IS333 A2 Group 4 - assignemnt 20%

Project management (The University of the South Pacific)

The University of the South Pacific

IS333 – Project Management

Assignment 2

Semester 1, 2022

Patient Care System for Wellington Regional Medical Centre

Group 4 Members

Name	ID
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Submitted to: Mr. Ravneil Nand

Date Submitted: 16/06/2022

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Introduction

Healthcare integration projects often require major organizational transformation with the purpose of improving patient services and outcomes through healthcare service integration (Gordon & Pollack, 2018). The Wellington Regional Medical Centre has proposed to integrate project management that would bring an uplift in hospital health care primarily in patient care. An AI integrated hospital can help medical professionals closely monitor overall patient's health providing improved patient outcomes. The current research's aims to improve the current health care system by employing the latest technology and software to track and save patients' medical information and to notify medical officers on their health development on a daily basis. Furthermore, the project management will help the medical centre in improving patient satisfaction while meeting insurance standards of care.

This proposal will depict on how Project Management can be used in Wellington Regional Medical Centre to improve patient care through by lowering prescription errors, lowering adverse drug reactions, and increasing adherence to practice standards[CITATION Yas17 \l 3081]. Thus, involving a variety of technologies ranging from basic charting to complex decision support and connection with medical technology. The goal is to improve the patient care system through PM that will provide the medical centre with numerous opportunities to transform and improve healthcare giving, improve clinical outcomes, lower human errors, increasing practice efficiencies, and collection of accurate data over time.

Project Overview Statement

Project Name: Patient Care System for Wellington Regional Medical Center	Project No: 2	Project Manager: Selvindra Naidu

Problem

Medical errors do occur, despite the fact that a more appropriate treatment path exists for the patient, a different treatment is used inadvertently or contrary to what a reasonable practitioner would have chosen under similar circumstances. There are several common causes of this type of medical malpractice. The present platform will be integrated with PM in order to help establish a more improved health care for above medical Centre.

Goal

The Main goal is to enhance Patient Care through the use of project management techniques. To address current operational issues by implementing policies that will improve patient care while also cultivating positive relationships with our investors.
This project is scheduled to be completed in 94 days.

Objectives

The company's goals for this project, Patient Health Care System, will be directly related to our strategic growth strategy of improving an online system for patients as well for staffs and medical practitioners.

- **Improving the quality of care by refining the methods used to deliver it.**
- **Improving communication among patients' healthcare providers, insurance providers on effective**
- **Enhancing organizational planning through leadership training**
- **Boosting employee productivity through equipping with latest skills and trainings**
- **Improving established processes to reduce the risk of lawsuits, in part because better-quality processes improve care superiority.**
- **To implement project management office (PMO) in the organization.**
- **Enhancing relationships with stakeholders such as insurance companies, government agencies, patients, and others.**
- **To complete the planned information system implementation before the deadline.**
- **Ensure that all project management rules on sustainability and the environment are followed.**

Success Criteria

- **Obtain the registration of all patients in the region for the new system.**
- **The patients' medical records will be hosted online for doctors to update during their visits.**
- **Obtain funding for the project from sponsors (Need a big project sponsor, ie: Pharmaceutical companies).**
- **Having a larger platform for a health care system that integrates technology.**

Risks Assumptions Obstacles

- **Patients may be too preoccupied to register, and they may forget their login information while using the system.**
- **Finding sponsors for such a large project is difficult. Maybe not for a corporation.**
- **Concerns about intellectual property**

Prepared By: Group 4	**Approved By:** Selvindra Naidu	**Date:** 09/ 06/ 2022

POS Attachment

Preliminary Analysis - Feasibility Studies Attachment

The goal of this feasibility analysis is to determine whether or not the project team can meet its commitments in the project overview statement satisfactorily and on time.

There are three types of feasibility study will look at, to determine whether the project is viable enough to continue and finish on time. However, It will also look into whether there are sufficient technological resources to carry out this project effectively.

The project will conduct these three types of feasibility studies which are as follows:

1. Technical Feasibility

Technical feasibility is the examination of a project's or companies technological specifications to determine what technical support is required. The Patient health care system has efficient and sufficient technological support to carry out the project's technical aspects.

The technical requirements for this project are as follows:

We have a well-trained and highly professionalized IT team that includes an IT administrator, a System administrator, a Database Administrator, a Network and Support team, and System engineers, as well as the necessary hardware such as server materials, cables, and switches/routers. The project has all of the technical resources required to complete the online health care system.

2. Schedule Feasibility

When it comes to schedule feasibility, we have a set of questions for this project.
We investigate: in light of the scheduling research
When is the project expected to be finished?
When will the project be economically viable?
Are the deadlines realistic?

According to the project, we have a reasonable due date of insert days.
With the necessary hardware, software, and testing, the project or system is guaranteed to work.
Furthermore, the project will be completed on time because it has specific due dates for activities and milesto nes.

3. Environmental Feasibility

There will be no environmental impact during the project's development. There will be no negative environmental consequences during the project's development. Remember that all practices from project conception to completion will ensure that all project management rules on sustainability and the environment are followed.

Project Charter

Project Charter- Patient Care System for Wellington Regional Medical Centre
Executive Summary **Despite the fact that a more appropriate treatment path for the patient exists, a different treatment is adopted mistakenly or contrary to what a reasonable practitioner would have chosen under similar circumstances. This type of medical malpractice is caused by a number of common factors. The current platform will be merged with PM to aid in the establishment of better health care for the aforesaid medical Centre.**
Project Purpose **The major goal of the project is to enhance for the current health care system using the best hardware and software to track and store patients' medical records and update the medical officers daily on their health progress.**
Risks Assumptions Obstacles ➢ **Patients may be too preoccupied to register, and they may forget their login information while using the system.** ➢ **Finding sponsors for such a large project is difficult. Maybe not for a corporation.** ➢ **Concerns about intellectual property.** ➢ **The project sponsor, stakeholders, and all departments fully support this project.**
Preliminary Scope Statement **The Patient Care project will compromise of designing, developing, testing, implementation, and the successful delivery of a project management integrated system to Wellington Regional Medical Centre. All the required work will be completed according to its duration dates. The project manager will be managing all the project funding, which is according to the budget. If the project needs further funding, prior approval will be needed from the project sponsor.** **The project will conclude once the final phase is completed which involves final documentation of project deliverables which is handed over to the client to be signed off and then the project is terminated. After which, post audit is performed to examine the system to ensure that it is working in accordance to the system requirements, and client's feedback is taken to further improve the system if required.**

Summary Milestone Schedule

The Summary Milestone Schedule for this project is shown below. This schedule may be updated as requirements are clarified. The project manager will convey any alterations through project status meetings.

