

A SHORT NOTE ON THE EYE BANK MANAGEMENT SYSTEM IN PUDUCHERRY

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ABSTRACT

The new eye bank that will shortly open in the city uses Eye Bank Management as a trial project. According to the management's plans, this bank will begin operations next month, and they have plans to gather eye tissues from various sources and give them to those in need. For handling all of these job responsibilities, a comprehensive programme is necessary. This programme allows it to register donor information, eye tissue collection information, and other information while maintaining the daily transaction records in an eye bank. This software programme is flexible enough to meet the future eye banks' requirements. We are making every attempt to carry out this project effectively, and if we are, we'll also focus on the other eye banks in the city.

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1. INTRODUCTION

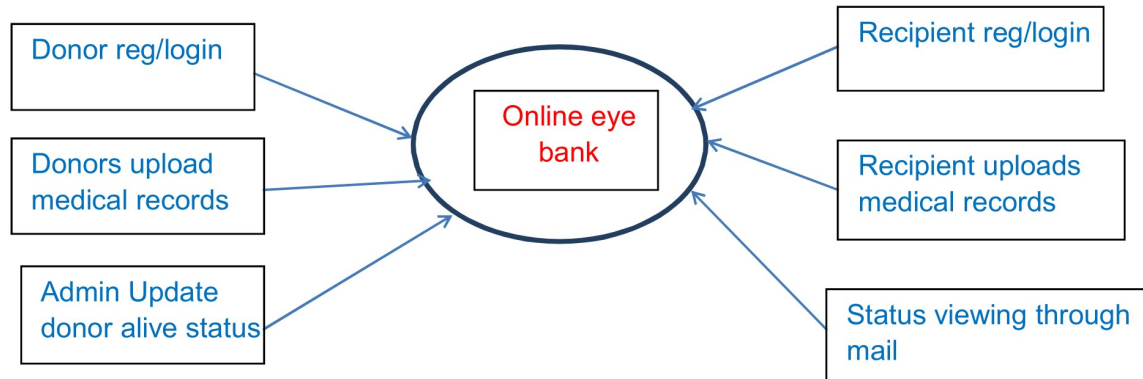
The management system for the Eye Bank displayed a great deal of inefficiency and ineffectiveness, which had a far-reaching effect on the decisions made by management. The manual method, which relied on paper cards to gather donor information, maintain donor records, and communicate findings to donors, had flaws that required IT-based fixes. The system was characterized by delays and occasional inability to access historical records, inaccuracies in data entry and human interpretation of findings, and a lack of secrecy and confidentiality of documents due to easy access by unauthorized parties. As a result, management decisions regarding the allocation of eyes to hospitals and the mobilization/sensitization of eye donors were not based on facts. Another difficulty for management in such a system was the rapid compilation of information related to eye groups for many eye donors in situ. It was intended to apply IT-based solutions to the system's improvement. As a result, the previous system was examined, and a reliable/effective eye donor management information system was created to aid management in carrying out its strategic plan and achieving the overall purpose, goals, and objectives.

Implementing a management system for eye banks online is necessary. The suggested system's key benefits are speed and precision. Data redundancy doesn't exist. In the database, the data are kept. It is simple to obtain and utilize at any moment. The suggested approach offers strict data protection and substantially reduces the current system's shortcomings. The proposed system allows contributors to register and store their information. They were comparing the recipient's and donor's eye tissue, producing a report, and sending it to the recipient's email address. Our programme can provide each user with a unique ID. It has a search feature so you can see the eye details that are accessible. The user can look up ocular availability.

2. METHOD

Testing is done to look for mistakes. Testing is the practice of looking for flaws or weaknesses in a work product and user expectations. It examines the operation of parts, subassemblies, assemblies, and a final product. It is the process of testing software to ensure it complies with its specifications and doesn't fail unpleasantly. Different exam kinds exist. Every test type responds to a distinct testing demand. Eye Bank information Gather all eye bank data, update it in the programme, and save it all in a database. Donor Information Donors may immediately provide their knowledge during the registration step. The recipient must register and upload their eye-related medical documents. Information about collecting eye tissue, comparing the recipient's and donor's eye tissue, producing a report, and sending it to the recipient's email address (Figure 1).

Figure 1. Data flow diagram



In a typical cloud architecture, which refers to the systems architecture of the software systems used in the delivery of cloud computing, several cloud components communicate via a loose coupling mechanism, such as a messaging queue. The employment of tight or loose coupling in processes like these and others demands intelligence in the use of elastic supply.

3. RESULTS AND ANALYSIS

To manage applications, cloud computing relies on sharing resources instead of local servers or individual devices. Grid computing, which uses the underutilized processing power of every computer connected to a network to tackle problems that are too complex for any single standalone system, is similar to cloud computing. The term cloud computing refers to "a type of Internet-based computing," where various services, such as servers, storage, and applications, are delivered to the computers and devices of an organization through the Internet. The word cloud (also referred to as "the cloud") is used in cloud computing as a metaphor for "the Internet." Cloud computing leverages the Internet and centralized distant servers to manage data and applications. Using programmes without installing them, individuals and companies may access their data from any computer with an internet connection, thanks to cloud computing. This technology makes computers considerably more effective by centralizing data storage, processing, and bandwidth. Yahoo email, Gmail, or Hotmail, among others, are straightforward examples of cloud computing. You may start sending emails right away with simply an internet connection. The cloud service provider, such as Yahoo, Google, etc., manages the server and email management software entirely from the cloud (Internet). Three categories make up cloud computing: "application," "storage," and "connectivity." Each sector has a distinct function for businesses and people worldwide and provides a range of products. According to research by V1 published in June 2011, only 2/3 of senior financial professionals and 9% of senior IT workers fully understand cloud computing. This finding emphasizes how new the technology is. According to research by Aberdeen Group published in September 2011, focused businesses had an average 68 percent rise in IT spending and a 10 percent decrease in the cost of powering their data centres.

4. CONCLUSION

Here, we introduce a straightforward web application for donor registration and search in the proposed system. Anyone may quickly sign up for this application and get the special donor condition status. This system minimizes communication between the hospital, the donor, and the beneficiary.

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ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

COMPETING INTEREST

The authors declare no conflict of interest.

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