ENHANCING STUDENT ENROLLMENT PROCESSES THROUGH ONLINE SYSTEMS

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Abstract

Education played a pivotal role in economic development, and as Information Technology advanced, the demand for school accountability increased. School websites became essential platforms for centralizing information, promoting general details such as the school's history, mission, vision, awards, accomplishments, organizational directory, and office hours. They also disseminated school policies, calendars of events, and extracurricular activities, providing students, teachers, and parents with a means to keep track of schedules and activities. This study aimed to address the challenges posed by manual enrollment systems, particularly in the context of the pandemic, by developing an Online Students Registration System. This system streamlined the enrollment process and enhanced the dissemination of important information, ultimately benefiting the institution and its stakeholders.

The proposed system's specific objectives included developing a comprehensive content management system (CMS) that allowed administrators to easily update and manage website content. This CMS supported functionalities for content creation, editing, organization, and publishing, ensuring efficient and user-friendly management. Additionally, the study aimed to incorporate interactive features such as forums, live chats, and feedback forms to enhance visitor engagement and interaction. These features were designed to foster a dynamic and engaging user experience, promoting community interaction and satisfaction.

Another critical objective was to develop a robust online membership and registration system that enabled users to sign up, log in, and manage their accounts seamlessly. This system included features such as user authentication, profile management, and account recovery processes, providing a secure and intuitive platform for user interaction. The study also involved thorough testing and evaluation of the system to ensure it met all specified requirements and standards before deployment. Using the ISO 25010 standard, the system's quality attributes—functionality, performance efficiency, usability, reliability, and security—were rigorously assessed to ensure robustness and effectiveness.

The study's delimitation outlined its boundaries and limitations. Geographically, the research was focused on a specific institution. Technically, it was constrained by available hardware and software infrastructure. The initial user base for implementation and testing included selected administrators, staff, and users, with testing conducted in a controlled environment. The study focused exclusively on web-based solutions, excluding mobile applications or other platform-specific developments at this stage. By defining these boundaries, the study aimed to maintain a focused and manageable framework for achieving its research objectives, providing a well-organized system for handling information on new and incoming students and assisting the

school with inquiries and information dissemination.

Education is one of the main keys to economic development. As development in Information Technology continues to advance, the demands for school accountability have also increased. School websites are the most common platform for centralizing information in promoting and discussing general information such as the school's history, mission and vision statement, awards and accomplishments, organizational directory, and other information about the office hours.

The registration website also promotes school policies to increase awareness of information on the calendar of events to provide students, teachers, and parents with a means to keep track of schedules, extracurricular activities like school clubs, sports special events, and other programs.

A website is one of the most important tools for a school to engage parents and market its strength. It can help build a solid and trusting reputation within its community. These are all benefits that improve education for our nation's students, and make it worth the effort.

These are the two primary purposes for any school website -- one is to provide timely, engaging, and current information;

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the other is to attract new students and recruit quality staff. School websites must both inform your existing customers and market to potential customers. It can be tricky but can be done right with a bit of planning.

The problem and difficulties using manual systems mean that the student must go to school and comply with the school for the reservation of their slot for enrolment. Due to the pandemic, schools are only able to organize face-to-face meetings for new students and enrollees. This study can provide a well-organized system for handling information on new and incoming students, assisting the school and students with inquiries and providing needed information about the students and the school.

The researchers aim to develop an Online Students Registration Systems with the intent to help the institution in terms of providing important information and provide comprehensive answers to visitor's inquiries.

Visitors may quickly browse the website and discover the information they are looking for. The students, non-students, faculty, and staff of GNHS will see the history, calendar of activities, organizational chart, the officials and personnel, school memo, gallery, alumni information, and contact details of the institution.

Specific Objectives

The proposed study has the following specific objectives:

1. Develop a comprehensive content management system (CMS) that allows administrators to easily update and manage website content.

2. Incorporate interactive features such as forums, live chats, and feedback forms to enhance visitor engagement and interaction on the website.

3. Develop an online membership and registration system that enables users

to sign up, log in, and manage their accounts seamlessly.

4. Conduct thorough testing and evaluation of the system to ensure it

Scope and Delimitation

The scope of this study is primarily focused on the development and implementation of an advanced online system that enhances website content management, user interaction, membership registration, and performance evaluation. The first objective involves creating a comprehensive content management system (CMS) that allows administrators to easily update and manage website content. This includes functionalities for content creation, editing, organization, and publishing, supporting multimedia content and providing version control features. The aim is to streamline the content management process, making it more efficient and user-friendly for administrators.