Summary Milestone Schedule: Patient Care System for Wellington Regional Medical Center	
Project Milestone	**Target Date (dd/mm/yyyy)**
• Project Start	01/06/2022
• Conceptualization Phase Start	01/06/2022
• Conceptualization Phase Complete	23/06/2022
• Planning Phase Start	24/06/2022
• Planning Phase Complete	13/07/2022
• Execution Phase Start	14/07/2022
• Execution Phase Complete	21/09/2022
• Closure Phase Start	22/09/2022
• Closure Phase Complete	10/10/2022
• Project Complete	10/10/2022

Budget Summary

The table below depicts a summary budget for planned costs components and its estimated costs.

Resources:	**$$$**	**$$$**
Human Resource Cost	83,249.36	
Facility Costs	835.00	
Material Costs	310.00	
Equipment	670.00	
Hardware Costs	20,000.00	
Software & Licensing Costs	35,000.00	
Subtotal		140,064.36
Other Costs		
Travelling	100.00	
Communication	250.00	
Miscellaneous	300.00	
Subtotal		650.00
Total Costs		**$140,714.36**

Authorization

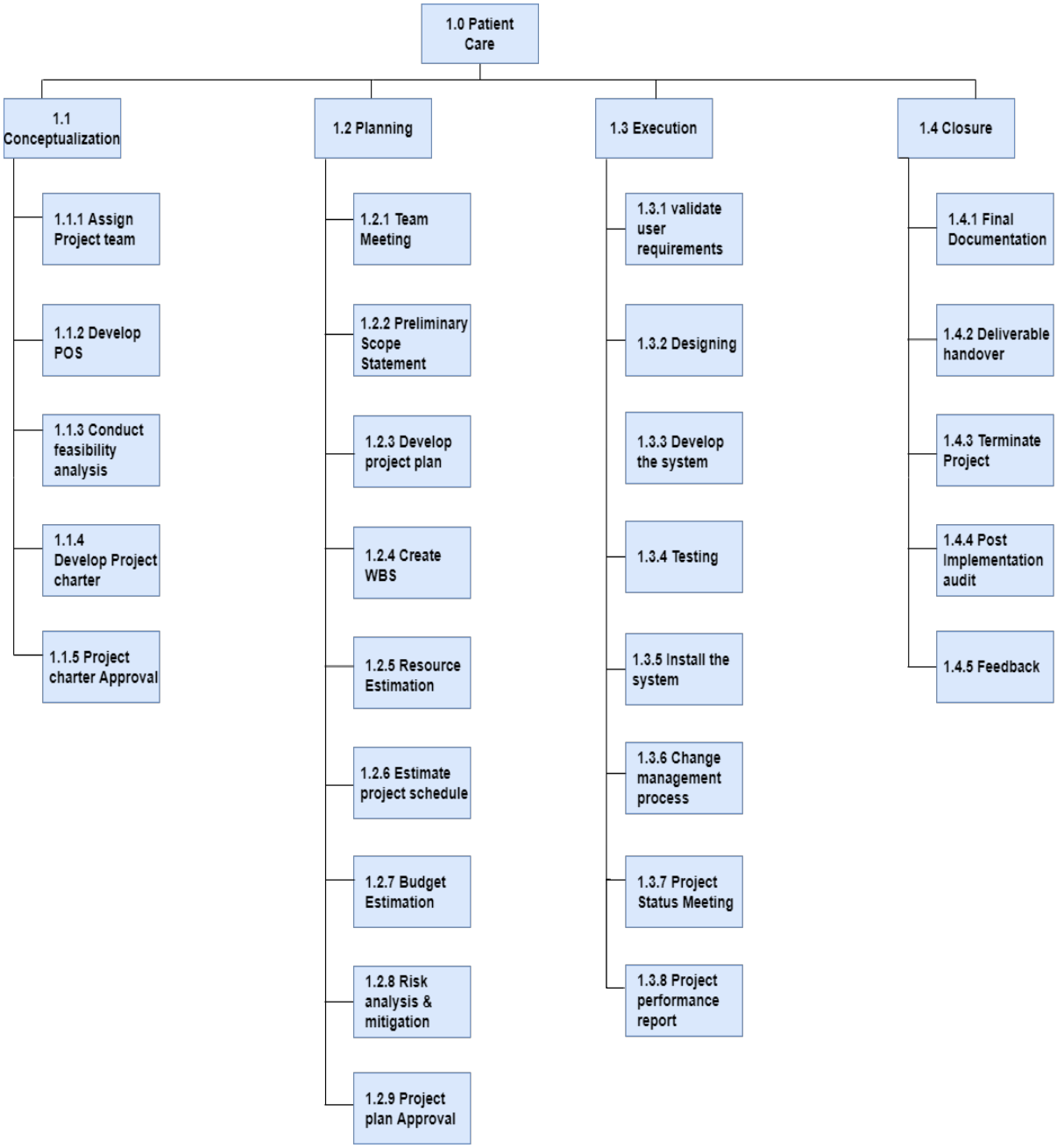
Approved by the Project Sponsor:

_____ Date:_____

Planning

Work-breakdown Structure (WBS)

A Work Breakdown Structure divides the deliverables of a project into smaller components. It is very important in project management as it helps to visualize the entire scope of a project and facilitates in managing the project by organizing the tasks into manageable components. Given below is a graphical representation of a work breakdown structure of the Patient Care System for Wellington Regional Medical Centre.



Conceptualization – the conceptualization phase is the initial phase where the project goals and objectives are identified and documented. The first activity is to assign or hire a project team and assign project manager who will work together as a team to accomplish the objectives of the project. Secondly, a project overview statement is created to outline the reasons and outcomes for implementing the project. This is followed by feasibility analysis which will be conducted to have a feasibility check in regards to certain factors to determine if the project is likely to succeed. The next activity is to develop a project charter which will reflect the business objectives and finally once it is approved the project is then initiated.

Planning – the second phase is planning where the project requirements are established. This phase is initiated by having a project team meeting then the project plan is documented in regards to its scope and requirements and the project deliverables are defined in the work breakdown structure. Resources are estimated and assigned to each activity with respect to skills inventory, needs inventory and staff assignments. Task duration is estimated and Gantt chart is created to aid in organizing and scheduling. Next, budget is developed to estimate the cost of resources that is needed to complete the project. Next activity is where project risks are identified, analysed and mitigation techniques are determined. Finally, the project plan needs management approval in order to start with its implementation.

Execution – in the execution phase, the team designs and implements the Patient care system. This phase involves validating user requirements to ensure that it meets system specification. The system is then designed and developed which takes into consideration the hardware and software requirements and design for the patient care system. Once the system is designed, it is then tested to ensure correct results and then the system is installed. Next, the change management process is defined and project status meeting is conducted to keep track of status of the project. Finally at the end of this phase the project performance report is documented.

