Project: Personal Health Monitoring System (PHMS)

CSE 5325 – SUM 2021

Project Management

Module: Project Scope & Feasibility

Deliverable: Scope & Feasibility Document

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1. Introduction and Executive Summary

The high-level objectives of the personal health monitoring system are that it has to be secure. This will be achieved by users registering their accounts and logging in before each use and ensures that people cannot access other users' data. This provides a very trustworthy system that the users can rely on for monitoring their health status. The personal health monitoring system should also maintain and monitor all the vital signs of health such as blood pressure, cholesterol levels, glucose levels, and others. It is a system that is meant to help the users maintain a healthy lifestyle that is health-oriented. Finally, the client's profile should be easily accessible from the android and website apps and also budget friendly. This plan has provided the project feasibility, risks, metrics, scope, process model, assumptions, constraints, tasks, schedule, cost, conclusion, and recommendations.

2. Objectives

2.1 BUSINESS OBJECTIVES

The following is the list of business objectives:

Objective 1: The first objective surrounds the login. The project has to be secure. This will be achieved by users registering their accounts and logging in before each use. Having secure personal accounts ensures that people cannot access others users' data. It is also crucial to ensure that the parties on the support side cannot change or alter other patients' data. This provides a very trustworthy system and better customer service that the users can rely on for monitoring their health status. Having accounts also ensures that whenever the clients change their devices, they can view their history and identify where there have been improvements and failures and how they should deal with them.

Objective 2: The personal health monitoring system should maintain and monitor all the vital signs of health such as blood pressure, cholesterol levels, glucose levels, and others. It is a system that is meant to help the users maintain a healthy lifestyle that is health-oriented. This means that all the vital measurements that are necessary for monitoring health have to be included in the system and be easy to access.

Objective 3: The client's profile should be easily accessible from the android and website apps condition and notify them whenever there are changes to their health condition that they need to look at. It should be easily accessible from the android and website apps. The users need to have this system at the palm of their hands. Additionally, they should be able to connect the app to wearable devices like watches and wristbands. With the current technology boom in the market, the system must be able to compete with other systems that allow for such connectivity.

Objective 4: The system should be able to store the user's data consistently so that they can access it for a long time and be able to provide a chart that displays the health progress of the patient over time.

2.2 SYSTEM OBJECTIVES

The following is the list of system objectives:

Objective 1: The web and android based applications should be provided. This will ensure that users can use their preferred method when connecting.

Objective 2: A Google Search should be integrated into the system for search purposes. This will ensure that whenever the users come across difficult or foreign health terms and issues, they can do their research and confirm their health statuses.

3 Project Feasibility, Risks and Metrics

Project feasibility and metrics are summarized below:

3.1 Project Feasibility Concerns

Even though the system is market-ready, many competitors are already offering similar systems that monitor the vital signs of health such as blood pressure, cholesterol levels, glucose levels, and others (Bedosky, 2020). This means that it will be crucial to come up with an exceptional system that stands out from the rest. Currently, most of the available systems have been deemed effective for achieving their goals and objectives and these are very similar to what the proposed system offers. This makes it important to develop an exceptional product.

Technical issues are expected for such a system, especially during the first few months of usage. This means that it will be very crucial for the developers to be ready to make changes and improvements as demanded by the users. This will lead to the eventual perfection of the offering.

The calculated cost of creating the system is very high compared to the client's budget. This means that there have to be some compromises to the features and other crucial characteristics of the project to ensure that the client's budget is not surpassed. Otherwise, the client will have to agree to spend more than they initially wanted. They have also indicated a short time to market which may not be enough to achieve all the technical objectives.

3.2 Project Risks

The major and only important risk surrounding the project is that the system's uptake may be slow, meaning that there will be very few users and the system will not be profitable. This will be mitigated through proper marketing that will reach all the target groups and ensure that the system gets enough users to be successful.

3.3 PROJECT METRICS

500,000 users by the end of the first year will indicate success for the project. This is because, within the first year, users can identify the bugs existing in the first release of the system and then for the necessary corrections to be made. Therefore, these bugs must be cleared. After the system is perfected, the success metrics will be at least one million users per year.

4 Project Scope and Process Model

The project scope includes the following:

1. Diet
2. Vital signs
3. Medication
4. Blood pressure monitoring
5. Glucose levels monitoring
6. Cholesterol levels monitoring.