The study seeks to incorporate various interactive features to enhance visitor engagement on the website. This includes integrating forums for community discussions, live chat options for real-time support, and feedback forms to gather user input. These interactive elements are designed to create a dynamic and engaging user experience, fostering a sense of community and enhancing user satisfaction.

The third objective focuses on developing a robust online membership and registration system. This system will enable users to sign up, log in, and manage their accounts seamlessly, incorporating features such as user authentication, profile management, and account recovery processes. The goal is to provide a secure and intuitive platform for users to manage their interactions with the website.

In terms of evaluation, the study will conduct thorough testing to ensure the system

meets all specified requirements and standards before deployment.

5. Deploy the system and monitor its performance to ensure ongoing effectiveness and user satisfaction.

meets all specified requirements and standards before deployment. This includes functional testing, performance testing, and user acceptance testing, using the ISO 25010 standard to evaluate quality attributes such as functionality, performance efficiency, usability, reliability, and security. This comprehensive evaluation aims to ensure the system's robustness and effectiveness.

After successful testing, the system will be deployed and its performance will be continuously monitored to ensure ongoing effectiveness and user satisfaction. This includes tracking system usage, identifying potential issues, and making necessary adjustments to maintain optimal performance.

The study's delimitation defines its boundaries and limitations. Geographically, the research will focus on a specific institution or organization implementing the system. Technically, it will be constrained by available hardware and software infrastructure. The initial user base for implementation and testing will be limited to selected administrators, staff, and users. Testing will be conducted within a controlled environment, acknowledging that real-world variability and long-term performance may reveal additional insights beyond this study's scope. Additionally, the study will focus exclusively on web-based solutions, excluding mobile applications or other platform-specific developments at this stage. By delineating these boundaries, the study maintains a focused and manageable framework for achieving its research objectives.

Significance of the Study

The study will give significance to the following:

Educational Institutions. Educational institutions will benefit from streamlined enrollment processes and enhanced website functionality, improving administrative efficiency and communication with stakeholders.

Administrators and Staff. Administrators and staff members will benefit from reduced administrative burden and improved ability to manage website content, allowing them to focus on other important tasks.

Students and Parents. Students and parents will benefit from a more convenient and user-friendly enrollment process, as well as enhanced communication and access to important school information.

Prospective Students and Staff. Prospective students and staff members will benefit from improved access to comprehensive information about the school, facilitating informed decision-making regarding enrollment or employment.

Education Sector. The education sector as a whole will benefit from the advancement and modernization demonstrated by the implementation of effective online systems, setting a precedent for future improvements in educational technology and administration.

To the Community. This study will encourage community members to visit the school and enquire about information, as well as to view updates and announcements that will be posted by the school without having to physically go there.

Researchers. This study will improve the needed skills in creating the website, especially its design. It is also considered a privilege for the researchers, as they can apply what they have learned from this study for future references.

Gap Bridged by the Study

The study bridges a significant gap in the traditional student enrollment processes, which have long relied on manual, paper-based systems that are time-consuming and prone to errors. This reliance on face-to-face interactions for enrollment and administrative tasks posed significant challenges, particularly during the COVID-19 pandemic, when in-person activities were severely restricted. By developing and implementing an Online Student Enrollment System, the study addresses these inefficiencies by providing a digital platform that streamlines the entire enrollment process. This system not only facilitates easy and secure online registration for students but also enables administrators to manage and update website content efficiently.

Moreover, the incorporation of interactive features such as forums, live chats, and feedback forms enhances user engagement and communication. The study ensures that these functionalities are rigorously tested and meet high standards of reliability and performance, thereby creating a robust, user-friendly solution that meets the evolving needs of educational institutions. Ultimately, this research bridges the gap between outdated manual enrollment processes and modern, efficient online systems, significantly improving administrative operations and the overall

experience for students, parents, and school staff.

Conceptual Framework

The conceptual framework of this study revolves around the input-process-output model, outlining the stages involved in developing and implementing an Online Student Enrollment System. The input phase encompasses various elements crucial to the system's creation, including the development of a comprehensive content management system (CMS) for efficient website content management. Additionally, interactive features like forums and live chats are integrated to enhance visitor engagement, while an online membership and registration system is designed to facilitate seamless user interactions. Thorough testing and evaluation are conducted to ensure the system meets specified standards before deployment, followed by continuous monitoring to maintain effectiveness and user satisfaction.