Closure – this is the final phase which involves final documentation of project deliverables which is then handed over to the client to be signed off and then the project is terminated. Audit is performed to examine the system to ensure that it is working in accordance to the system requirements, and client's feedback is taken to further improve the system if required.

Resource Estimation

Skills Inventory - Staff and Skills

SKILLS	STAFF					
	SELVINDRA	RONEEL	NITESH	RAJIV	KAUSAR	BHAVIKA
Leadership	A	G	G	B	G	B
Communication	A	A	A	G	G	G
Analysis	B	A	A	A	G	G
Designing	G	A	A	B	A	B
Implementation	G	B	A	A	G	A
Testing	A	B	B	A	B	A
Networking	B	B	A	B	A	B
Database	B	A	A	G	A	G
Programming	A	B	A	B	A	B
Problem Solving	A	A	B	B	G	B
Risk Management	B	G	B	A	B	A
Documentation	A	G	G	B	A	B

Key

B - Basic

G - Good

A - Advance

Needs Inventory - Activity and Skills

Activity	Skills										
	Leadership	Communication	Analysis	Designing	Implementation	Testing	Networking	Database	Programming	Problem solving	Documentation
CONCEPTUALIZATION											
Assign Project Team	✓	✓								✓	
Develop POS ✓		✓									✓
Conduct Feasibility Analysis			✓	✓							✓
Develop Project Charter			✓								✸
Project Charter Approval	✓	✓									✓
PLANNING											
Team Meeting	✓	✓								✓	✓
Preliminary Scope Statement	✓		✓	✓						✓	✓
Develop Project Plan	✓		✓							✓	✓
Create WBS		✓	✓	✓	✓	✓				✓	✓

Resource Estimation	✓	✓	✓					✓	✓	✓	✓
Estimate Project Schedule	✓		✓						✓		✓
Budget Estimation		✓	✓		✓				✓	✓	✓
Risk Analysis & Mitigation	✓	✓	✓		✓	✓				✓	✓
Project Plan Approval	✓	✓	✓						✓		✓
EXECUTION											
Validate User Requirements		✓	✓	✓					✓	✓	✓
Designing				✓			✓	✓	✓	✓	✓
Develop the System				✓			✓	✓	✓		✓
Testing		✓	✓			✓	✓		✓	✓	✓
Install the System		✓			✓		✓	✓	✓		
Change Management Process		✓	✓		✓	✓	✓			✓	✓
Project Status Meeting		✓	✓							✓	✓
Project Performance Report		✓	✓			✓				✓	✓

CLOSURE											
Final Documentation	✓										✓
Deliverance Handover	✓	✓									✓
Terminate Project	✓										✓
Post Implementation Audit	✓	✓	✓							✓	✓
Feedback	✓	✓	✓							✓	

Staff Assignments

Activity	Staff					
	Selvindra (Project Manager)	Roneel (System Analyst)	Nitesh (System Designer)	Rajiv (Testing Analyst)	Kausar (Programmer)	Bhavika (Configuration Specialist)
CONCEPTUALIZATION						
Assign Project Team	✱	✱	✱	✱	✱	✱
Develop POS	✱	✱				
Conduct Feasibility Analysis		✱				
Develop Project Charter	✱	✱				
Project Charter Approval	✱					
PLANNING						
Team Meeting	✱	✱	✱	✱	✱	✱
Preliminary Scope Statement	✱					✱
Develop Project Plan		✱	✱			✱
Create WBS		✱	✱		✱	
Resource Estimation	✱					✱
Estimate Project Schedule	✱	✱			✱	
Budget Estimation	✱					✱
Risk Analysis & Mitigation		✱		✱		✱
Project Plan Approval	✱					✱
EXECUTION						

Task Duration Estimation

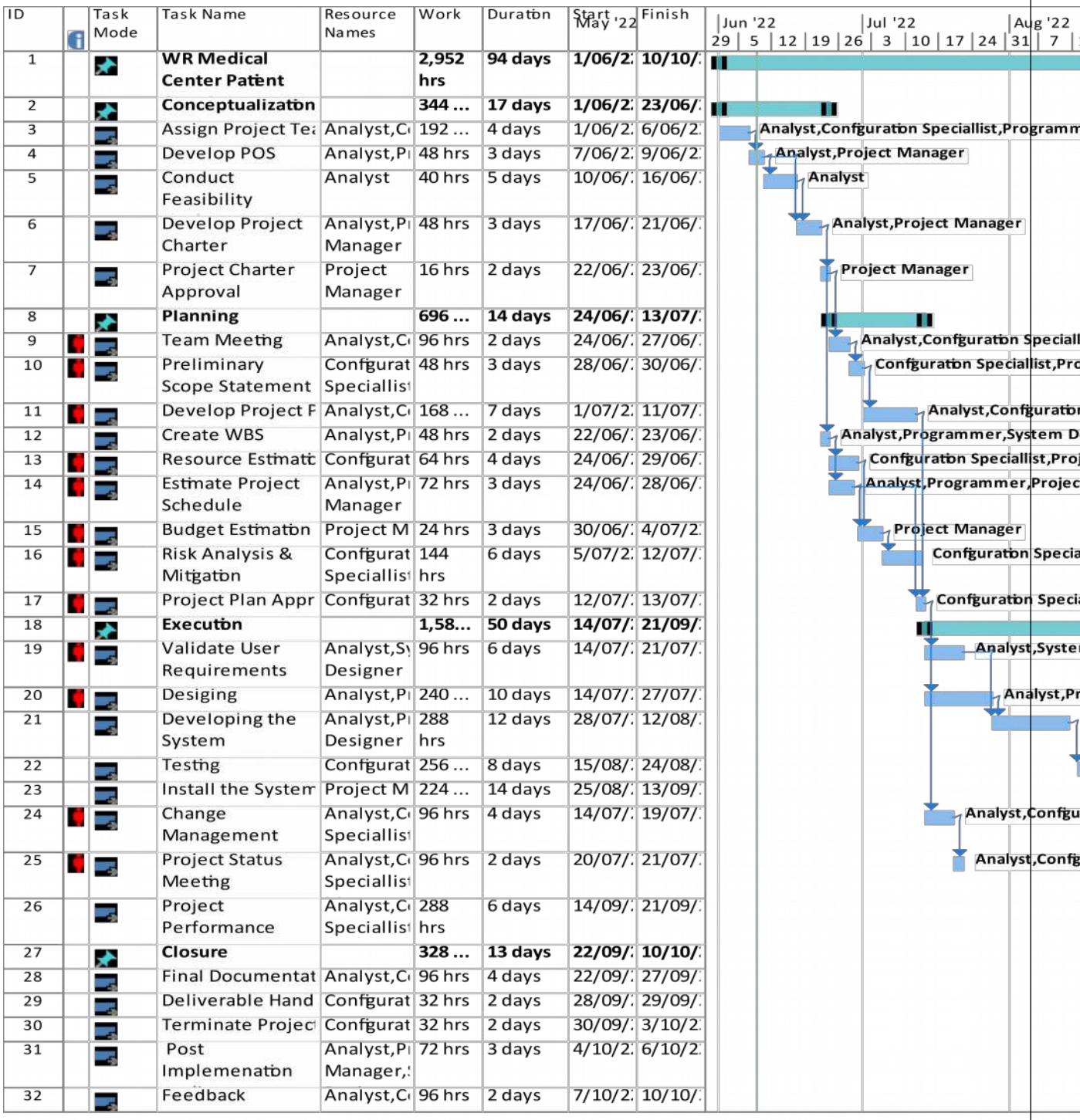
Name: Patient Care for Wellington Regional Medical Center						
Duration are listed in Days						
Activity	**Description**	**Optimistic**	**Most likely**	**Pessimistic**	**Duration**	**Predecessors**
CONCEPTUALIZATION						
A	Assign project team	3	4	5	4	-
B	Develop POS	2	3	4	3	A
C	Conduct feasibility analysis	3	5	7	5	A
D	Develop project charter	2	3	4	3	B,C
E	Project charter approval	1	2	3	2	D
PLANNING						
F	Team Meeting	1	2	3	2	E
G	Preliminary Scope Statement	2	3	4	3	F
H	Develop Project Plan	5	7	9	7	G
I	Create WBS	1	2	3	2	E
J	Resource Estimation	3	4	5	4	I
K	Estimate Project Schedule	2	3	4	3	I
L	Budget Estimation	2	3	4	3	J,K
M	Risk Analysis & mitigation	4	6	8	6	L
N	Plan Quality	1	2	3	2	H,M
EXECUTION						

