PROJECT PROPOSAL

Diagnostic's Medical Test Information System

VERSION 1.5

Diagnostic's Medical Test Information System

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Abstraction:

This article is about medical tests for diagnostics. In medicine, a **diagnostic's medical test** is any kind of medical test performed to aid in the diagnosis or detection of disease. A diagnostic test is a procedure performed to confirm, or determine the presence of disease in an individual suspected of having the disease, usually following the report of symptoms, or based on the results of other medical tests.

So, we've tested this for **Diagnostic Center** and we hope ***"Software of Diagnostic Medical Information System"*** will helpful for collect medical test at any Diagnostic Center. That's why; we think it will make some revolution to our real life.

Interpretation of diagnostic tests should always take sources of inaccuracy and imprecision into account. Sources of inaccuracy and imprecision of diagnostic tests may broadly be categorized as:

- Physical sources within the diagnostic test taking itself
- Interpretational sources of the resultant data in relation to the target condition. Such sources include conversion of continuous values to binary ones (creating artificially binary values), such as designating a blood test for prostate specific antigen as "positive" when having reached a certain cutoff value, which is generally less accurate than considering the value itself.

Proper evaluation of a diagnostic test involves the use of statistical analysis. In this context the test is referred to as a classification rule for a binary classifier. The test is then compared to a gold standard test to assess the quality.

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1. Introduction

The purpose of this document is to collect, analyze and define the high-level needs and features of the "Diagnostic's Medical Test Information System". It focuses on the capabilities and facilities needed by the stakeholder who are work in Diagnostic Center and target users the Doctors, Receptionist, Director, Chairman etc. of the Diagnostic Center. The details of what all are the needs Diagnostic's Information *System* fulfils these needs are detailed in the use-case and supplementary specifications.

2. Background of Proposed Project

The purpose of this document is to describe the collect and include of the information of the Medical Test of the patient. The Document captures high-level requirements and design constraints, which gives the reader an understanding of the Information of Medical Test Handling System of Patients. Requirements Specification defines and describes the operations, interfaces, performance, and quality assurance requirements of the Medical Test Information System. The document also describes the nonfunctional requirements such as the user interfaces. It also describes the design constraints that are to be considered when the system is to be designed.

The *Diagnostic Medical Test Information System* that is to be developed provides the Patient, Doctors, and Worker of the Diagnostic Center with detail information about Medical Test. The System is supposed to have the following features.

- The system provides medical test result or information service to the Patient, Doctor and some worker who are related with work of medical test.
- The system provides the stuffs with the option to check their medical test whenever needed all through the day.

The features that are described in this document are used in the future phases of the software development cycle. The features described here meet the needs of all the users. The success criteria for the system are based in the level up to which the features described in this document are implemented in the system

The stakeholders for this system are:

- Chairman.
- Directors.
- Manager Admin.
- Doctors.
- Medical Technologist.
- Chemist
- Patient.

- Assistant of Doctors or Technologist.
- Receptionist.
- Computer Operator.

3. Objectives of the Project:

Diagnostic Center a kind of organization where find medical test of the patient. Diagnostic organization only finds and identifies the medical report or result of patient. The software system is like a spiral system and their service.

- Medical Test Counting and Management
  In this Software project we include counting of medical test in every process step, start to end. For this reason user and owner can easily manage themedical test information.
- Patient's Medical test Input & Output
  In this system different patient's different medical tests input by patient ID and get output by searching patient's ID.
- User to User Data Entry
  Which employee or user edit, update, delete or entry data or use this software, that all include this *software*.
- **Development & Environment**

This subsection describes the necessary methods tools and technology used in this project. The following table shows the environment used in this project in different milestones and its purpose.

Table 1: Development & Environment

Item	Applied for
Methods	
Use Case	Requirements capturing
Sequence Diagram	Requirements capturing & Software Architecture
Tools	
Rational Rose	Design
Languages	
UML	Design
Java	Web interface
C++	…
SQL	Database

The medical profession requires the ability to provide diagnostic medical imaging utilizing critical thinking skills to make judgments in the process. Medical professionals who must possess high level skills in diagnostic techniques under the guidance of a licensed physician. A medical software is responsible for providing excellent patient care and gathering adequate data necessary for diagnoses to be determined.

