**Proposal**

Introduction:

In today's fast-paced world, the healthcare industry is continually evolving to meet the demands of patients and the healthcare system. Hospital management systems play a crucial role in ensuring that healthcare facilities run smoothly, efficiently, and effectively. However, with manual record-keeping processes, gaps, inconsistencies, and inefficiencies can occur, leading to errors in patient care, delays in treatment, and decreased trust in the healthcare system.

Therefore, our proposed solution is a web application for Hospital Management that addresses these challenges by providing an efficient and effective system for managing patient records and prescriptions. The proposed system allows patients, doctors, and admins to access and manage patient records and prescriptions efficiently. The system will automate various tasks, reducing manual effort and increasing efficiency. Patients can create accounts and access their prescriptions and make payments through the system, reducing the time and effort involved in manual payment processing. Doctors can upload prescriptions and view paid/unpaid amounts, and admins can manage the overall system, approve prescriptions, and handle payments.

One of the unique features of our proposed system is the ability to integrate sandbox payment for testing purposes and provide secure data storage for patient information, ensuring privacy and confidentiality. Additionally, the system will be accessible from anywhere and anytime, increasing accessibility and convenience for patients and doctors.

The work plan for the proposed solution will include several stages, starting with planning, development, testing, implementation, and maintenance. In the planning stage, the team will gather requirements from stakeholders and develop a detailed project plan, including timelines and milestones. The development stage will involve designing the system architecture, creating wireframes and prototypes, and developing the system's code. Testing will involve verifying that the system works as intended, including testing for functionality, performance, and security. The implementation stage will involve deploying the system to production, training stakeholders on how to use the system, and conducting a post-implementation review to ensure that the system is functioning correctly. Lastly, the maintenance stage will involve regular updates and patches to ensure that the system remains secure and functional.

The healthcare industry is constantly evolving, with technological advancements offering opportunities to improve patient care and outcomes. However, many hospitals still rely on manual record-keeping processes, which can be time-consuming and prone to errors. These inconsistencies can lead to inefficiencies and errors in patient care, which can have a negative impact on the patient experience and result in decreased trust in the healthcare system.

The proposed solution for hospital management is a web application that allows patients, doctors, and admins to access and manage patient records and prescriptions efficiently. By automating various tasks, reducing manual effort, and increasing efficiency, the proposed solution will improve patient care and outcomes while increasing patient trust in the healthcare system.

One of the key features of the proposed solution is the ability for patients to create accounts and access their prescriptions and make payments through the system, reducing the time and effort involved in manual payment processing. Doctors can upload prescriptions and view paid and unpaid amounts, and admins can manage the overall system, approve prescriptions, and handle payments. This will enable doctors and admins to streamline the process of managing patient records and prescriptions, ensuring that patients receive the right care at the right time.

The proposed solution also includes a sandbox payment integration for testing purposes and provides secure data storage for patient information, ensuring privacy and confidentiality. The system will be accessible from anywhere and anytime, increasing accessibility and convenience for patients and doctors.

To ensure the success of the proposed solution, it is important to follow the 10 tips for successful enterprise architecture (EA).

1. The first tip is to focus on business value, which means that the proposed system should provide business value by improving efficiency and patient care, reducing manual effort and errors, and increasing patient trust in the healthcare system.
2. The second tip is to involve stakeholders in the development process to ensure that the system meets their needs and expectations. Gathering requirements from stakeholders is crucial to ensuring that the system aligns with their needs and is user-friendly.
3. The third tip is to maintain alignment with the hospital's overall business strategy and goals. This means that the proposed system should align with the hospital's mission, vision, and goals to ensure that it contributes to the hospital's overall success.
4. The fourth tip is to develop a clear roadmap for the project, including timelines, milestones, and resource requirements. Having a clear roadmap will ensure that the project stays on track and is completed within the specified timeframe.
5. The fifth tip is to use a modular approach to system development. A modular approach involves breaking down the system into smaller components that can be easily maintained and updated. This approach ensures that the system remains scalable and can be easily adapted to changing requirements.
6. The sixth tip is to adopt industry standards for security, data privacy, and interoperability. Adhering to industry standards will ensure that the system meets regulatory requirements and is secure and interoperable.
7. The seventh tip is to address change management. Change management involves involving stakeholders, communicating changes, and providing training on how to use the new system. Addressing change management will ensure that stakeholders are aware of the changes and are comfortable using the new system.
8. The eighth tip is to incorporate governance and risk management into the system design and development. This will ensure that the system meets regulatory requirements and is secure.
9. The ninth tip is to foster collaboration and teamwork among stakeholders. Collaboration and teamwork will ensure that the system meets stakeholders' needs and expectations and that everyone is working towards the same goal.
10. The tenth and final tip is to ensure continuous improvement of the system through regular updates and maintenance, incorporating feedback from stakeholders and industry best practices. Continuous improvement will ensure that the system remains up-to-date and meets changing requirements.

Initial Use Cases/Context Diagrams:

Patient accesses the system, creates an account, uploads their profile information, and downloads their prescription.

A diagram of a server

Description automatically generated with low confidence

Doctor accesses the system, uploads a prescription, and views paid and unpaid amounts.

A screenshot of a computer

Description automatically generated with medium confidence

Admin accesses the system, manages prescription approvals and payments, and generates reports.

Payment Gateway Provider integrates with the system, providing technical support as needed.

A picture containing text, screenshot, diagram

Description automatically generated

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