Delivery Project Plan

Project Name: ***Patient and Health Insurance Management System***
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1.0 Purpose of Project

The Health Information and Insurance Tracking System project aims to meet the demand for a reliable and centralized platform to manage patient data and health insurance. A system that can conveniently access, manage, and safeguard patient information is necessary because the current healthcare system has grown to be complex.

The issue is the absence of a system that integrates all the data and services required for efficient healthcare. The chance is to design a system that will streamline the medical procedure and improve the overall experience for all parties.

2.0 Objectives & Deliverables

Objectives To accomplish this goal, the following will be done:	**Deliverables** The following will be delivered as a result of accomplishing this objective. *Where possible, tie deliverables to objectives.*
Data authentication and Access management	❑ A third party authentications will be used to decide the access of the user ❑ The dual authentication will be used to authenticate the user.
To give easy access to the patient of the doctor's information and schedule	❑ A roster page of the doctors with all the vital information that is required by the patient to make an informed decision will be built ❑ A scheduling system will be implemented which will give access to the patient to book an appointment with the interested doctors
To provide customize the views of available doctors	❑ A search and filter to select and view doctors based on the various filters
To provide best medical for the patient	❑ A platform where the doctors can access the medical history of the patient to provide the best health care possible
To provide a platform for insurance purchase	❑ A roster page of insurances that are available to the customer ❑ An information workup on the insurance companies and their reviews for the customer to make an informed decision
To create a communication channel between doctor and patient	❑ An application chat app for the doctor and patient's communication
To create a communication channel between insurance provider and the customer	❑ An application chat app for the customer and insurance provider's communication
A customized insurance plan for the customer	❑ A platform for the insurance provide where they can see the medial history of the customer to provide the best insurance possible

To provide insight in Covid -19 situation	❑ A dashboard that will relay the current insights of the ongoing situation of the Covid-19
To provide assistance with the Covid-19	❑ A basic work along and information guide on how to navigate different situation in Covid-19

2.5 Scope Control

Complete the following aspects of scope that further define this project.

In Scope	Out of Scope	Uncertain
Data security and access management	payment method for insurance	insurance recommendation system
chat application for internal communication between parties	payment method for doctor	Covid-19 statistics recommendation
Search and filter of doctors		
Covid-19 dashboard		
Patient data for the customize insurance policy		
Statistics of transactions		

Areas in which to define the scope of the project include:
a) Business functions and processes
b) Systems with which this project will interface
c) Interdependencies with other projects
d) Interdependencies with other groups (internal/external)
e). Technology expected to be deployed by this project (software, hardware, infrastructure, communication).

3.0 Approach

Describe the approach, or strategy, for your project. For example, will you be developing a system in-house, or purchasing a vendor package? Will the project be delivered in phases as part of a larger project? Will you be developing prototypes or pilots? If working with a new technology, will there be a critical decision point where you will decide to move forward or implement a contingency plan?

- ❑ As required, we would be developing the system in-house using Agile methodologies. This methodology emphasizes collaboration, flexible planning, and continuous delivery and improvement. The development team works closely with stakeholders to ensure that the system meets their needs and can continuously refine and improve the system throughout the development process.

The project can be done in stages, each stage building on the previous one. The first stage could typically develop the basic functionality of the system, such as patient registration, policy management, and claims processing. In the second stage, we can focus on adding additional features such as: A group chat feature between doctors and a chat feature between patients and doctors. This approach enables the project team to deliver value to stakeholders quickly and continuously improve the system over time.

Prototyping and piloting are also an important part of the development process, allowing the project team to test and refine the system with real users before fully implementing it. This makes the system usable and able to meet the needs of all involved.

When a project involves new technology, the development plan may need to include key decision points. This may include evaluating the success of the technology in meeting project requirements and deciding whether to proceed with implementation or consider contingency plans.

In summary, the patient-insurance-management system project approach involves developing the system in-house using an agile methodology, rolling out the system in phases, prototyping and piloting, and making critical decisions when adopting new technology.

