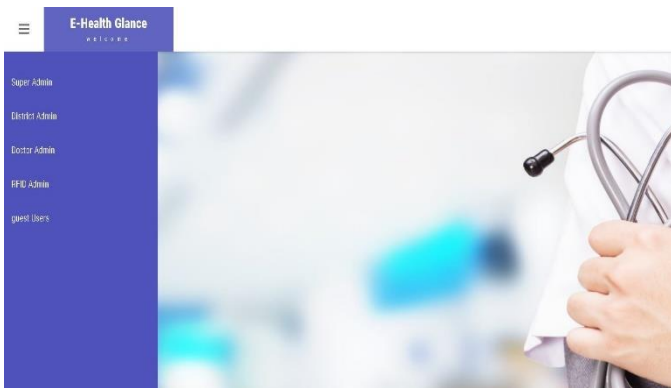


Fig-3: Home Panel

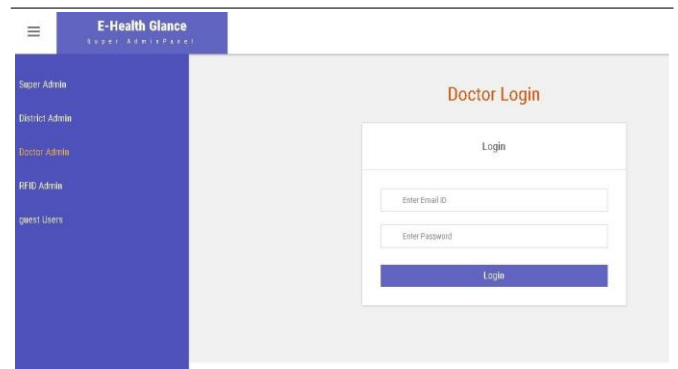


Fig-6: Doctor Admin Panel

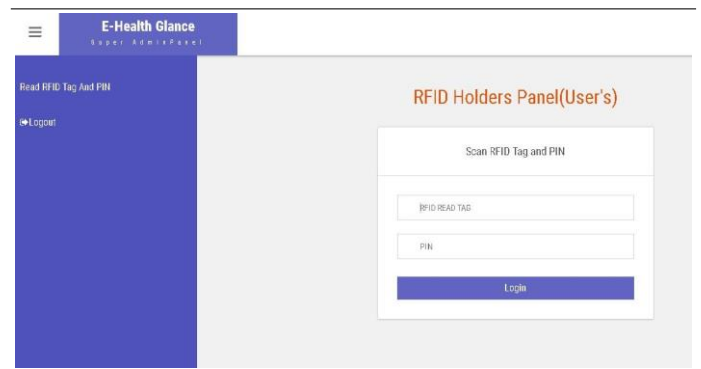


Fig-7: RFID Holder's Panel

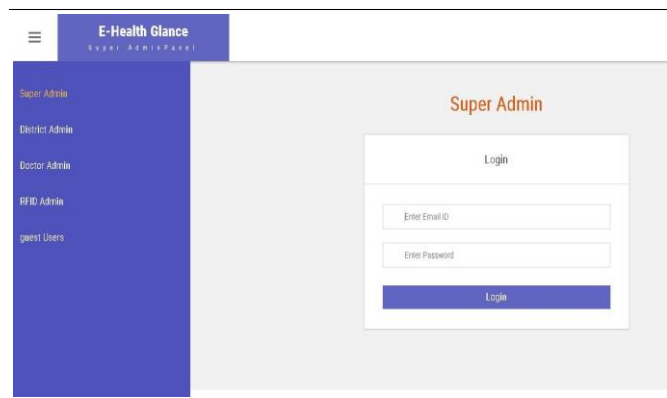


Fig-4: Super Admin Panel

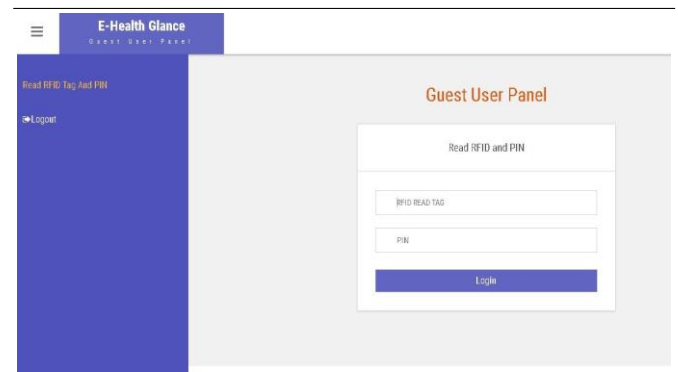


Fig-8: Guest User Panel

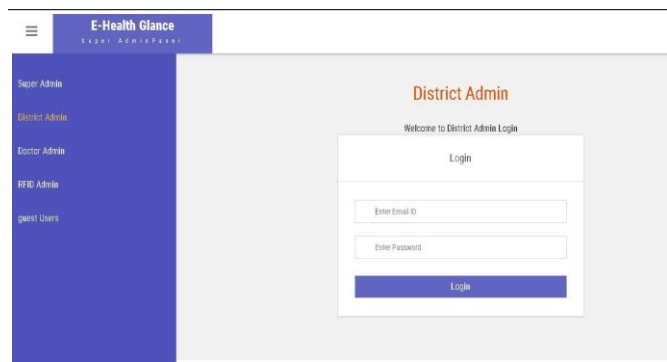


Fig-5: District Admin Panel

### 5. CONCLUSIONS

The E-health Glance System would be successful when people will understand the actual benefits of this E-Health Glance System and about the necessity of this technology for upgrading the current healthcare situation. The health care service for the citizen of a developing country like India needs to be cost effective for proper healthcare facilities. The E-health Glance System would not only prove useful in practical life scenarios but can also be

used to study the various effects of a variety of medicines on the ones consuming them in various scenarios. Thus,

creating tons of case studies for medical science enthusiasts which in return would create a huge database for research that can possibly change the course of human medication

## 6. FUTURE SCOPE

The data generation done in the E-Health Glance system can be analyzed and used for statistical surveys for studying the effects of certain medication and treatment to improve the medical science field and in return improve the quality of human healing. Of course, this data will be used without revealing the personal identity of the users

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