4. Expected Outcomes

Most diagnostic tests are conducted on the living; however, some of these tests can also be carried out on a dead person as part of an autopsy. Some of the diagnostic tests are parts of a simple physical examination which require only simple tools in the hands of a skilled practitioner, and can be performed in an office environment. Some other tests require elaborate equipment used by medical technologists or the use of a sterile operating theatre environment. Some tests require samples of tissue or body fluids to be sent off to a pathology lab for further analysis. Some simple chemical tests, such as urine pH, can be measured directly in the doctor's office.

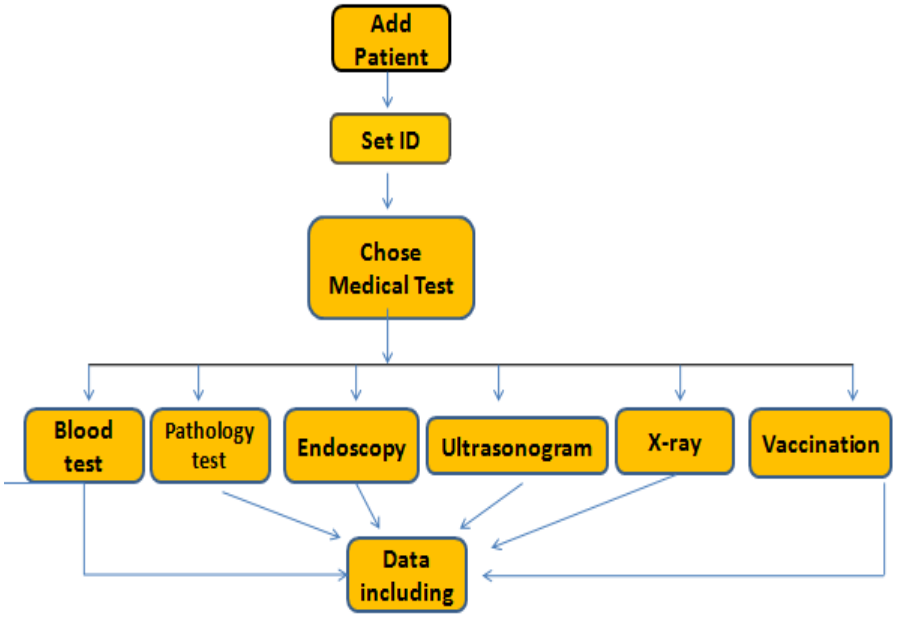

Figure 1: Expected outcome process

The medical profession requires the ability to provide diagnostic medical imaging utilizing critical thinking skills to make judgments in the process. Medical professionals who must possess high level skills in diagnostic techniques under the guidance of a licensed physician. A medical software is responsible for providing excellent patient care and gathering adequate data necessary for diagnoses to be determined.

Graduates of the project will be able to perform, at minimum, the following objectives:

Demonstrate critical thinking skills during the performance of medical procedures to provide optimum diagnostic services in a information system.

1. Add Patient
2. Add Medical Test
3. Blood Test
4. Pathology Test
5. Urine Test
6. Stool Test
7. Endoscopy
8. Ultrasonogram
9. Vaccination
10. X-ray Report
11. View Patient
12. View Medical Test
13. Search Patient
14. Search Medical Test
15. Edit Patient
16. Edit Medical Test
17. Delete Option

5. Proposed Activities

This document listed all the capabilities of count the Information and Result of Medical Test in the Diagnostic Center.