The Project start date is 1st June, 2022. Staffs work from Monday to Friday from 8am – 4pm resulting in 8 hours of work. All public holidays are considered as non – working days.

Duration Estimation Technique

The estimation technique used to determine duration is mathematical derivation based on formula , where a is optimistic days, m is most likely days a b is pessimistic days. This technique is used as it is more reasonable in comparison to expert opinion and experience as such information may not be available while on the other hand mathematical derivation is based on Program Evaluation and Review Technique (PERT) technique which uses three point estimates to fairly predict the activity durations.

Gantt chart



ID	Task Mode	Task Name	Resource Names	Work	Duration	Start	Finish
1		**WR Medical Center Patient**		**2,952 hrs**	**94 days**	**1/06/2**	**10/10/**
2		**Conceptualization**		**344 ...**	**17 days**	**1/06/2**	**23/06/**
3		Assign Project Tea	Analyst,C	192 ...	4 days	1/06/2	6/06/2
4		Develop POS	Analyst,Pr	48 hrs	3 days	7/06/2	9/06/2
5		Conduct Feasibility	Analyst	40 hrs	5 days	10/06/	16/06/
6		Develop Project Charter	Analyst,Pr Manager	48 hrs	3 days	17/06/	21/06/
7		Project Charter Approval	Project Manager	16 hrs	2 days	22/06/	23/06/
8		**Planning**		**696 ...**	**14 days**	**24/06/**	**13/07/**
9		Team Meeting	Analyst,C	96 hrs	2 days	24/06/	27/06/
10		Preliminary Scope Statement	Configurat Speciallist	48 hrs	3 days	28/06/	30/06/
11		Develop Project P	Analyst,C	168 ...	7 days	1/07/2	11/07/
12		Create WBS	Analyst,Pr	48 hrs	2 days	22/06/	23/06/
13		Resource Estimatic	Configurat	64 hrs	4 days	24/06/	29/06/
14		Estimate Project Schedule	Analyst,Pr Manager	72 hrs	3 days	24/06/	28/06/
15		Budget Estimation	Project M	24 hrs	3 days	30/06/	4/07/2
16		Risk Analysis & Mitigation	Configurat Speciallist	144 hrs	6 days	5/07/2	12/07/
17		Project Plan Appr	Configurat	32 hrs	2 days	12/07/	13/07/
18		**Execution**		**1,58...**	**50 days**	**14/07/**	**21/09/**
19		Validate User Requirements	Analyst,Sy Designer	96 hrs	6 days	14/07/	21/07/
20		Desiging	Analyst,Pr	240 ...	10 days	14/07/	27/07/
21		Developing the System	Analyst,Pr Designer	288 hrs	12 days	28/07/	12/08/
22		Testing	Configurat	256 ...	8 days	15/08/	24/08/
23		Install the System	Project M	224 ...	14 days	25/08/	13/09/
24		Change Management	Analyst,C Speciallist	96 hrs	4 days	14/07/	19/07/
25		Project Status Meeting	Analyst,C Speciallist	96 hrs	2 days	20/07/	21/07/
26		Project Performance	Analyst,C Speciallist	288 hrs	6 days	14/09/	21/09/
27		**Closure**		**328 ...**	**13 days**	**22/09/**	**10/10/**
28		Final Documentat	Analyst,C	96 hrs	4 days	22/09/	27/09/
29		Deliverable Hand	Configurat	32 hrs	2 days	28/09/	29/09/
30		Terminate Projec	Configurat	32 hrs	2 days	30/09/	3/10/2
31		Post Implemenation	Analyst,Pr Manager,'	72 hrs	3 days	4/10/2	6/10/2
32		Feedback	Analyst,C	96 hrs	2 days	7/10/2	10/10/

Budget

Budget Summary

Resources:	$$$	$$$
Human Resource Cost	83,249.36	
Facility Costs	835.00	
Material Costs	310.00	
Equipment	670.00	
Hardware Costs	20,000.00	
Software & Licensing Costs	35,000.00	

Subtotal		140,064.36
Other Costs		
Travelling	100.00	
Communication	250.00	
Miscellaneous	300.00	
Subtotal		650.00
Total Costs		**$140,714.36**

Human Resource Costs

Project Team Members	Resource Name	Hourly rate ($)	Hours Needed	Overhead Charges	Personal Time	Fully Loaded Labor Cost ($)
Selvindra Naidu	Project Manager	18.00	656	1.65	1.12	21,821.84
Roneel Prasad	System Analyst	15.00	624	1.65	1.12	17,297.28
Nitesh Kumar	System Designer	16.00	560	1.65	1.12	16,558.08
Rajiv Prakash	Testing Analyst	12.00	240	1.65	1.12	5,322.24
Kausar Ali	Programmer	17.00	408	1.65	1.12	12,817.73
Bhavika Singh	Configuration Specialist	11.00	464	1.65	1.12	9,432.19
Total						**$83,249.36**

