



D-HEALTH

HEALTHCARE
THROUGH
DIGITAL
TECHNOLOGY



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- Project Charter
- High-Level requirement
- Use Case Description
- Activity Diagram
- Sequence Diagram
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- Usability Assessment
- Agile Methodologies
- Teamwork

ABOUT THE PROJECT

dHealth Platform is a telemedicine service that connects patients and doctors using digital communication technologies such as chats, phone/online calls, and video conferences. Patients can easily search for doctors, make appointments, and have remote teleconsultations with their preferred doctors. Doctors can access and manage patients' medical records, issue prescriptions, and provide medical recommendations

Project Name	dHealth Platform
Product Owner	Faye Simon
Project Overview	To develop a digital health (dHealth) platform that provides telemedical consultation services to patients. The platform will allow patients to search for doctors, make appointments, and have a teleconsultation with particular doctors remotely through online communication channels such as chats, phone/online calls, and video conferences. The platform will also enable doctors to access and manage medical records of patients, give teleconsultation, and provide medical recommendations and prescriptions to patients.
Objectives	<ol style="list-style-type: none"> 1. To develop a user-friendly and secure dHealth platform that provides telemedical consultation services to patients. 2. To increase accessibility to healthcare services and improve patient outcomes. 3. To improve communication between doctors and patients. 4. To improve the efficiency of healthcare services and reduce healthcare costs. 5. To establish a robust and scalable platform that can be expanded in the future to include additional features and functionalities. 6. To provide remote access to medical consultations for patients in distant areas- revolutionizing the services
Project Deliverables	<ol style="list-style-type: none"> 1. A fully functional dHealth platform for telemedical consultation services, including a web. 2. Testing and quality assurance reports to ensure the platform meets the necessary security and performance standards. 3. Including project plan, requirements, design, and test cases.
Project Start / End	15/03/2023 - 26/03/2023

PROJECT CHARTER

Project Team	1. Nyein Chan Win Naing 2. Vidath Singarapu 3. Somesh rao Coka 4. Pyae Sone Kyaw 5. Lakash Maharjan	
Project Risk	1. Technical challenges in developing a scalable and secure platform.(Technical risks) 2. Resistance from healthcare providers and patients to adopt the new platform.(user-adoption risks) 3. Regulatory and compliance risks related to privacy and security of patient data.(security risks) 4. Resource constraints, including budget and staffing. (resource scarcity risks) 5. Necessity in effective and efficient operations ensuring good user experience (operational risks) 6. Possible non-compliance with laws and regulations related to healthcare services (legal risks)	
Stakeholder and Responsibilities		
Stakeholder	Role	Responsibility
Faye Simon	Product Owner	Project Vision, Resources, Planning
Dr. Chutiporn Anutariya	Subject - Matter Expert	Provides expertise on a specific subject, maintain up-to-date experience and knowledge on the subject matter, provide advice to the team.

PROJECT CHARTER

HIGH-LEVEL REQUIREMENT (FUNCTIONAL)

S.No	Requirements	Type (Functional / Non-Functional)
1.	The application should allow users to Register and Login into the System.	Functional
2.	The application will allow the patients to search for Doctors	Functional
3.	The patients can have the ability to book the appointment and cancel the appointment.	Functional
4.	Ability to have a telemedical consultations like video call	Functional
5.	The platform allows the Patients/Doctors to access their medical records	Functional
6.	The patients have ability to receive, view and download the prescription.	Functional
7.	Patients can make the online payment	Functional

HIGH-LEVEL REQUIREMENT (NON- FUNCTIONAL)

