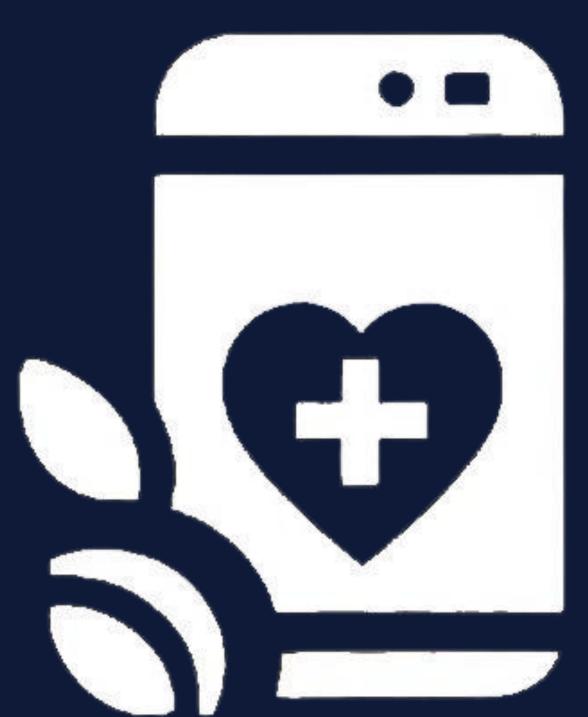# uSpark
AI Medical Assistor

Sprint 1 Presentation

Team 1 – Rush Hour
CS691
March 2025

AGENDA

Team :

- Roles and Responsibilities
- Improvements

Project Overview:

- Problem Statement
- Project Description
- Working Agreement
- Personas
- Product Design
- MVP Design

Technology:

- **Technologies**
- **Algorithms**
- **Diagrams**

Product Backlog

Sprint Backlog:

- Backlog
- Test Cases
- Completed
- Not Completed

Sprint 1 Metrics:

- Velocity
- Burndown Chart
- Committed Ratio

Sprint 1 Retrospective

Sprint 2 Planning

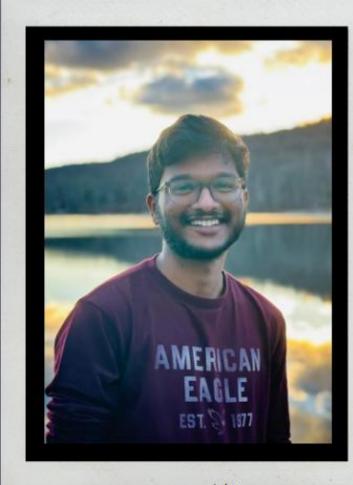## Product Demo

FULL STACK TEAM

Avinash Manchala
Full Stack Developer/ UI Designer

Rathan Jayanath Singavarapu
Team Lead/Scrum Master/Full
StackDeveloper

Koundinya Pidaparthy
Lead Full StackDeveloper

Sairam Maddela
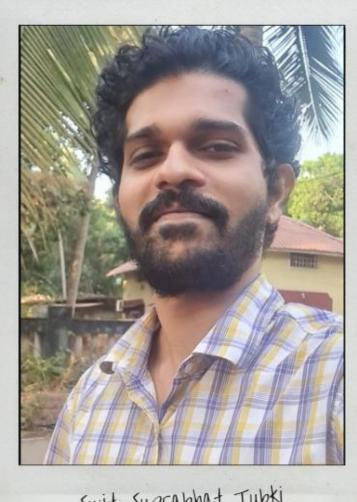Full Stack Testing Engineer

ML AI TEAM

Pranay Kumar Reddy
Lead AI, ML Engineer

Uday Kumar
AI, ML Engineer/Tester

Murali Kummari
AI, ML Engineer/Tester

Sujit Suprabhat Tubki
Tester/Quality Assurance

Improvements from professor

- Removed the Jira Screenshots
- Made slides to communicate what needs to be delivered for each sprint

PROBLEM STATEMENT

Continuous Medical Assistance is one of a non-negotiable requirement these days and it can't be ignored. It is tedious to manage and store data related to a diagnosis of a patient for hospitals and for the patient as well. A simplified way of managing health care is needed, which can be achieved through AI chatbot and smart data storage system and like wise professionals in the medical sector can use a trained ML based algorithm service to reduce manual effort in the patient diagnosis.
This creates a hassle-free environment for both patient and doctors.

PROJECT DESCRIPTION

A robust approach to ease the process of health care and management with just one click!

➜ "uSpark" is an Intelligent full stack application incorporated with machine learning that is an ultimate go-to point for the users/patients for all their healthcare related issues. uSpark allows users to schedule appointments in a hassle-free manner.

➜ These appointments can be virtual or in-person using "Uheal" a smart chatbot in the application that diagnoses the patient condition with the help of few questions. uSpark stores all the assessment details of the patient for further usage.

