



DBMS Mini-Project Synopsis

1.	Project Title : Covid-19 Patient Management System	
2.	Submitted by :	
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3.	Tools used: Visual Studio Code, My SQL Programming languages: PHP Front end design : HTML, CSS, JavaScript Database : SQL	
4.	Abstract of the Project : <ul style="list-style-type: none">• The COVID-19 pandemic has underscored the importance of efficient patient management systems to streamline healthcare processes and ensure optimal care delivery.• This mini-project focuses on developing a COVID-19 Patient Management System using database management principles.• The system aims to facilitate the organization and retrieval of patient information, patient status, ward details, admitted room, discharge details, covid status, staff and doctor in charge.• Through a user-friendly interface, healthcare professionals can efficiently input, update, and access patient data, enabling timely decision-making and coordination of care.• The system will also include features for generating reports, tracking resource utilization, and monitoring patient outcomes.• By implementing best practices in database design and management, this mini-project aims to contribute to the development of effective tools for managing COVID-19 patients within healthcare settings.	

5.	<p>Scope/Objective of the Project:</p> <ul style="list-style-type: none"> • Data Management : The project will focus on efficiently managing COVID-19 patient data, including demographics, medical history, test results, and treatment plans. • User Interface : Designing a user-friendly interface for healthcare professionals to input, update, and retrieve patient information. • Querying and Reporting : Implementing querying and reporting functionalities to extract insights and generate reports for decision-making. • Integration : Integrating the DBMS with existing healthcare systems and electronic health record (EHR) platforms for interoperability. • Scalability : Designing the system to accommodate a growing volume of patient data and evolving healthcare needs. • Improved Decision-making : Enable healthcare professionals to make informed decisions by providing access to comprehensive patient information and insights. • Enhanced Patient Care : Contribute to the enhancement of patient care by streamlining workflows, reducing administrative burden, and ensuring data accuracy. • Scalability and Flexibility : Design the system to be scalable and adaptable to accommodate future growth and changes in healthcare requirements. <p>By addressing these scope and objectives, the COVID-19 Patient Management DBMS Mini Project aims to contribute to the optimization of patient care and management during the ongoing pandemic.</p>
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6. **ER Diagram:**