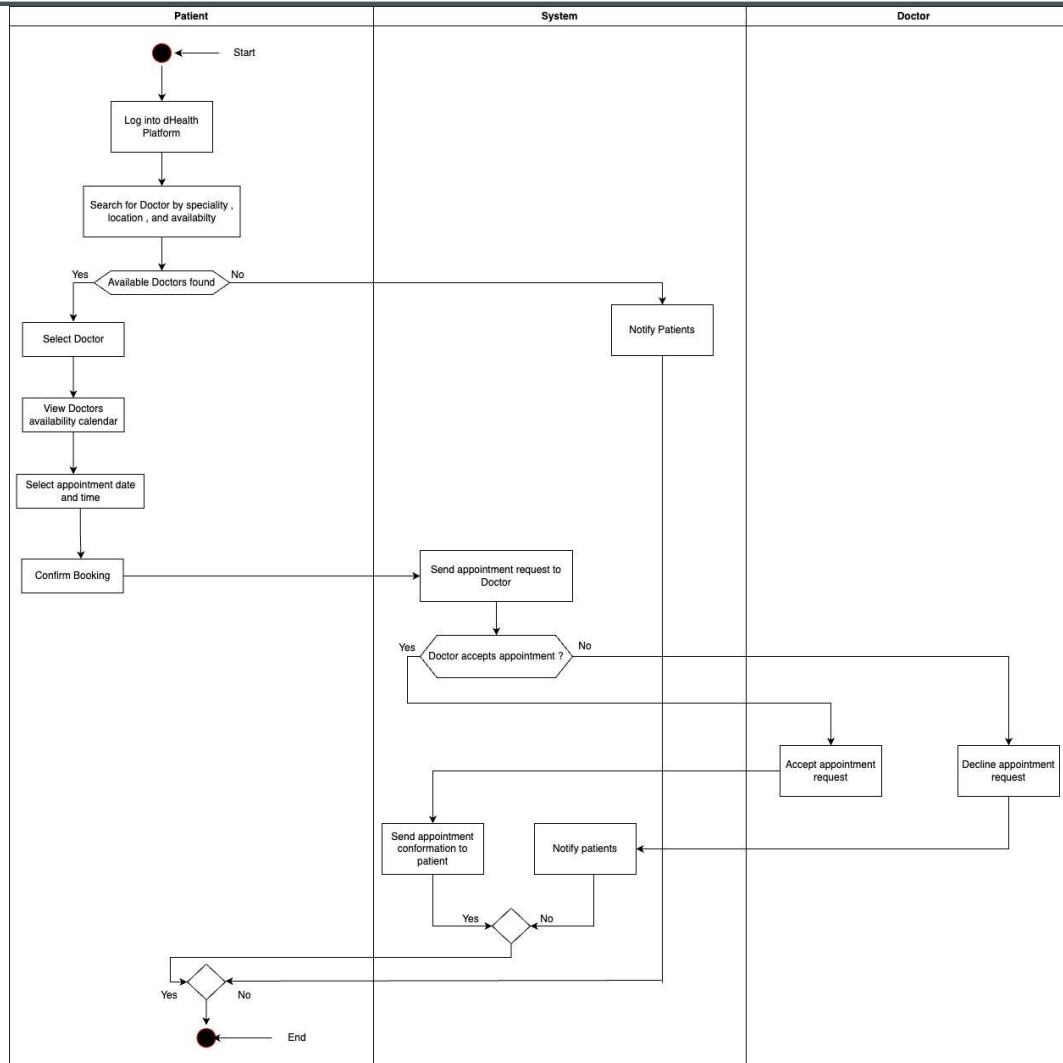
S.No	Requirements	Type (Functional / Non-Functional)
8.	The application should be user friendly.	Non-Functional
9.	The application should be mobile responsive.	Non-Functional
10.	Users should able to access web app in their respective devices (Mobile or Desktop)	Non-Functional
11.	The application should have minimum downtime	Non-Functional
12.	The application should follow all data security laws	Non-Functional

Use case title	Book Appointment with Doctor
Primary Actor	Patient
Stakeholders	Doctor, Medical Assistant, Pharmacy, dHealth Platform
Precondition	The patient has an account with dHealth and has access to the platform. The patient has already searched for and selected a doctor to book an appointment with.
Minimal Guarantee	The patient's appointment booking request will be recorded in the system and forwarded to the doctor for confirmation.
Success Guarantee	The patient will receive a confirmation of their appointment and a reminder before the scheduled time. The teleconsultation will be conducted successfully, and any prescribed medication will be delivered to the patient's home if requested.
Trigger	The patient initiates the appointment booking process through the dHealth platform.