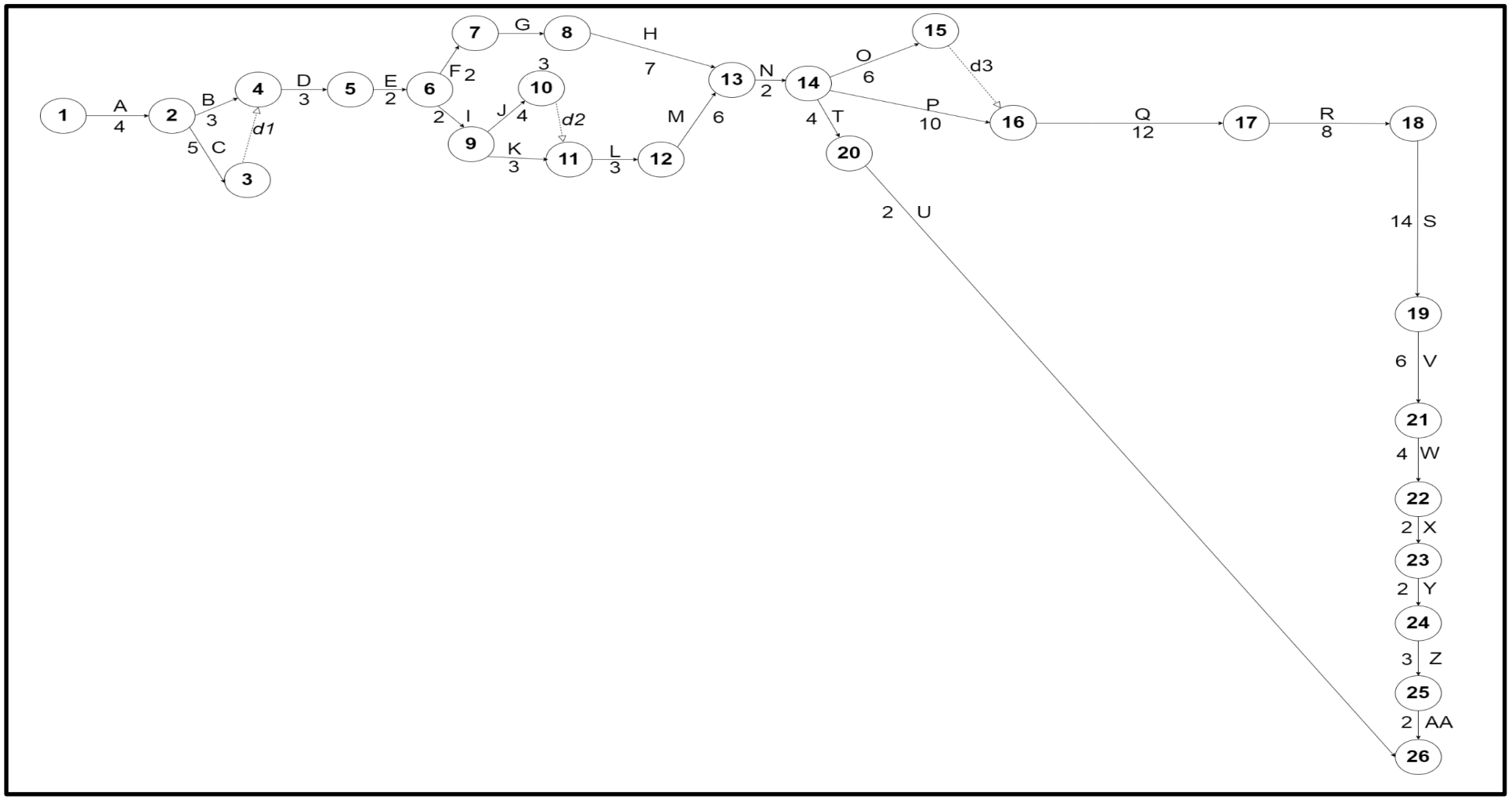
Fully Loaded Labor Cost =	Hours Needed	x	Overhead Charge	x	Personal Time Rate	x	Hourly Rate

Detailed Budget

Activity	Facility				Equipment				Materials			
	Office Space	Conference Room	Server Room	Sub Total ($)	Computer and Software	Server	Printer	Sub Total ($)	White board & Markers	Stationaries	Internet	Sub Total ($)
CONCEPTUALIZATION												
Assign project team		✓		50	✓		✓	10	✓	✓		5
Develop POS					✓			5	✓	✓		5
Conduct feasibility analysis					✓		✓	10				
PLANNING												
Develop project charter		✓		50	✓		✓	5	✓	✓	✓	30
Project charter approval		✓		75	✓		✓	30	✓	✓		20
Team Meeting	✓	✓		50	✓		✓	40	✓	✓		40
Preliminary Scope Statement		✓		30	✓			20				
Develop Project Plan		✓		20	✓			10			✓	10
Create WBS												
Resource Estimation		✓		10					✓	✓		30
Estimate Project Schedule		✓		20	✓			20	✓	✓		40
Budget Estimation		✓		30	✓			30	✓	✓		20
Risk Analysis & Mitigation					✓			20				
Project Plan Approval		✓		30	✓			20				