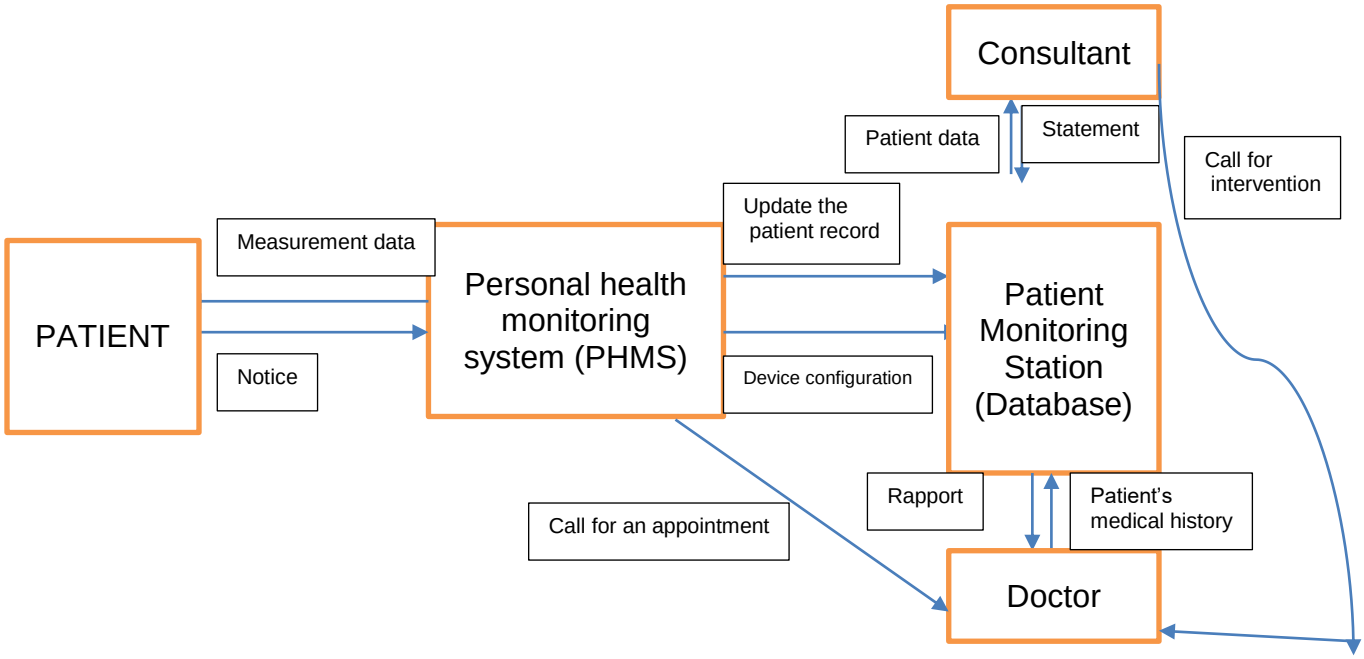
The following is a list of items out of scope:

1. Post project maintenance
2. Post project routine checks
3. Post project bug-checking
4. Post project changes to the system.

4.1 PROJECT PROCESS MODEL

The waterfall model will be used. This is because it will provide a breakdown of the project's activities into linear sequential phases. For each phase, the dependency will be on the previous one and the specialization of tasks. This will ensure that whenever a task is undertaken, the previous ones that it is dependent on are already completed.

4.2 PROJECT CONTEXT



5. Assumptions and Constraints

5.1 ASSUMPTIONS

The following is a list of assumptions:

- The system will have ready users ready to sample it and indicate the bugs and errors.
- The system will be easy to use and not require a lot of direction or tutoring.

5.2 CONSTRAINTS

The following is a list of constraints:

- The client budget is a bit constraining for the features that they want to be integrated into the system
- Some of the features require a very high-level understanding of technology and app design.
- It will be difficult and almost impossible to balance the benefits and risks of the project.
- The client has provided a short timeline which may be difficult to meet.

6. Project Tasks, Schedule and Cost

TASK	Estimated Schedule
Designing	15th June to 22nd June 2021
First trial version	23rd June to 6th July 2021
Correcting the trial version	7th July to 22nd July 2021
Final version	23rd July to 29th July 2021
Marketing	30th July to 13th August 2021
Release	14th August 2021

HARDWARE/SOFTWARE /ACTIVITY COST	COST
Servers	$900
Databases	$600
Linkages	$500
Salaries	$6400
Health insurance	$200
Building	$400
Utility	$150
Housing	$200
Profit margin	50%

7. Conclusion and Recommendations

The major and only important risk surrounding the personal health monitoring system project is that the uptake of the system may be slow, meaning that there will be very few users and the system will not be profitable. This is a very beneficial system since it helps the users capture and monitor very important data surrounding their health. It is recommended that a high-level marketing approach is adopted so that the project's risk can be mitigated.

REFERENCES

[1] Bedosky, A. C., Rapaport, L., Haupt, A., Patino, E., Migala, J., & Ruder, K. (2020). 16 Best Diabetes Apps to Try in 2021: Everyday Health. Retrieved from https://www.everydayhealth.com/hs/type-2-diabetes-care/diabetes-apps/