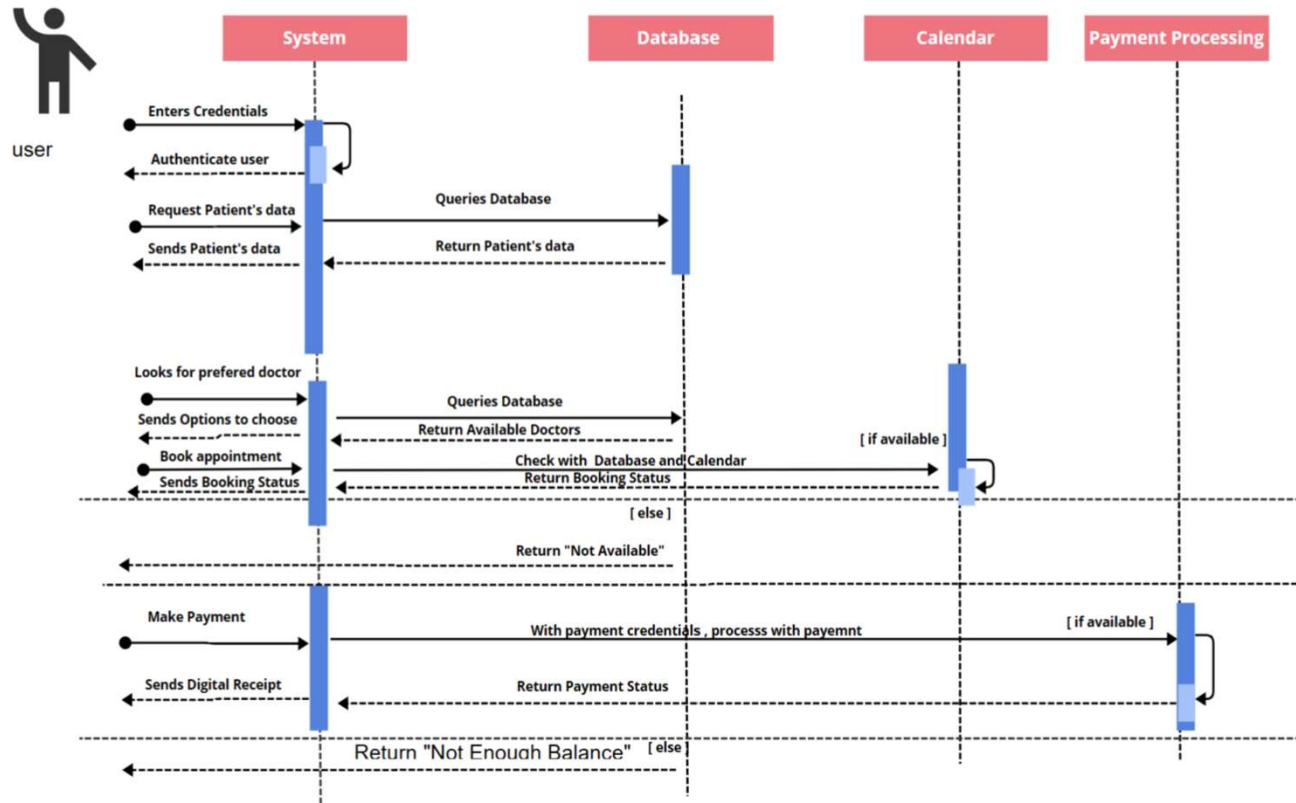
USE CASE
DESCRIPTION

	<ol style="list-style-type: none"> 1. The patient searches for a doctor and selects a suitable one. 2. The patient selects a preferred date and time for the appointment. 3. The patient provides any necessary information about their medical history and current symptoms. 4. The patient submits the appointment booking request. 5. The system records and forwards the booking request to the selected doctor. 6. The selected doctor confirms the appointment booking request. 7. The system sends the patient a confirmation of the appointment booking. 8. Before the scheduled time, the system sends a reminder to the patient. 9. At the scheduled time, the patient and doctor connect for teleconsultation. 10. The doctor reviews the patient's medical history and symptoms and provides medical advice and recommendations. 11. If necessary, the doctor prescribes medication and the patient requests for medicine-to-home delivery service. 12. If requested, the pharmacy delivers the prescribed medication to the patient's home. 13. The patient receives follow-up advice from a medical assistant if necessary.
Main Success Scenario	
Extensions	<ul style="list-style-type: none"> - If the doctor is not available for the selected date and time, the system provides alternative options to the patient. - If the patient needs to reschedule the appointment, the system allows the patient to do so and forwards the request to the doctor for confirmation. - If there are any technical difficulties during the teleconsultation, the system provides support to both the patient and doctor to resolve the issue.