- **Use Case Diagram:**

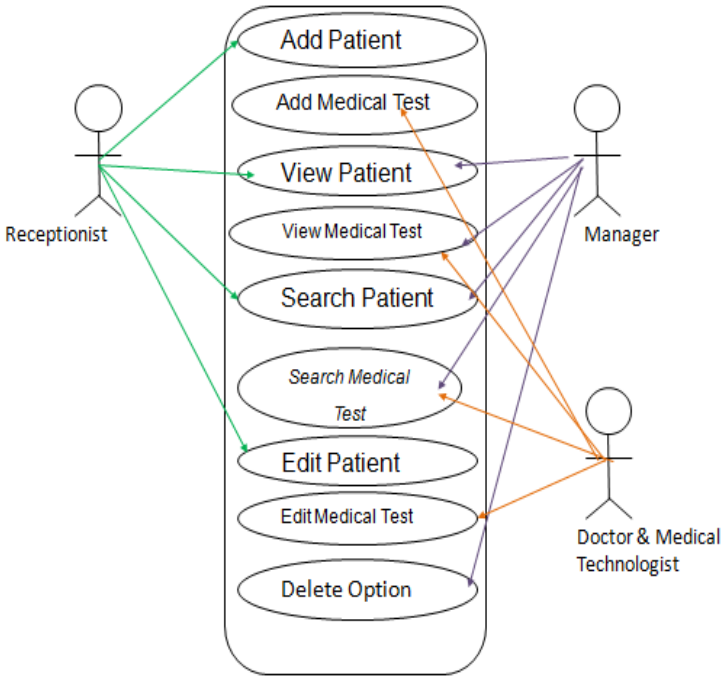

Figure 2: Use Case Diagram

- **Expected Main Menu:**
  In this figure we just show this option of main menu will include in our project.

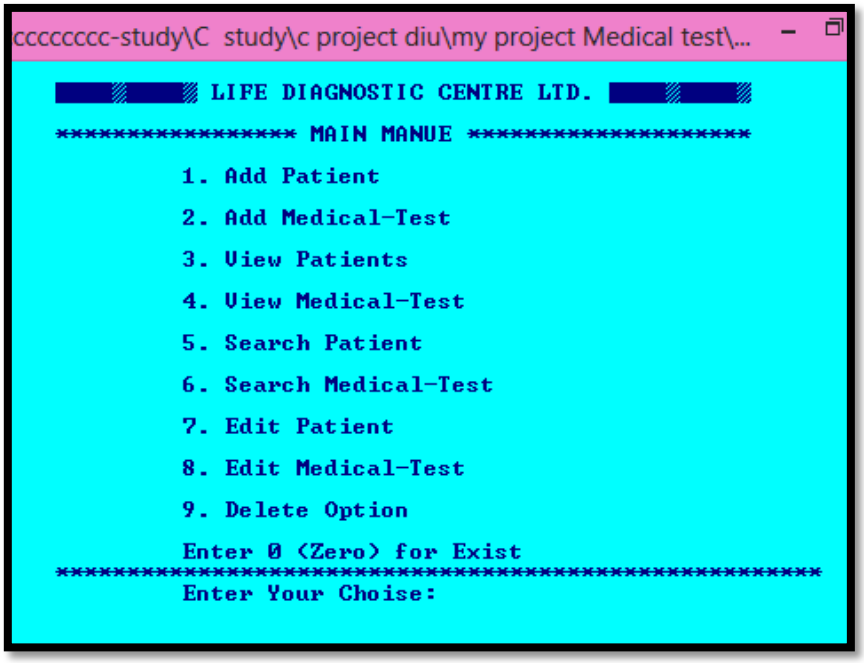

Figure 3: Expected Main Menu

6. Estimative Budget

This subsection proposes an approximate budget for this software project. Budget is proposed for each milestone by considering different aspects. Final amount is the total budget for this project. The budget is shown in the table below:

Table 2: Budget

Category	Budget for Period in kUS$					
	M0-M1	M1-M2	M2-M3	M3-M4	M4-M5	M5-M6
Human Resources (internal)	10000	10000	10000	20000	30000	8000
Human Resources (external)	8000	8000	8000	10000	10000	5000
Purchases (COTS)						
Equipment					5000	
Premises						
Tools					5000	
Travel costs						
Training						
Review activities						
Other						
Total	18000	18000	18000	30000	40000	13000

7. Project Timelines

This section described the project timeline. It's working approach, its working selection process for development etc. An approximate budget is also proposed in this chapter section.

- **Work Breakdown Structure**

  Work breakdown is the decomposition is the whole project in several parts. In this software project is divided into several millstones.