Project Network Diagram

AOA



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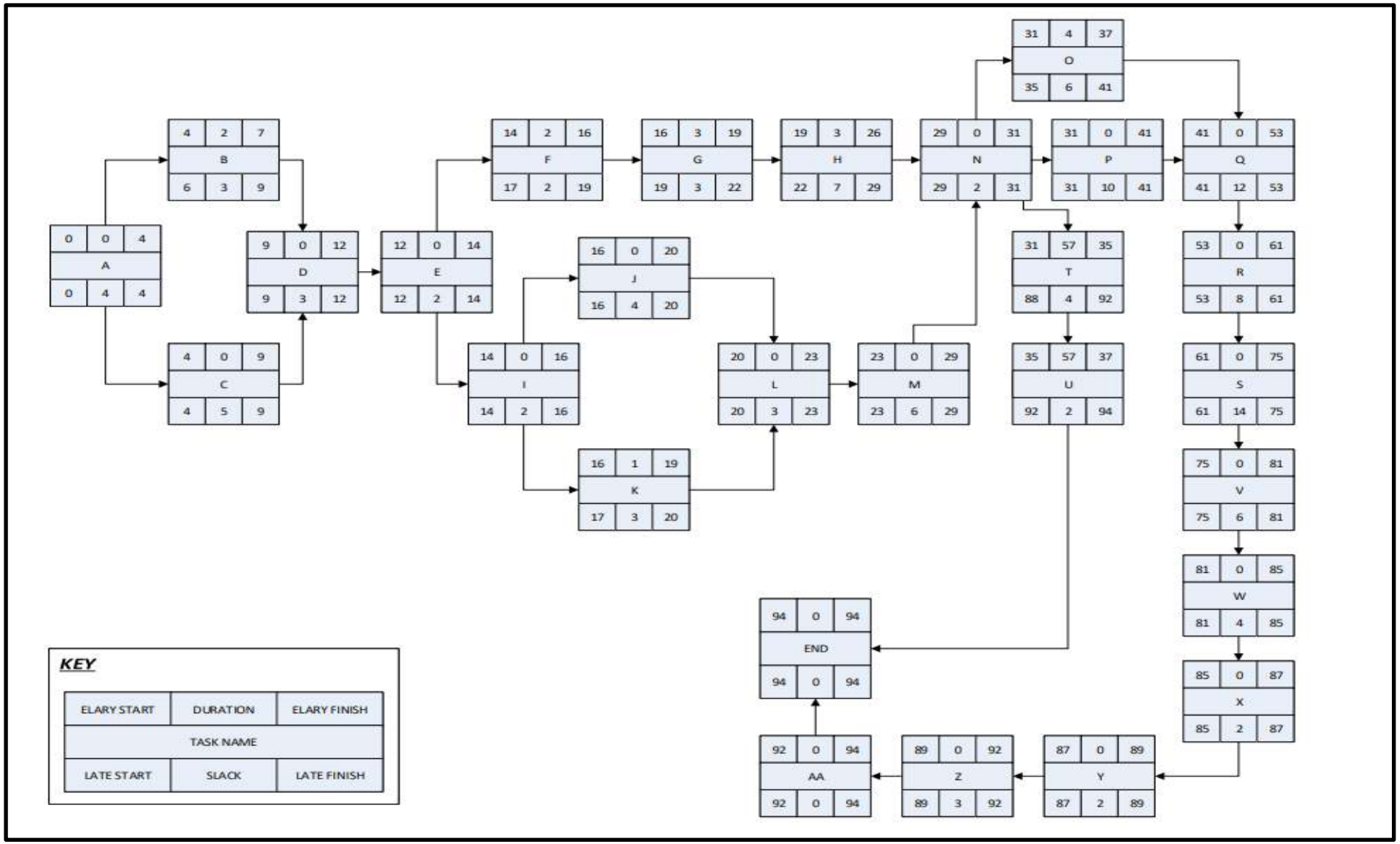

Critical Path and other Paths with Durations

Distinct Paths	Duration
1. A-B-D-E-F-G-H-N-O-Q-R-S-V-W-X-Y-Z-AA	85
2. A-B-D-E-F-G-H-N-P-Q-R-S-V-W-X-Y-Z-AA	89
3. A-B-D-E-F-G-H-N-T-U	32
4. A-B-D-E-I-J-L-M-N-O-Q-R-S-V-W-X-Y-Z-AA	88
5. A-B-D-E-I-J-L-M-N-P-Q-R-S-V-W-X-Y-Z-AA	92
6. A-B-D-E-I-J-L-M-N-T-U	35
7. A-B-D-E-I-K-L-M-N-O-Q-R-S-V-W-X-Y-Z-AA	87
8. A-B-D-E-I-K-L-M-N-P-Q-R-S-V-W-X-Y-Z-AA	91
9. A-B-D-E-I-K-L-M-N-T-U	34
10. A-C-D-E-F-G-H-N-O-Q-R-S-V-W-X-Y-Z-AA	87
11. A-C-D-E-F-G-H-N-P-Q-R-S-V-W-X-Y-Z-AA	91
12. A-C-D-E-F-G-H-N-T-U	34
13. A-C-D-E-I-J-L-M-N-O-Q-R-S-V-W-X-Y-Z-AA	90
14. A-C-D-E-I-J-L-M-N-P-Q-R-S-V-W-X-Y-Z-AA	94
15. A-C-D-E-I-J-L-M-N-T-U	37
16. A-C-D-E-I-K-L-M-N-O-Q-R-S-V-W-X-Y-Z-AA	89
17. A-C-D-E-I-K-L-M-N-P-Q-R-S-V-W-X-Y-Z-AA	93
18. A-C-D-E-I-K-L-M-N-T-U	36

Critical Path:

The Critical Paths are: **A,C,D,E,I,J,L,M,N,P,Q,R,S,V,W,X,Y,Z,AA**

Slack Days, Early and Late Schedule

Act	ES	EF	LS	LI	SLACK	CRITICAL PATH
A	0	4	0	4	0	YES
B	4	7	6	9	2	NO
C	4	9	4	9	0	YES
D	9	12	9	12	0	YES
E	12	14	12	14	0	YES
F	14	16	17	19	3	NO
G	16	19	14	22	3	NO
H	19	26	22	29	3	NO
I	14	16	14	16	0	YES
J	16	20	16	20	0	YES
K	16	19	17	20	1	NO
L	20	23	20	23	0	YES
M	23	29	23	29	0	YES
N	29	31	29	31	0	YES
O	31	37	35	41	4	NO
P	31	41	31	41	0	YES

Q	41	53	41	53	0	YES
R	53	61	53	61	0	YES
S	61	75	61	75	0	YES
T	31	35	88	92	57	NO
U	35	37	92	94	57	NO
V	75	81	75	81	0	YES
W	81	85	81	85	0	YES
X	85	87	85	87	0	YES
Y	87	89	87	89	0	YES
Z	89	92	89	92	0	YES
AA	92	94	92	94	0	YES

Project Risks

Risk Management Plan

Risk management is recognizing, assessing, and responding any risk factors that may arise across the span of a project. Project risk is identified as any unplanned event that may or may not occur throughout the course of a project.

Top Four Risks

1. Poor Budget Estimation
2. Poor Time Estimation
3. Hardware Failures
4. Poor Team Performance
5. Risks arising from Pandemic Crisis

Risk Identification

For the Patient Care System, a risk assessment meeting was held to identify potential risks involved in the project. The meeting was led by the project manager and each member was given 15 minutes to record risks that could prevent the project from achieving its objectives.

Expert Interview

One Expert Interview was carried out to gather important information about project risks. Many project risks were identifies out of which some were mitigated. And the remaining risks were included in the Risk Register.

Risk Assessment Meeting

A risk assessment meeting was called for by the project manager for risk identification with team members and stakeholders. These risks were included in the risk register.