USE CASE DESCRIPTION

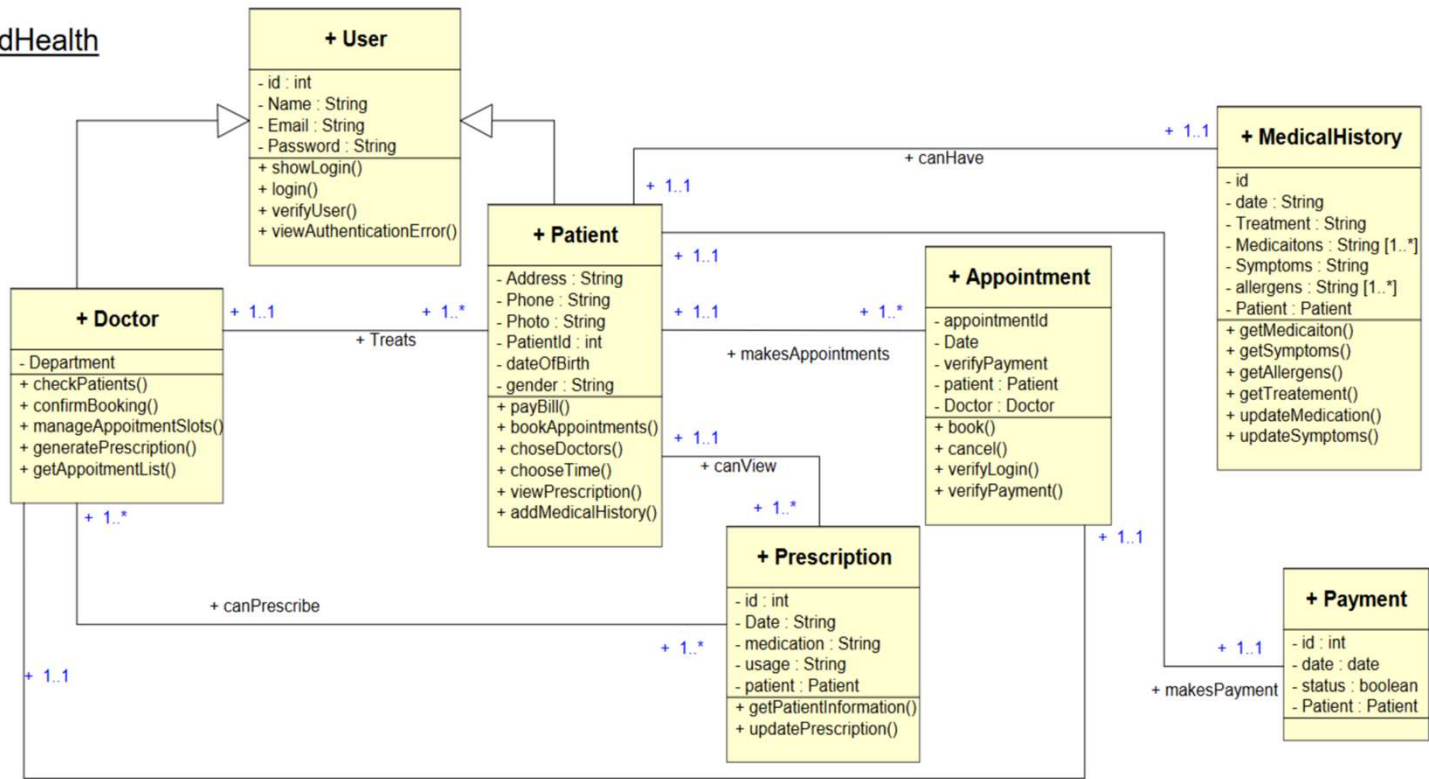


ACTIVITY DIAGRAM



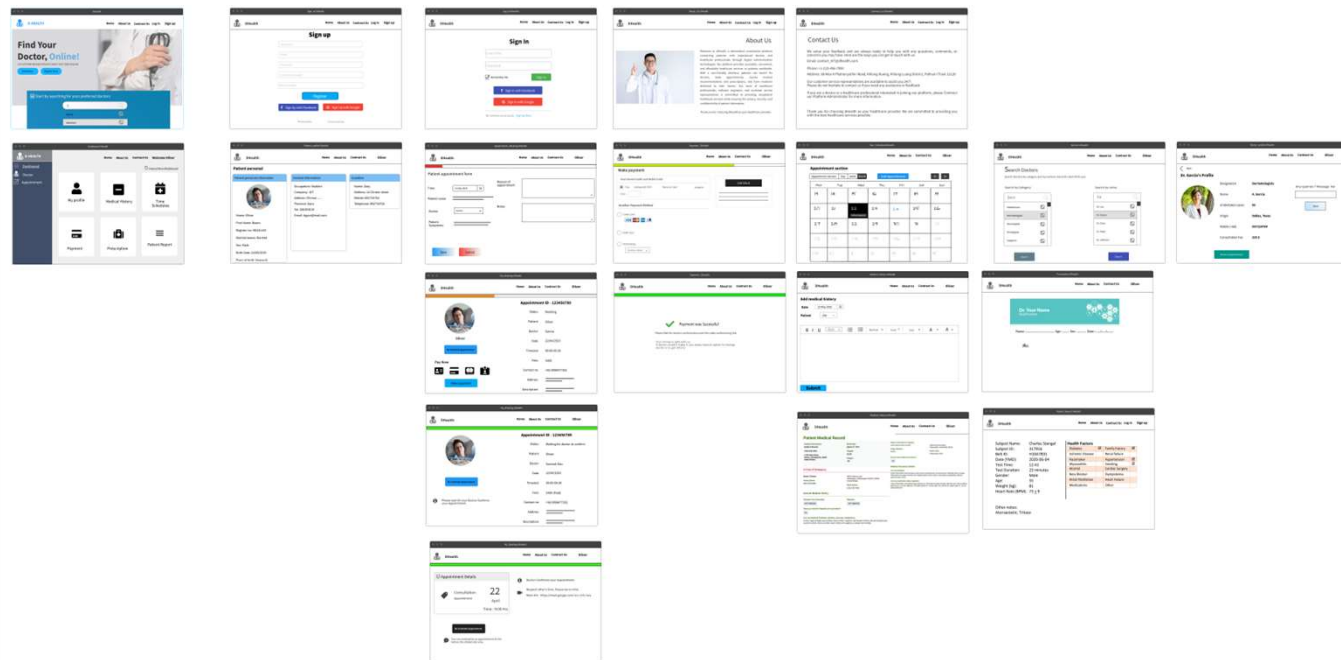
SEQUENCE DIAGRAM

dHealth



ENTITY RELATION DIAGRAM

MOCKUP WEBSITE (WIRE-FRAME)



MOCKUP
WEBSITE

Let's
Visit