The process phase utilizes the Rapid Application Development (RAD) methodology, comprising requirements planning, user design, construction, and cutover stages. Requirements planning involves gathering stakeholder inputs to determine system functionalities, while user design focuses on creating an intuitive and engaging user interface. The construction phase entails actual system development, coding, and testing, leading to the cutover stage where the system is deployed and transitioned to live operation.

The study's ultimate output is the realization of "Enhancing Student Enrollment Processes through Online Systems," signifying the successful implementation of an efficient and user-friendly enrollment platform that fosters improved communication and engagement within the school community while meeting stakeholders' needs effectively.
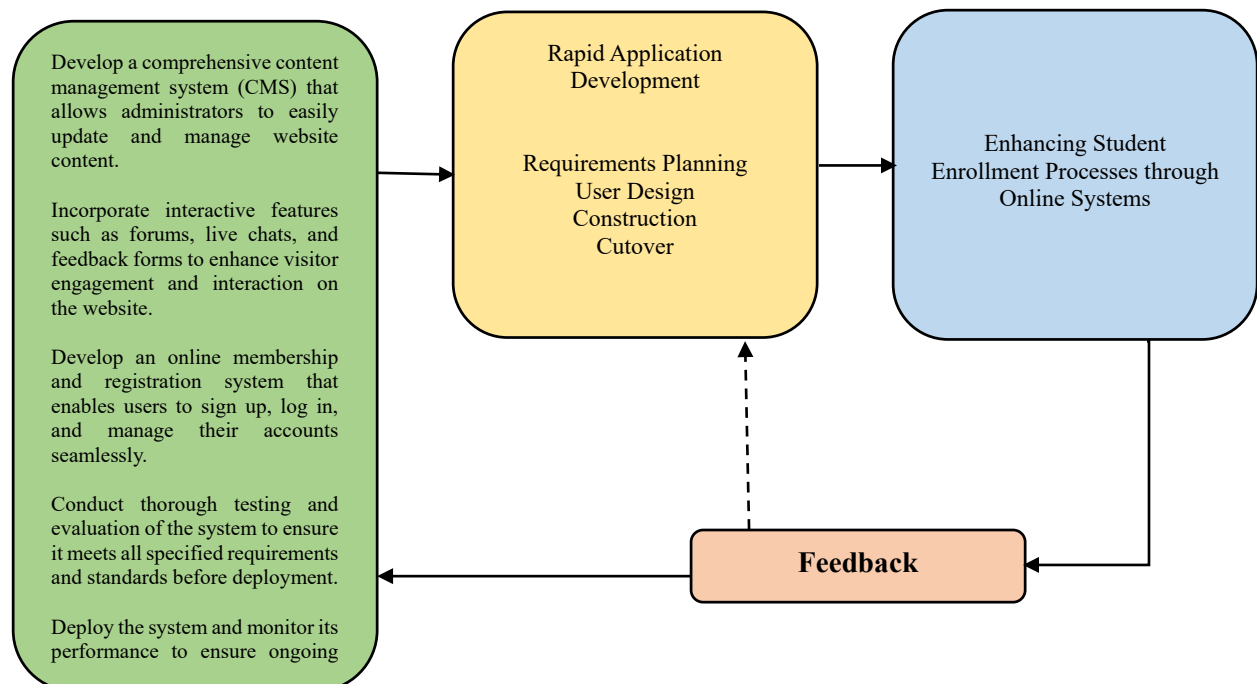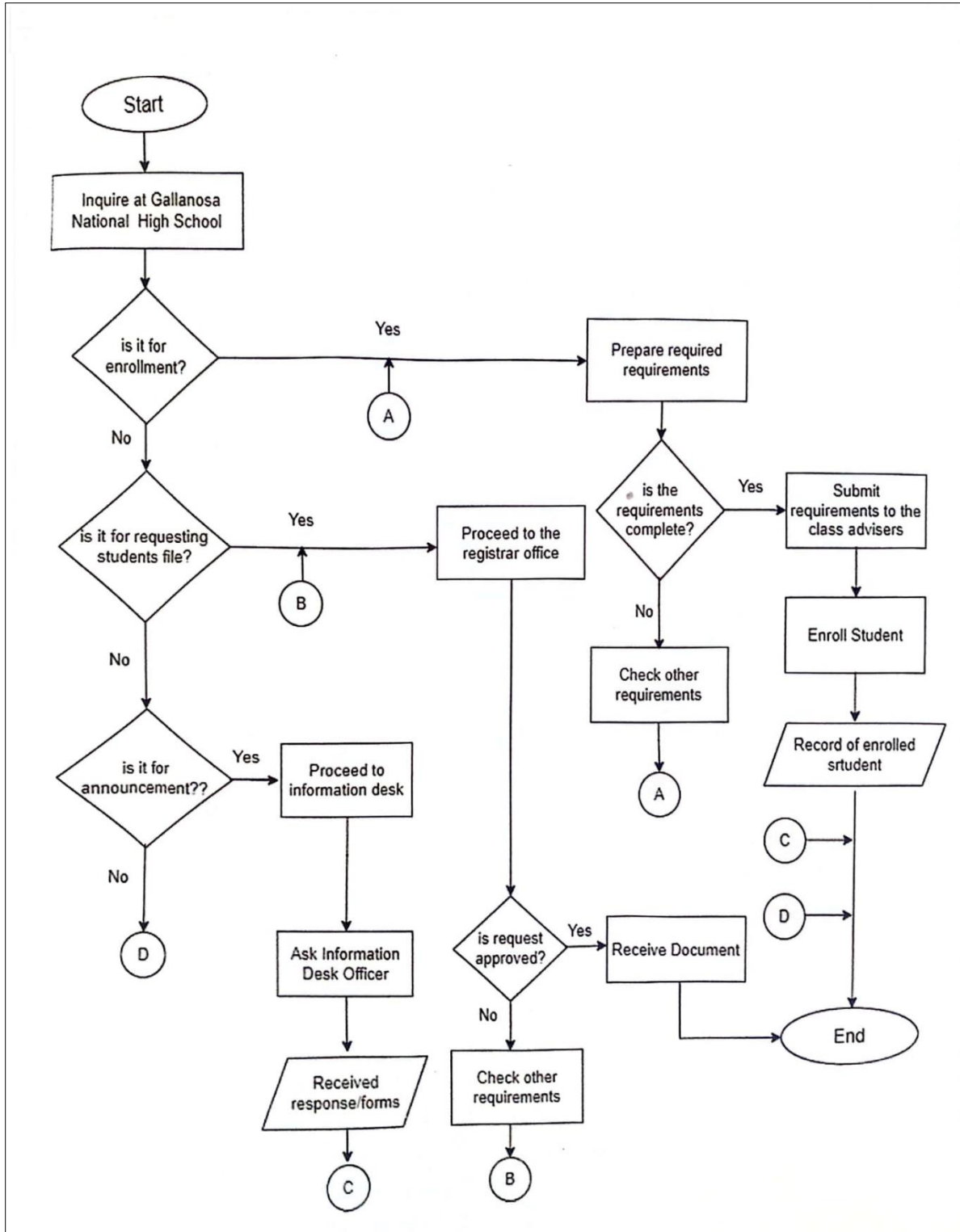