3.5 Time Line

Milestone / Deliverable	Completion Date
Login and Registration (User Specific)	3/03/23
Search Functionality	3/03/23
Homepage	3/03/23
Custom Dashboards - Patient, Doctor, Insurance provider	3/24/23
Chat Functionality	4/07/23
Recommendation	4/07/23
Final Integration, Testing, Deployment	4/14/23
Final Test Plan and Documentation	4/20/23
Project Delivery	4/21/23
Final Presentation and Demo	4/28/23

4.0 Stakeholder Roles & Responsibilities

Project Role	Who	Project Responsibilities	% Time
Sponsor	Yashvanth Kumar	❑ Provide requirements ❑ Attend weekly meeting with team	
Project Manager	Yashvanth Kumar	❑ Define tasks ❑ Track deliverables	
Project Team	Ketul Patel	❑ Backend development	16.67%
	Kartikay Kumar	❑ Backend development	16.67%

	Sai Sumanth Muvva	❑ Database creation & management	16.67%
	Sriram Reddy Pidaparthi	❑ Frontend development	16.67%
	Abhijith Dameruppala	❑ Frontend development	16.67%
	Param Patil	❑ Frontend development	16.67%
Others		❑	
		❑	
		❑	
Tech Integration	Project team	❑	

4.5 Communication Plan

How will key stakeholders be kept involved/informed about the project status?

What	Who (is involved/receives)	Frequency
Team Meetings	Project team	Weekly
Meetings with Sponsor	Project team, Sponsor	Weekly
Written Status Reports	Project team, Sponsor	Weekly
Other Forms of Communication	Project team	Daily

5.0 Project Budget

	Initial Cost	Recurring Cost
People		
▪ Staffing	$6,000	$48,000 / month
▪ Consultants	$10,000	$0
▪ Training/Documentation	$6,000	$ 1000 / 2 weeks
System		
▪ Hardware	$20,000	$0
▪ Software	$10,000	$400 / month

6.0 Risk Plan

Define key risks such as assumptions, dependencies, and constraints and a planned response for each.

Risk Factor	Impact On Project	Risk* Rating	Risk Plan or Mitigation Strategy	Person Responsible	In Place By
Data Security & Privacy	H	H	❑ Implementing strong authentication measures. ❑ Encrypting Sensitive data, both in storage and transit.	Security and Privacy team	Later in the project
Compliance with Regulations	H	H	❑ Stay on-par with the relevant regulations and ensure that our system is compliant with these regulations. ❑ Document all processes and procedures related to data privacy and security to demonstrate compliance.	Legal and regulatory advisor	As early as possible
User adoption	M	M	❑ Engage with the stake holders to understand needs and requirements.	UX Lead	Later in the project
Budget and Timeline	M	M	❑ Establish a realistic budget and timeline. ❑ Monitor the progress and adjust the plan to make sure the project stays on track.	Project Manager	As early as possible
Technical challenges	M	M	❑ Plan for scalability and performance from the outset. ❑ Conduct regular performance testing and tuning to identify and resolve any issues.	Technical Lead/Team	As early as possible

Rating = Probability that the risk will happen (H,M,L) x the Severity of the Impact if it does (H,M,L).

HxH = H **HxM = H** **HxL = M** **MxL = M**

7.0 Assumptions

This plan is based on the following assumptions (about resources, policies, schedules, technologies, etc.):

- The project's timeline would be followed according to the plan
- Regularly keeping an eye on these suppositions and determine if any modifications are necessary for the risk strategy
- The unexpected disruptions or delays will not affect the project
- Ensuring the privacy of patient and insurance information is crucial. To ensure this, it's important to implement effective security measures
- Equipping with Adequate Resources is crucial to assume that there are adequate resources like budget, personnel, and technology for the successful design, development, implementation, and maintenance of the system

8.0 Success Criteria

How we know we are successful. How to measure success:

- User satisfaction: Evaluate the level of satisfaction among healthcare providers and insurance personnel through surveys or feedback. High levels of satisfaction indicate the system is meeting user needs and is easy to use and effective.
- Data accuracy: Regularly audit the patient and insurance information in the system to ensure it is up-to-date and error-free.
- Integration with other systems: Evaluate the effectiveness of integration with other healthcare systems, such as electronic medical record systems, to ensure it is working as intended
- Time savings: Track the time required to perform tasks, such as accessing patient information, and compare it to the time required before the system was implemented. Significant time savings indicate the system is working effectively
- Error reduction: Monitor the number of errors in tasks such as billing and insurance claims and compare it to the number of errors before the system was implemented. Significant error reduction indicates that the system is effective in reducing errors

References

- Requirements Document
- Line of code Estimation (Lines of Code (LOC) in Software Engineering - GeeksforGeeks)
- Lecture notes