dHealth Platform

GROUP - 1

 st122892@ait.asia (not shared) [Switch account](#)



1) I think I will visit this website of this system on aregular basis.

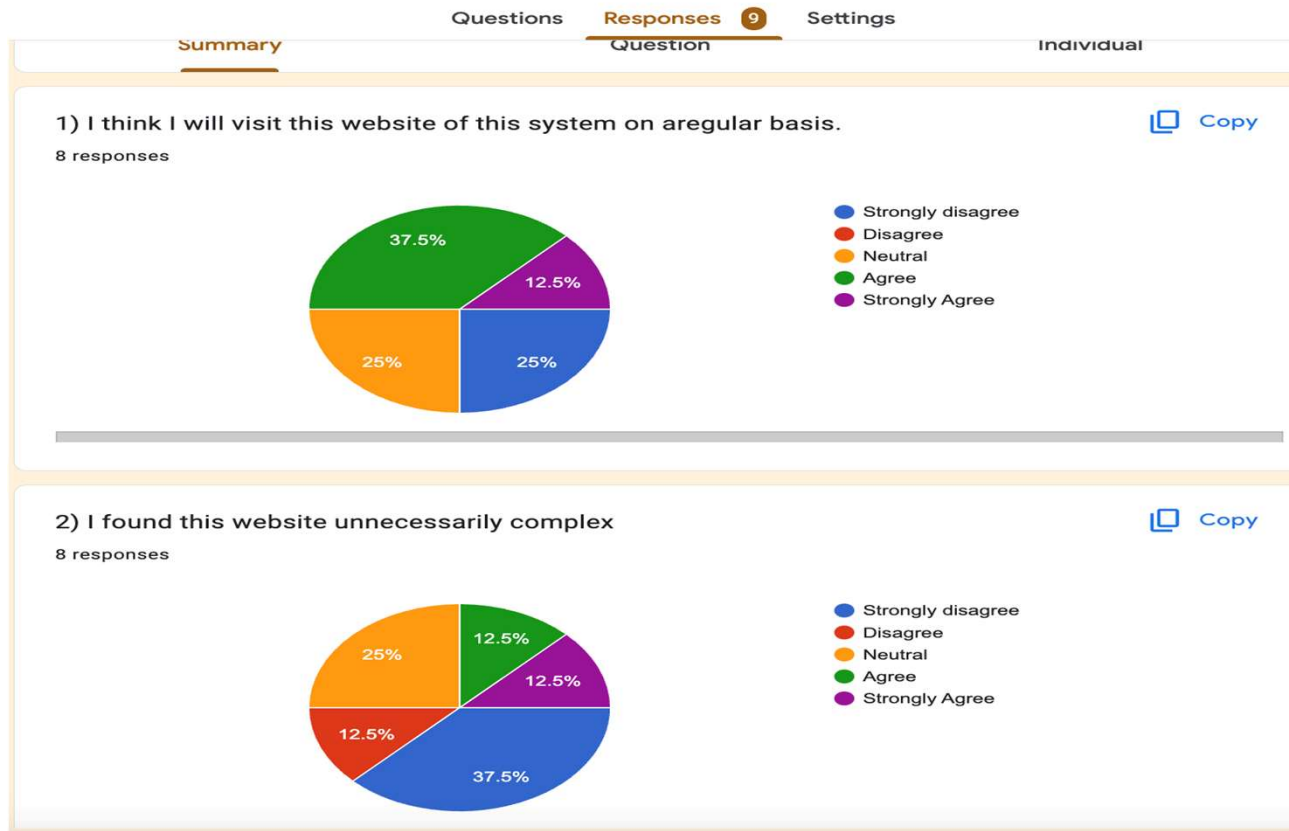
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