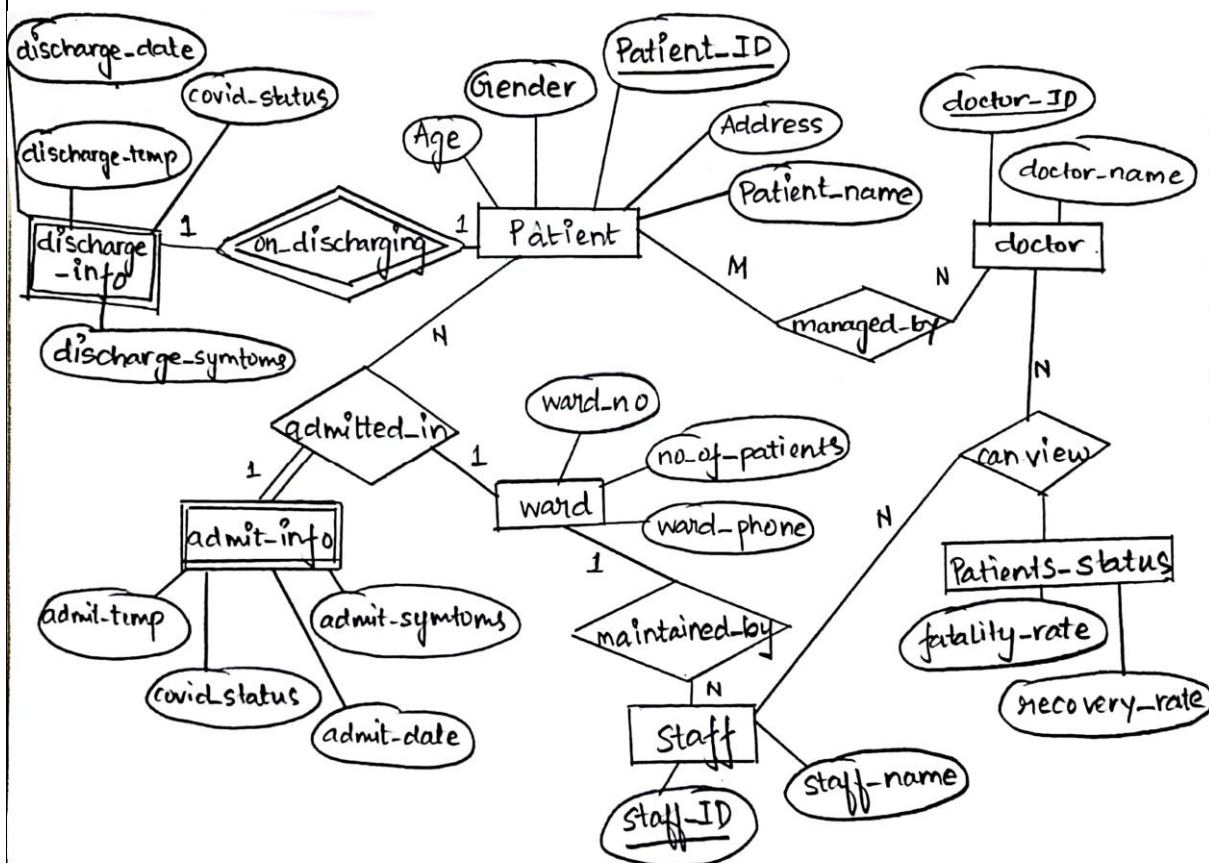


Fig: ER Diagram for Covid-19 Patient Management System

7. **Applications/Advantages of the project :**

- **Data Centralization :** The DBMS can centralize patient data including demographics, test results, treatment history, and vaccination status, making it easier for healthcare providers to access and update information efficiently.
- **Patient Tracking :** With a well-designed DBMS, healthcare professionals can track the progression of COVID-19 cases, monitor the effectiveness of treatments, and identify trends or patterns in the spread of the virus.
- **Resource Allocation :** By analyzing data stored in the DBMS, healthcare administrators can optimize resource allocation, such as hospital beds, ventilators, and medical staff, based on the severity of cases in different regions.

- **Contact Tracing :** Integrating contact tracing data into the DBMS can help identify individuals who may have been exposed to COVID-19, allowing for timely notifications and preventive measures to limit further transmission.
- **Research and Analysis :** Researchers can utilize the database to conduct epidemiological studies, analyze the effectiveness of public health interventions, and identify risk factors associated with severe outcomes of COVID-19.
- **Decision Support :** Healthcare policymakers and government officials can use data from the DBMS to make informed decisions regarding public health policies, vaccination strategies, and resource allocation to mitigate the impact of the pandemic.
- **Telemedicine Integration:** Integrating telemedicine functionalities into the DBMS enables remote monitoring and consultation for COVID-19 patients, improving access to healthcare services and reducing the burden on healthcare facilities.
- **Real-time Reporting:** The DBMS facilitates real-time reporting of COVID-19 cases to public health authorities, enabling them to monitor disease activity, track outbreaks, and implement targeted interventions promptly, thereby controlling the spread of the virus.
- **Enhanced Communication:** The system improves communication among healthcare providers by providing a centralized platform to share patient information, treatment plans, and updates, fostering collaboration and coordination in patient care.
- **Scalability and Adaptability:** As the pandemic evolves and healthcare needs change, the DBMS can be easily scaled up or adapted to accommodate new requirements, ensuring that it remains relevant and effective in managing COVID-19 patients over time.

Overall, a well-designed COVID-19 patient management DBMS can streamline healthcare delivery, improve decision-making, and contribute to efforts to control the spread of the virus.

8.	<p>Any other details (Please specify) :</p> <ul style="list-style-type: none"> • By digitizing patient records and forms, the DBMS eliminates the need for cumbersome paperwork, freeing up healthcare staff to focus more on patient care rather than administrative tasks. • The DBMS can send automated alerts and reminders to healthcare providers for tasks such as scheduling follow-up appointments, administering medications, or conducting regular patient assessments, ensuring timely and proactive patient management. • Designed with scalability and flexibility, the DBMS can evolve to meet the changing needs of healthcare systems beyond the COVID-19 pandemic, making it a valuable long-term asset for healthcare management.
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Signature with date

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Project Guide

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