Risk Mitigation and Avoidance

Once the risks were identified, the project team developed mitigation strategies to reduce the impact of the risks and to ensure that it is monitored accordingly. The risks for this project will be addressed using the triple constraints of project management which includes the constraints of time, scope, and cost. The project manager together with the project team will evaluate and respond to these risks to ensure that it is in accordance with these constraints.

Execution

Change Management Process

Change Management is a vital part for any successful project. The Change Management Plan includes; the purpose of the change management plan, change control procedures, roles and responsibilities for managing change, and a change request form. The process for submitting, reviewing, and approving changes must also be disclosed to all stakeholders in order to effectively set expectations.

Change Management Approach

A more foundational, commitment-based, and measure-focused approach to managing hierarchical change enables pioneers, directors, and staff to work together in the implementation of innovation and business measure adjustments.

One approach to use is the Lewin's Change Management Model which will help to better understand the organizational and structured change. It is divided into three stages: unfreeze, change, and refreeze. Employees must unfreeze themselves in order to prepare for change. It is critical to inform staff about the changes so that they are prepared and communication is simple. Changes are implemented, and refreezing is the process in which the change is accepted and completely understood by the staff.

Definitions of Change

There were several types of changes requested and placed under consideration for the proposal. The project manager must ensure that the scope and nature of any permitted changes are documented in the project's related documents and communicated to all project stakeholders. Some of the changes that could be considered are:

- Scope Changes: important and influential changes to the project's scope that may have been neglected due to unforeseen requirements, or the addition of any specific capability that would satisfy the client but was not originally intended for. These changes may have an influence on the expected budget and project schedule, as well as the Work Breakdown Structure, project scope statement, and other required documentation.
- Schedule/Project Deadline Changes: necessary changes that would change the project duration and the approved schedule of the project. These changes may require, crashing one or more activities, fast-tracking, or re-evaluating the initial schedule depending on the impact of the considered change(s).
- Budget Changes: changes that would have a major impact on the project's approved budget Any modifications to the project budget would need seeking assistance by asking additional funding to accommodate the adjustments. These adjustments may result in the release of funds that are no longer needed, or the addition of funds to project or management reserves. Any budget modifications may require a revision of the initial cost baseline.

Change Board Control

The Change Control Board is in charge of approving any requests for changes to the project's scope, budget, or timeline (CCB). The CCB is in charge of examining change requests, assessing and analyzing their effects on the project's scope, budget, and schedule,

identifying project risks, and approving or denying each request. For the proposed project, the CCB members are as follows:

Name	Position	CCB Role
B. Singh	Project Sponsor	CCB Co-chairperson
S. Naidu	Project Manager	CCB Chairperson
N. Kumar	Project Technical Lead	CCB Member
K. Ali	Project Operations Lead	CCB Member

All requests for changes from the project team and/or stakeholders will be sent to the Project Manager. These requests for change will be documented in the change log and discussed and vetted by the CCB members at the end of the week (Friday) or any time prior to the planned meetings, depending on the priority or urgency of the change requests. The proposed change would be suspended and referred back to the requestor for clarification on the information provided if the CCB members require additional information or if the request for change submitted is not clear.

Roles and Responsibilities

The following are the roles and responsibilities for all change management efforts related to the Project:

Project Sponsor is responsible for:

- approving changes to the budget and funding allocation
- approving changes to the schedule and delivery baseline
- taking an active involvement in the approval of changes to the project scope
- Chair CCB

Project manager is responsible for:

- Gathering all change requests from the stakeholders
- Keep record of change request in change register.
- conducting a preliminary risk, cost, schedule, and scope analysis with the project team prior to the CCB review,
- seeking clarification from change requestors when required
- Updating necessary documentation during the project's life cycle.
- Play an active role as a member of the CCB

Project Team/ Stakeholders are responsible for:

- Submitting change requests following the standard organizational change request form
- Providing feedback to changes
- Providing all necessary information about any or all changes in detail
- addressing any issues or provide clarification on the changes requested

Change Control Process

The project management change control process ensures that each change suggested throughout a project is properly defined, evaluated, and approved prior to execution. The

change management process helps to minimize unwanted changes that could interrupt services and ensures that resources are used efficiently.

The following change control process is a standard necessary procedure under the responsibility of the Project Manager.

1. Need for the change - this is demanded by project stakeholders.
2. Document the change request—this is where the proposed modification is detailed, as well as any difficulties that may arise. The project manager keeps track of this.
3. Formal assessment- this step assesses the risks, the need for change, and the benefits of making changes, as well as whether or not the changes should be implemented. The project manager and the team are in charge of this.
4. Change requests are submitted to the change management board (CCB), which will investigate the request and make decisions.
5. Approval or rejection- the CCB examines the request and determines whether it should be approved or rejected.
6. Implement change - if the request is granted by the CCB, the project manager will apply the change.

Change Request Form

Change Request Form			
Project Name:	Project Manager:		
Request Name:	Request No.		
Requested by:	Date:		
Change Description:			
Reason for Change:			
Impact of Change:			
Proposed Action:			
Status:	In Review	Approved	Rejected
Approval Date:			
Approved By:			

Team Charter and Ethical issues

Project Name: Patient Care System for Wellington Regional Medical Centre

Vision: to enhance for the current health care system using the best hardware and software to track and store patients' medical records and update the medical officers daily on their health progress.

Mission: to improve Patient Care System through the use of project management techniques. To address current operational issues by implementing policies that will improve patient care while also cultivating positive relationships with our investors.

Project Team

Name	Role	Phone
Selvindra Naidu	Project Manager	6250001
Roneel Prasad	Systems analyst	6660101
Nitesh Kumar	System Designer	6722210
Rajiv Prakash	Testing analyst	6503232
Kausar Ali	Programmer	6250003
Bhavika Singh	Configuration Specialist	6720500

Success Criteria:

- Project uses allocated budget to achieve project outcomes
- Project is completed on time
- Project meets the desired quality target
- Project meets all requirements and system is performing as expected
- Customer satisfaction is achieved

Communications:

- Daily meetings at will be held at 9am each work day.
- Team leader will inform about the agenda of each meeting.
- Team leader will disseminate minutes of each meeting.
- All Members to update their work on white board each work day before the meeting.
- All Members are expected to be at the scheduled meeting on time (unless on sick leave).
- All Members must be notified in advanced for any additional meeting or cancellation of a meeting.
-

Code of Ethics

As the project team strives for the success of the project, there are some standards put into place to uphold organizations values and morals and to ensure integrity and proper ethical behaviour in the working environment. The following code of ethics is adopted from the Project Management Institute Code of Ethics and Professional Conduct, and is to be followed by the project team throughout the course of this project:

Responsibility – it is our duty to take ownership of our actions and the decisions we make.