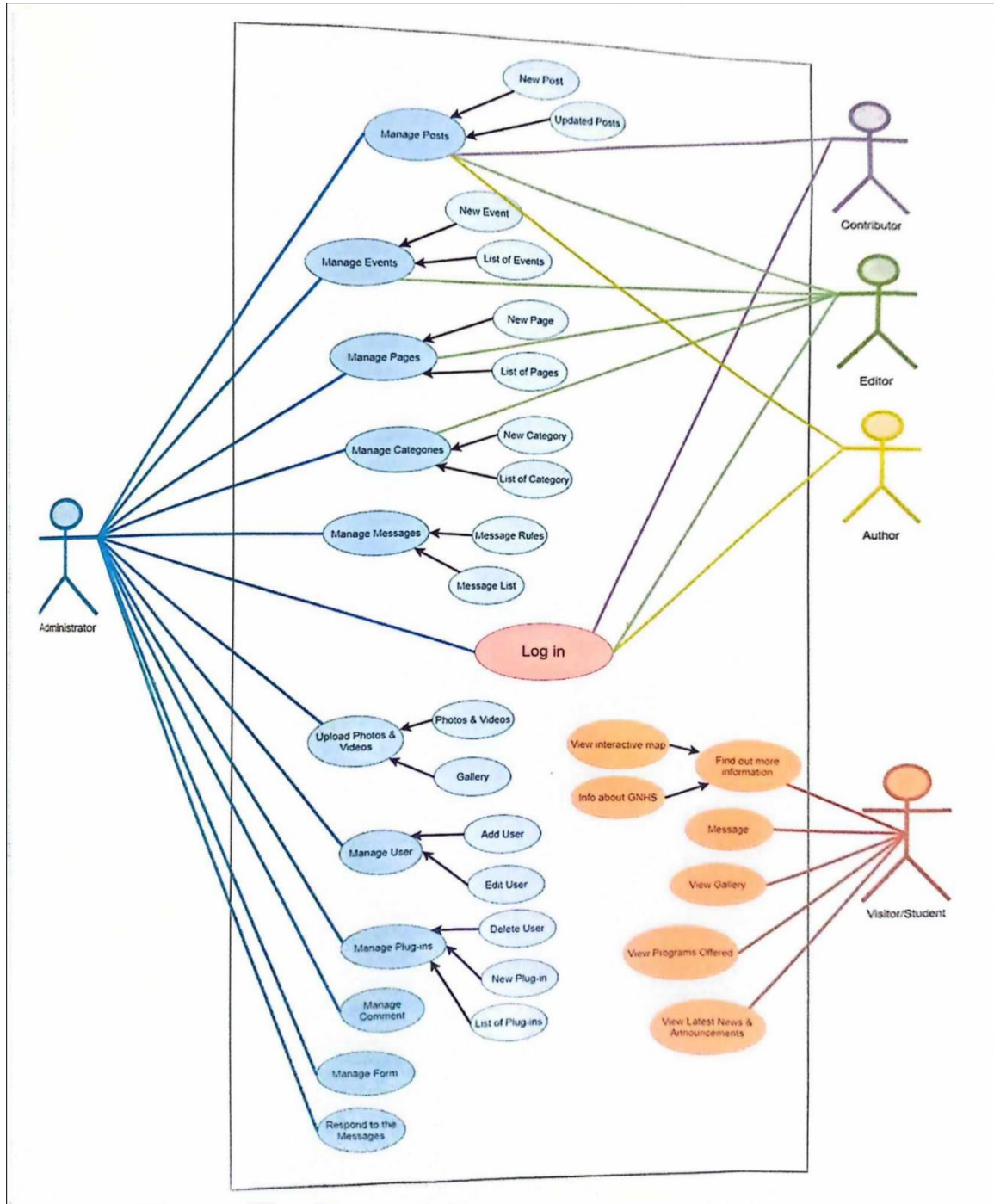**Figure 1 – Conceptual Paradigm**

Figure 2 – Manual Process

Figure 3 – Use Case of the Proposed System

Findings

After the system was designed, tested, and evaluated, the following findings were established:

1. The study successfully developed a comprehensive content management system (CMS) that enabled administrators to easily update and manage website content, resulting in more efficient and streamlined content handling.
2. Interactive features such as forums, live chats, and feedback forms were effectively incorporated into the website, significantly enhancing visitor engagement and interaction.
3. An online membership and registration system was developed, allowing users to sign up, log in, and manage their accounts seamlessly, thus improving the user experience.
4. Thorough testing and evaluation of the system were conducted, ensuring that it met all specified requirements and standards, demonstrating its reliability and functionality before deployment.
5. The system was deployed and its performance was continuously monitored, confirming ongoing effectiveness and high levels of user satisfaction.

Conclusions

The study's findings lead to the formulation of the following conclusions:

1. The development of the comprehensive CMS allowed administrators to manage website content more efficiently.
2. The incorporation of interactive features successfully enhanced visitor engagement and interaction on the website.
3. The creation of the online membership and registration system enabled users to sign up, log in, and manage their accounts seamlessly.
4. Thorough testing and evaluation ensured that the system met all specified requirements and standards before deployment.
5. Continuous monitoring of the system after deployment confirmed its ongoing effectiveness and user satisfaction.

Recommendations

The researcher would want to advise upcoming researchers to enhance the system by:

1. To maintain the efficiency of the CMS, it is recommended that regular training sessions be conducted for administrators to keep them updated on the latest features and best practices for content management.
2. Continually assess and enhance interactive features such as forums, live chats, and feedback forms to ensure they remain relevant and effectively engage visitors.

3. Periodically review and optimize the online membership and registration system to ensure it remains seamless and user-friendly, addressing any issues promptly to enhance user satisfaction.

4. Maintain rigorous testing and evaluation protocols for any system updates or new features to ensure they meet specified requirements and standards before deployment.

5. Establish a robust monitoring framework to continuously track the system's performance, promptly address any issues, and gather user feedback to inform future improvements and maintain high levels of user satisfaction.

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