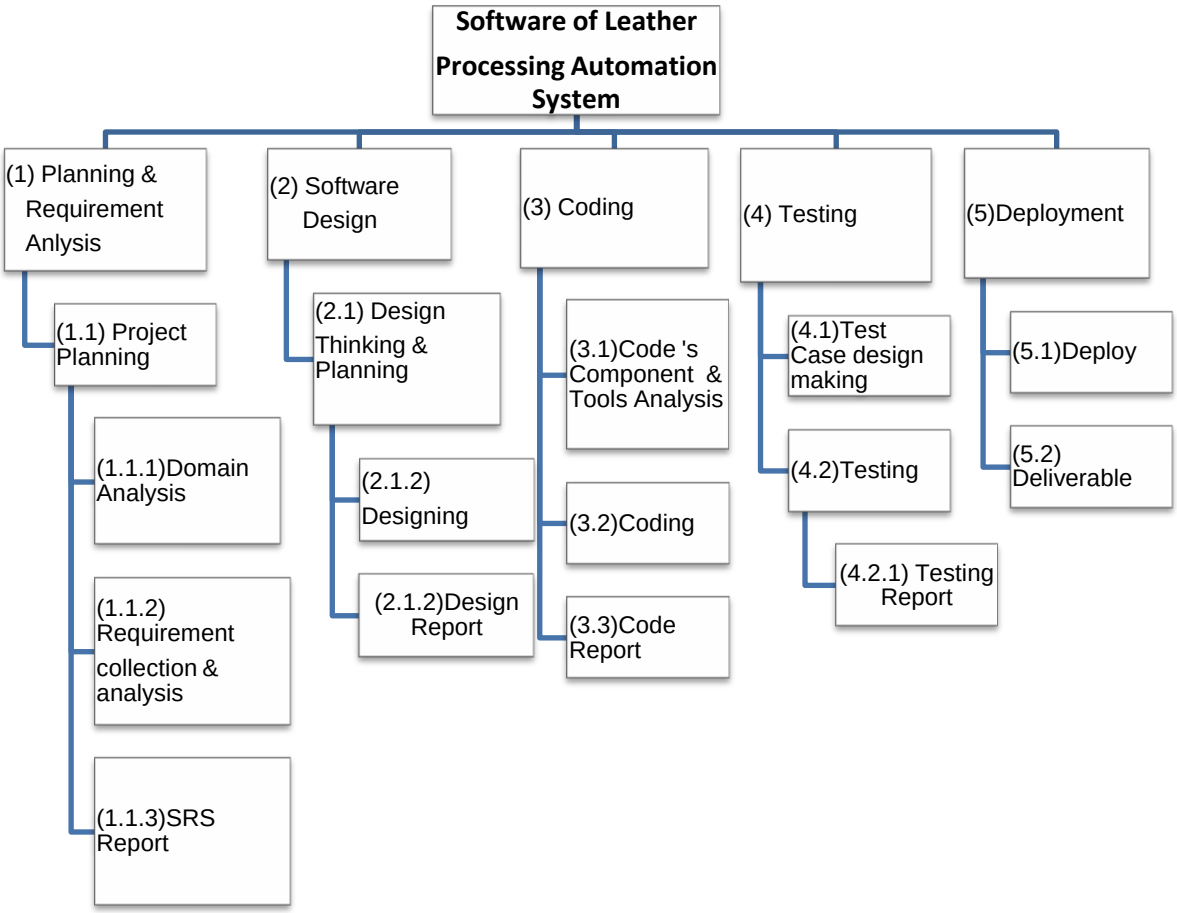

Figure 4: Work Break-down Structure

- **Schedule & Milestone**

  Achieving the above the full work the project is divided into several milestones. A general view of this project milestone is given in the table below:

Table 5: Schedule and Milestone

Milestones	Description	Milestone Criteria	Planned Date
M0	Start Project	Budget Release	5 -6-2016
	Software Project goals and scope defined	PRS or SRS reviewed Stakeholders identified Impl. Proposal reviewed	7-3 -1016
M1	Start Planning		7 -6 -2016
	Life Cycle of Tannery industry defined	Scope and concept described	10 -6 -2016
M2	Start Execution		10-7 -2016
	Software Requirements Defined	Requirements agreed, project plan reviewed, resources committed	15-7 -2016

Milestones	Description	Milestone Criteria	Planned Date
M3	Confirm Execution		15-8-2016
	Software Architecture & design	Architecture reviewed and stable	25-8-2016
M4	Start Introduction		25-8-2016
	Software Coding & Development	Coding of new functionality finished, Draft documentation	26-8-2016
M5	Release Product		26-8-2016
	Software Testing & Implementation & others	Product system tested, documentation reviewed	30-8-2016
M6	Close Project		30-8-2016

8. Conclusion

We believe such system will help to the Diagnostic Center organization for take care the Information of medical test of patient. So A Diagnostic's Medical Test Information System is a kind of medical software procedure performed to detect, diagnose, or monitor diseases, disease processes, susceptibility, and determine a course of treatment.

9. References

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[3] Y. Zhong, B. Shirinzadeha, G. Alicib and J. Smith, "An autowave based methodology for deformable object simulation," Computer-Aided Design, vol. 38, no 7, pp. 740-754, July 2006.