2) I found this website unnecessarily complex

- ☐ Strongly disagree
- ☐ Disagree

USABILITY ASSESSMENT

USABILITY ASSESSMENT



USABILITY ASSESSMENT

Score Calculation from SUS response result

Questions	Frequency	Odd Score	Even Score	Final Odd Score	Final Even Score	Sum	Final SUS Score
Q - 1	1	5		4		4	10
Q - 2	1		2		3	3	7.5
Q - 3	1	5		4		4	10
Q - 4	1		1		4	4	10
Q - 5	1	4		3		3	7.5
Q - 6	1		1		4	4	10
Q - 7	1	4		3		3	7.5
Q - 8	1		1		4	4	10
Q - 9	1	4		3		3	7.5
Q - 10	1		2		3	3	7.5
						Total = 35 * 2.5	87.5

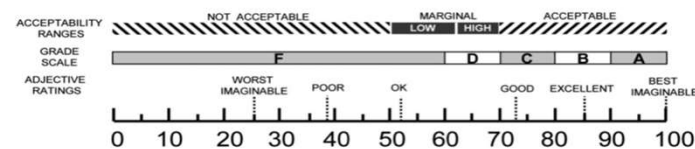
Score Breakdown

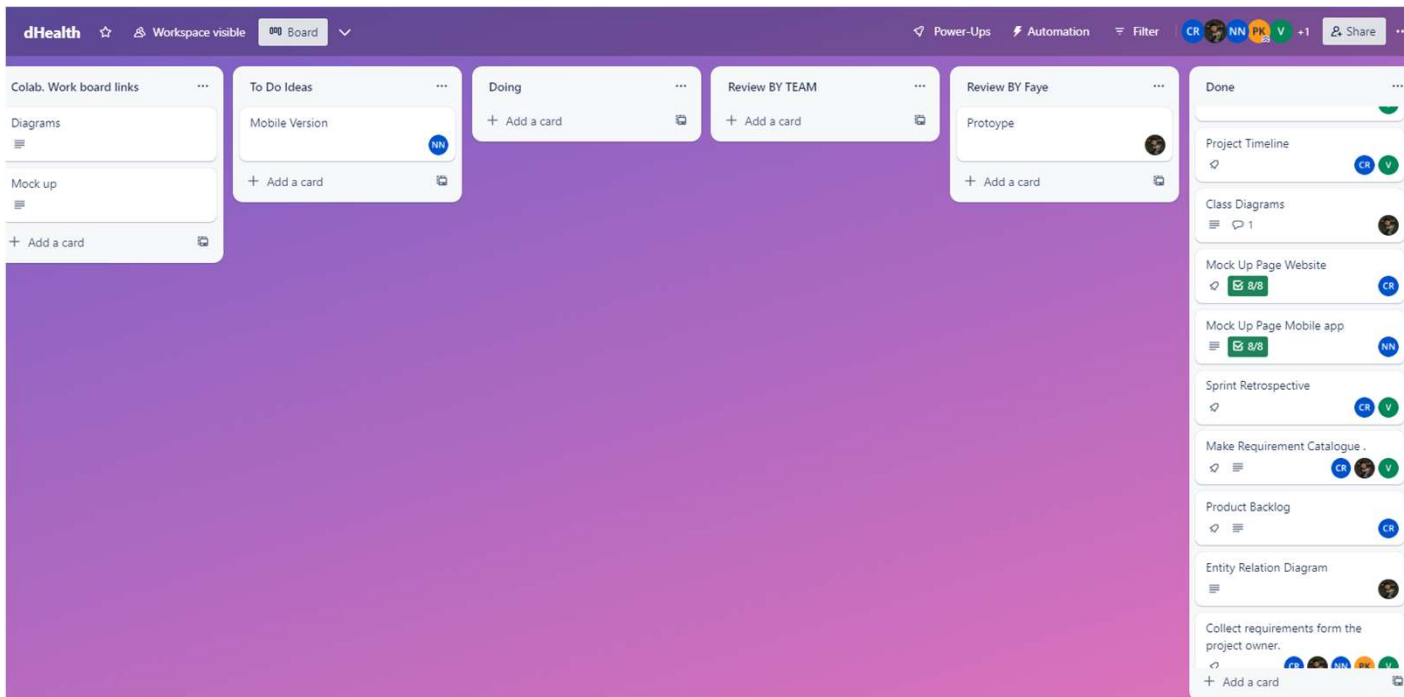
At the end of the 10-question survey, the formula works like this:

- Subtract 1 from the odd question answers,
- Subtract the value of the even question answers from 5.
- Then add up the total score, and multiple it by 2.5.
- The result is a number on a scale of 1 - 100.
- While not a percentage, it gives you a clear way to understand the score

Interpretation of SUS

SUS Score	Grade	Adjectival Rating
> 80.3	A	Excellent
68-80.3	B	Good
68	C	Okay
51-68	D	Awful
<51	F	Poor