- We will accept responsibility and be accountable for our actions.
- We will protect confidential information that has been entrusted to us.

Respect – it is our duty to uphold dignity of individuals and to not abuse any power or resources that we are given.

- All team members will treat each other respectfully at all times.
- We will respect each other's point of view, seeking to understand it.
- Will conduct ourselves in a professional manner at all times.

Fairness – it is our duty to be just in the decision making process and in all other aspects with regards to one's behaviour towards another members.

- All team members will be treated equally regardless of, but not limited to, gender, nationality, religion, race or age.
- Ensure decisions are free from any biasness, including but not limited to, favouritism, nepotism or bribery.

Honesty – it is our duty to be truthful and sincere in our conduct and to act in a good faith.

- We will be truthful in our communications and our conduct.
- We will provide with correct information in a timely manner.

Project Performance and Reporting System Table

Expected Report	Person Responsible	Deadline
Status	Project Manager	Monthly
Progress	Project Manager	Weekly
Baseline	System Analyst	Monthly
Timeline Tracking	Team Members	Weekly
Forecasting	System Analyst	End of planning phase
Variance	Operations Lead	weekly
Risk	Testing Analyst & System Analyst	Fortnightly
Earned Value	System Analyst	Monthly

Termination

Project Deliverables Check List

Checklist	Deliverables
	Preliminary Survey Done and Requirements/Specifications Gathered
	Adequate Recommendation Were Made
	Project Approved
	Goals and Objectives clearly defined
	Scope and Limitations well defined
	Major Deliverables defined (Deliverables Plan)
	Work Breakdown Structure completed
	Charter Developed and Review Conducted
	Performance, Evaluation and Test Plan completed
	Change Control Plan completed
	Documentation Plan completed
	Project Risks identified, analyzed, and mitigation measures were defined.
	Project Plan completed
	Budget specified
	Functional Deliverables defined
	Detailed Functional Planning and Schedules completed
	Functional Schedule Critical Path Analysis completed
	Schedule & Path aligned
	Planning Phase Checklist completed
	Progress Report

	Final Report
PROJECT NAME:	
REVIEWER'S NAME & SIGNATURE:	
DATE:	

Post-Implementation Audit Check List

Post-Implementation Check list				
	Categories	Yes	No	Comments
1	Change Management Plan			Made sure that any changes to the project's development or customer are noticed and communicated to the rest of the team.
2	Deliverables completed			System's functional criteria were met.
3	Project completed on time			Ensure that professionalism was demonstrated and that clients were not let down.
4	Risk Management			All project risks are accounted for and that appropriate remedies are implemented if they arise.
5	Budget utilized properly			Budget was used accordingly and was not misused

Recommendation

We would like to recommend the client for a new technology such as Tele-Health, Tele-health refers to the use of digital information and communication technology, such as computers and mobile devices, to access and manage health care services remotely. Also, Remote Monitoring, the doctor or health care team can remotely monitor your health using a range of technologies. Among these technologies are:

- Web-based or mobile apps for sending information to the doctor or health-care team, such as blood glucose levels.

- Wearable devices that monitor and communicate data such as heart rate, blood glucose, walking distances, posture control, physical activity, tremors and sleep patterns automatically.

Technology has the ability to increase health-care quality while also making it more accessible to a wider range of individuals. Telehealth has the potential to improve the efficiency, coordination, and accessibility of health care.

Appendix

Risk Register- Patient Care System for Wellington Regional Medical Centre

Risk Identification		Qualitative Rating				Risk Response
Risk	Risk Category	Probability	Impact	Risk Score	Risk Ranking	Risk Response
Poor budget Estimation	Execution	3	6	18	1	Ensure that the budget is well prepared and all costs are to be again estimated properly. Revie and manage resources accordin
Poor time estimation	Execution	4	5	20	2	Hold Meeting to Review Project Schedule.
Hardware failures	Technical	5	7	35	3	Ensure that the hardware used well compatible with the requirements of the system. Ha up-to-date hardware tools.
Poor team performance	Execution	5	8	40	4	Tasks need to be well suited for person responsible. Constant enagagement with all the team members.
Risks arising from pandemic crisis	Financial	2	10	20	5	Follow Risk Management Plan

Key Terms

Risk: The risk stated in a complete sentence which states the cause of the risk, the risk, and the effect that the risk causes to the project.

Risk Category: Categorization of risks by area of project affected, source of risk or other useful category.

Probability: The likelihood that a risk or opportunity will occur (on a scale from 0 to 10 with 10 being the highest).

Impact: The impact of the risk on the project if the risk occurs (scale from 0 to 10 with 10 being the highest).

Risk Score: Determined by multiplying probability and impact (scale from 0 to 100).

Risk Ranking: A priority list which is determined by the relative ranking of the risks (by their scores) within the project with the number one being the highest risk score.

Risk Response: The action which is to be taken if this risk occurs.

Trigger: Something which indicates that a risk is about to occur or has already occured.

Risk Owner: The person who the project manager assigns to watch for triggers, and manage the risk response if the risk occurs.

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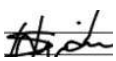
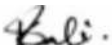
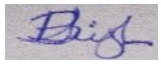
Mark Allocation Agreement

Member ID	Percentage of Assignment 2 Marks
S11157446	100%
S11185068	100%
S11096080	100%
S11034381	100%
S11170866	100%
S11145727	100%

Signed

Member Name	ID	Signature
Selvindra Naidu	S11157446	

Kausar Zoya Ali	S11185068	
Ronel [illegible]	S11[illegible]	
Nitesh [illegible]	S11[illegible]	
Bhavika Singh	S11170866	
Rajiv Prasad	S11[illegible]	

RAM Matrix

Deliverables	Selvindra	Roneel	Nitesh	Rajiv	Kausar	Bhavika
Conceptualization						
Introduction	R	S			A	
POS	S	R			A	
Preliminary Analysis	S	R			A	
Project Charter	R	S			A	
Planning						
WBS	S	N			R	
Resource Estimation	R		N		S	
Task Duration Estimation	A	N	N	N	R	N
Gantt Chart	R	S	N	N	S	N
Budget	A		R			
Project Network Diagram	N	R	R		S	S
Project Risks	S	S	S		S	
Execution						
Change Management Process	A		R		S	
Change Request Form	A		S		R	

Team Charter and Ethical Issues	A		S		R	
Project Performance & reporting System Table	A		R		S	
Termination						
Project Deliverables Checklist			S	R		
Post-Implementation Audit Checklist			S	R		
Recommendation				R		

Responsible
Notification
Support
Approval

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