FEASIBILITY STUDY

A feasibility study is a crucial initial step in evaluating the viability of a proposed project or business venture. It serves as a comprehensive analysis to determine whether the project is economically, operationally, and technically feasible. During this study, various factors such as market demand, financial resources, technical requirements, legal considerations, and potential risks are thoroughly examined to provide a clear understanding of whether the project can be realistically implemented and achieve its intended objectives.

TECHNICAL FEASIBILITY

Technical feasibility is an evaluation of whether a project can be successfully developed and implemented from a technical standpoint. It involves assessing the availability of necessary technology, resources, and expertise to achieve project goals and whether potential technical risks can be mitigated. This assessment is crucial in determining the viability and practicality of pursuing a particular project or initiative.

ECONOMIC FEASIBILITY

Economic feasibility is an assessment of whether a proposed project or business venture is financially viable and can generate a positive return on investment. It involves analyzing the costs, benefits, and potential revenue associated with the project, considering factors such as market demand, pricing, and long-term sustainability. This evaluation helps stakeholders determine if the project is economically sound and worth pursuing.

OPERATION FEASIBILITY

Operation feasibility refers to the assessment of whether a proposed project or initiative can be realistically implemented and sustained within the constraints of available resources, time, and technology. It involves evaluating factors such as financial viability, technical capability, human resources, and legal or regulatory considerations to determine if the project can be carried out effectively.

FEASIBILITY STUDY QUESTIONNAIRE

1. Is the chosen technology stack (React Native for the mobile app, HTML/CSS/JavaScript for the web app, and Firebase for both) appropriate for building the proposed application?

   Ans: Yes, the chosen technology stack of React Native for the mobile app, HTML/CSS/JavaScript for the web app, and Firebase for both is appropriate for building the proposed Patient Medication Tracker application, as it offers cross-platform compatibility, real-time features, and scalability, aligning with the project's requirements and objectives.

2. Can Firebase effectively support the integration needs of both the mobile and web applications, including features like real-time data synchronization and user authentication?

   Answer: Yes, Firebase is well-suited to support the integration needs of both the mobile and web applications, offering robust capabilities for real-time data synchronization and user authentication. Its real-time database and authentication services enable seamless data sharing and user access control across both platforms, simplifying development and ensuring a synchronized user experience.

3. Does the chosen technology stack provide robust security measures to protect sensitive patient and medication data?

   Answer: The chosen technology stack, including Firebase, offers robust security measures to protect sensitive patient and medication data when properly configured and implemented. Features like user authentication, database rules, and encryption options in Firebase help ensure data security, but it is crucial to follow best practices and regularly update security measures to maintain protection.

4. Can the system handle a growing user base and a potentially large medication database without compromising performance?

   Answer: The ability of the system to handle a growing user base and a large medication database without compromising performance will largely depend on its scalability

planning and efficient database design within Firebase. Firebase's real-time database and cloud functions can help manage increased loads, but proper architecture and optimization must be in place to ensure smooth performance as the user base and data volume expand.

5. What are the estimated development and maintenance costs for both the mobile and web applications, including expenses related to hosting and Firebase usage?

   Answer: Development and maintenance costs for both mobile and web apps, along with hosting and Firebase usage, vary based on complexity, team rates, and ongoing needs. Development costs can range from tens of thousands to hundreds of thousands of dollars, with ongoing expenses, including hosting and Firebase usage, influenced by usage and user growth.

6. Is there a plan in place to encourage patients, caregivers, doctors, and administrators to adopt and actively use the application?

Answer: Encouraging user adoption is crucial, and there should be a well-defined plan that includes user training, onboarding, and ongoing support to ensure that patients, caregivers, doctors, and administrators are motivated to actively use the application. The plan should also consider incentives and feedback mechanisms to engage and retain users effectively.

7. Is there a plan for training users, especially healthcare professionals, on how to effectively use the system?

Answer: Yes, there should be a comprehensive training plan in place, particularly for healthcare professionals, to ensure they can effectively use the system. This plan should include user-friendly guides, tutorials, and support resources to facilitate a smooth onboarding process and maximize the system's utility for medical practitioners.

8. Are there resources and processes in place to provide ongoing maintenance, updates, and customer support for the applications?

Answer: User feedback will be collected through in-app feedback forms and emails, then analyzed to identify trends and issues. Regular feedback review meetings will be held, and

a dedicated team will prioritize and implement necessary improvements in subsequent app updates.

9. Are there ongoing operational and maintenance costs, such as hosting, support, and updates?

Answer: Yes, there are ongoing operational and maintenance costs, including hosting, support, and updates, which are essential for ensuring the continued functionality, security, and effectiveness of the Patient Medication Tracker system.

10. Is there a demonstrated demand for the system among potential users (patients, caregivers, healthcare professionals)?

Answer: Yes, there is a demonstrated demand for the patient medication tracker system among potential users, including patients seeking improved medication management, caregivers looking to support their loved ones, and healthcare professionals aiming to enhance patient care and adherence.