AGILE METHODOLOGIES



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	A	B	C	D	E	F	G
1	First name	Last name	Email	Duration	Time joined	Time exited	
2	Somesh Rao	Coka	st122892@ait.as	28 min	1:58 PM	2:26 PM	
3	Lakash	Maharjan	st123187@ait.as	28 min	1:58 PM	2:26 PM	
4	Faye	Simon	st123452@ait.as	17 min	2:06 PM	2:23 PM	
5	Vidath	Singarapu	st122909@ait.as	24 min	2:02 PM	2:26 PM	
6	Nyein Chan	Win Naing	ncwn*****@***.c	22 min	2:02 PM	2:24 PM	
7							
8							
9							
10							
11							

AGILE METHODOLOGIES

2023-04-22 18:07 Team Meeting #11 - Attendance Report ☆ 📁 ☁

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A1 ▾ | fx First name

	A	B	C	D	E	F	G
1	First name	Last name	Email	Duration	Time joined	Time exited	
2	Somesh Rao	Coka	st122892@ait.asia	1 hr 45 min	6:07 PM	7:52 PM	
3	Pyae Sone	Kyaw	st123225@ait.asia	15 min	6:54 PM	7:09 PM	
4	Lakash	Maharjan	st123187@ait.asia	1 hr 45 min	6:07 PM	7:52 PM	
5	Vidath	Singarapu	st122909@ait.asia	1 hr	6:07 PM	7:07 PM	
6	Nyein Chan	Win Naing	ncwn*****@***.com	24 min	6:10 PM	6:34 PM	
7							
8							
9							
10							
11							

AGILE METHODOLOGIES

TASK No.	TASK NAME	SPRINT #	ASSIGNED TO	HOURS SPENT
1	Project overview	Sprint 1	Lakash Maharjan	0.5
2	Project charter	Sprint 1	Vidath Singarapu	1.5
3	Project timeline	Sprint 1	Vidath Singarapu	0.75
4	High level requirement	Sprint 1	Somesh Rao Coka	2
5	Use case description	Sprint 1	Somesh Rao Coka	2
6	Use case Diagram	Sprint 1	Lakash Maharjan	1
7	Work breakdown structure	Sprint 1	Nyein Chan Win Naing	2
8	Managing Kanban board	Sprint 1	Nyein Chan Win Naing	0.5
9	Gantt chart	Sprint 1	Pyae Sone Kyaw	1.5
10	Sprint#2 over view	Sprint 2	Lakash Maharjan	0.5
11	Project timeline	Sprint 2	Vidath Singarapu	1
12	Activity Diagram	Sprint 2	Vidath Singarapu	2
13	Entity relation Diagram	Sprint 2	Lakash Maharjan	3
15	Sequence Diagram	Sprint 2	Pyae Sone Kyaw	2
16	Mockup website design	Sprint 2	Somesh Rao Coka	5

TEAMWORK

17	Retrospective	Sprint 2	Somesh Rao Coka	1
18	Gantt chart	Sprint 2	Vidath Singarapu	1.5
19	Burndown chart	Sprint 2	Nyein Chan Win Naing	2
20	Product Backlog	Sprint 3	Somesh Rao Coka	2
21	Technical design	Sprint 3	Somesh Rao Coka	1
22	About Product/ project	Sprint 3	Somesh Rao Coka	0.5
23	Prototype	Sprint 3	Lakash Maharjan	4
24	User Assessbility	Sprint 3	Vidath Singarapu	1.5
25	Mobile version of mockup	Sprint 3	Nyein Chan Win Naing	2

TEAMWORK

AGILE PRINCIPLES AND VALUES PRACTICED IN OUR PROJECT

Based on what we have worked on for our project, here are some Agile principles and values that have been practiced:

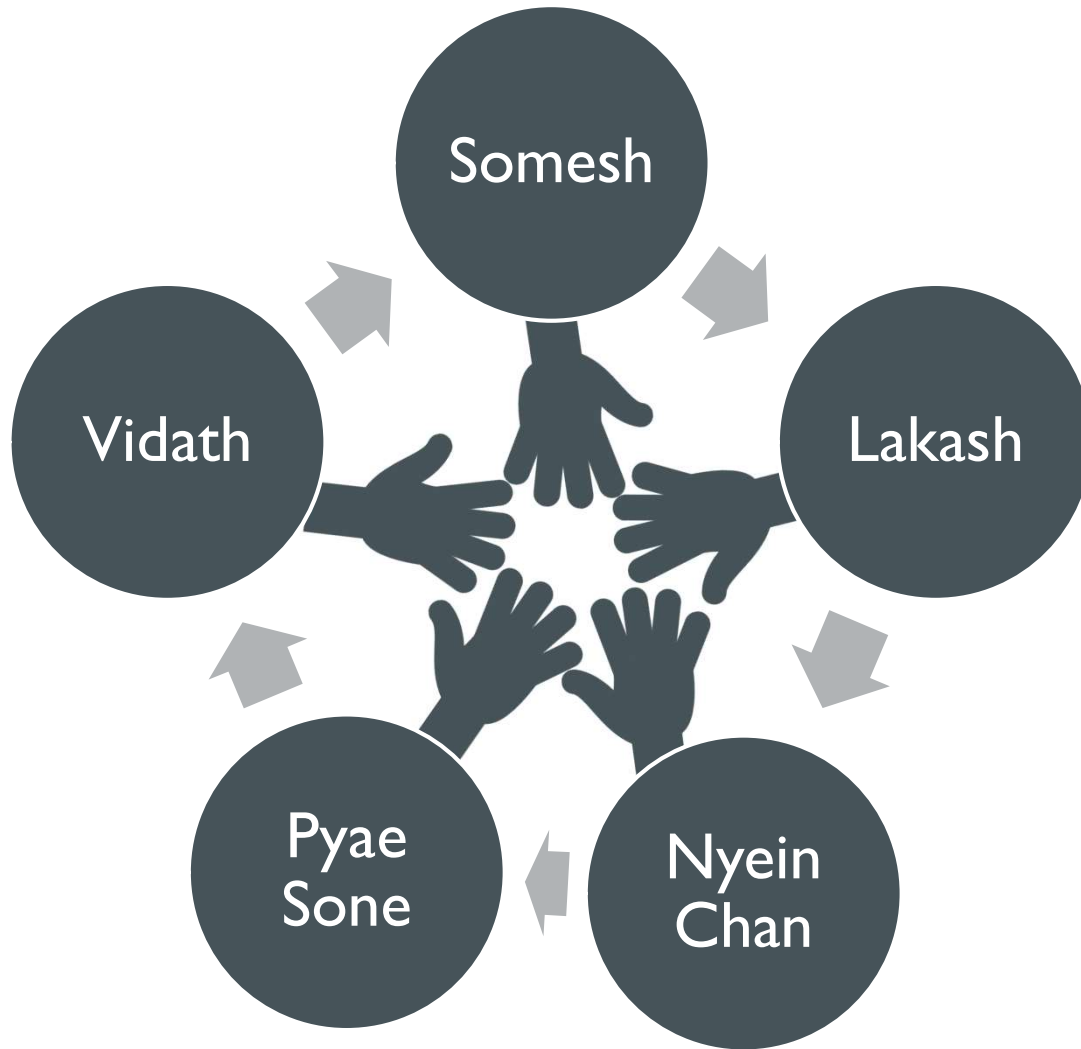
- 1. Individuals and interactions over processes and tools: The project team as a whole has emphasized collaboration and communication among team members over rigid processes and tools.
- 2. Working software over comprehensive documentation: The team has prioritized producing working software over extensive documentation, while still ensuring that important information was properly documented.
- 3. Customer collaboration over contract negotiation: All the team members have worked closely with the client/product owner throughout the project, seeking frequent feedback and making adjustments as necessary to ensure that the end product met the client's needs.
- 4. Responding to change over following a plan: The team has been flexible and adaptable to changes in project requirements, adjusting the plan as necessary to accommodate new information or changing priorities.

AGILE PRINCIPLES AND VALUES PRACTICED IN OUR PROJECT(CON'TD)

- 5. Emphasis on face-to-face communication: The team has prioritized face-to-face communication to promote collaboration and ensure that everyone was on the same page.
- 6. Iterative and incremental development: The team has broken down the project into smaller, more manageable chunks, developing and testing each piece incrementally to ensure that the end product met the client's needs.
- 7. Continuous improvement: The team as a progressive engine has sought to continuously improve the development process, seeking feedback from team members and the client and making adjustments as necessary to improve efficiency and quality.

CONCLUSION

- Collaborating closely with the Product Owner helped us gain a deep understanding of project requirements
- Applying Agile methodology in a highly effective manner
- Using Jira software to create detailed user stories to refine our approach and streamline development process
- Importance of time management in sprint planning
- Careful allocation of time and resources helped us stay on track and meet our goals within the given timeframe
- Using a Burndown chart to measure progress during each sprint allowed us to identify issues and areas requiring further attention
- Comprehensive learning experience covering a wide range of skills and competencies
- Gained valuable insights into building and maintaining strong relationships with clients, managing time effectively, and performing mockups and prototyping with confidence and precision
- These skills are invaluable to the team and will serve well in future endeavors.



OUR TEAM



THANK YOU