➜ Doctors can use uSpark as their personal virtual assistant that helps them in their work for managing appointments and patients records. It provides doctors with "Useg" a well-trained ML algorithm that precisely processes bio-medical images that produces an output

uSpark Application

FEATURE 1

BOOK APPOINTMENTS!!

uSpark allows users to make appointments which can be in-person or virtual based on their availability and doctor's availability , in contrast to the traditional way of making appointments

FEATURE2

HOSPITAL RECOMMENDATIONS

Users can now see recommendations of hospitals that might be suitable for their issue. These recommendations on their assessment done via a series of questions asked by our chatbot "Uheal"
Distance from Hospital, working hours can be seen.

FEATURE 3

CHATBOT – Uheal

uHeal conducts assessment for the patients with the help of series of questions and also gives few preventive measures and also it makes appointments for the user by giving recommendations about hospitals, in contrast to traditional method of searching hospitals

FEATURE 4

ONE CARD

uHeal stores the details of the health issue of the patient which is obtained from the conducted assessment, all the assessment details are saved on ONE CARD along with the date of assessment. One card involves patient's assessment details, insurance details, personal details and a QR code that is used to share the ONE CARD, this completely eliminates the need for physical documents to store information.

FEATURE 5: Useg

Useg is an ML algorithm that is used by doctors as a part of their diagnosis.
This makes their work easier and helps them to narrow down the issue in a much quicker way

Team Working Agreement

Link:
[Team working agreement](#)

CS 691 Capstone Project

Team – 1: Rush Hour

Team Working Agreement

To produce a viable result at the end of the project duration is the aim by w team "Rush Hour" is driven by. Our sole purpose is to give a working produc capable of handling real life scenarios so that it ultimately leads to custom satisfaction. We as a team understand the need to work together to make t project happen. We strive to give our best to meet the pre-decided plans, commitments, goals. Individually, we are responsible to the tasks that have assigned to us and will work to the best of our capacity to prioritize the suc the team and to achieve the goal of making our product "uSpark"

Team Rush Hour

As a part of the project and the norms associated to it, we have decided fev that are incorporated into the team which ensures the success of the team policies/terms have been discussed in the agreement.

Terms of Agreement:

Individual Accountability:

As an individual it is one's duty to be responsible and be accountable for th actions. It is an obvious thing that such a big project cannot be completed b single person or a small team. Individual work is important as much as tea in capstone project. This fact is acknowledged by all the team members. We team of eight members understand this and are willing to take responsibili work and actions through the course of this project.

In all the discussions team members are expected to bring something to th that adds value to the team and the project. We as a team recognize the im of our own self and our peers as well in the team.

Communication and Resource Sharing:
Interaction in the team makes a whole lot of difference when a complex pr progress. This makes many things like idea analysis, brain storming, planni easier and fluent. It is understood that the team assembled has members t

belong to various demographic areas, based on this the technical resources like Laptops, mobiles or other software devices, software they provide to the team might vary. To make the learning and the working more generic we decided to employ a shared resource system so that all can have access to them.

We use Zoom, WhatsApp as our primary way to communicate within the team. For resource sharing we use google docs, word documents are uploaded to a private google drive space which can be accessed only by the team members. All other working software and tools like figma, canva, jira, GitHub can be accessed by the team.

Communication plays an integral part in any team, the team members understand this and are open towards any discussion as a whole team or needed divisions of the team. All the team members agree to be available to rest of the team, so that the work doesn't get stuck at any point.

Team Division and Synchronization:

After finalizing the project idea and the features that are included, we have decided to split the team in to two divisions namely ML/AI team and Full Stack team. "Lead Developer" of each team is head of the their team. This division was done in the best interest of the application and this segregates the task for each division.

This might lead to few mishaps or disturbances in terms of synchronization when work from both the fronts are combined together. The team is expected to understand this and work bearing this in mind as any decision in one team can change the way in which the other team works. The work done one team must compliment the work done by other team, we agree to this and will strive to do the same in the duration of the project.

Participation:

A team of eight member is expected to give a viable output at the end of the project and due to this there might occur two completely contrast scenarios. First one, a particular team member is burdened with a lot of work and has no time to help others. Team members are to understand this situation and are expected to provide with needed space to that person. On the contrary, if a team member has not been assigned any other work, it is to be noted that he must take stand and try to help the team in any way possible. Active participation of the entire team is expected at all times and this ensures on time completion of works.

Openness and Helping:

It is understood that all the team members are acquainted with their own skill sets and might be lacking the skill sets that are needed in the project. The team should

Persona 1

About

Age: 40
Gender: Female
Occupation: Senior Radiologist
Location: NewYork
Hospital: NYC Health + Hospitals

DR. SARAH JOHN

DESCRIPTION

A dedicated medical professional striving to provide accurate diagnoses while managing time efficiently, seeking AI-driven support to enhance patient care.

CHALLANGES

- Spends too much time manually reviewing medical images.
- Struggles with unstructured patient history and reports.
- Managing appointments and last-minute schedule changes is inefficient.

GOALS & NEEDS

- Wants AI-powered tools to assist in faster and more accurate diagnostics.
- Prefers a centralized system to access patient history easily.
- Needs a well-organized appointment and consultation management system.

Persona 2

About

Age: 45
Gender: Male
Occupation: Bank Manager
Company: TD Bank
Location: New Jersey

MARK THOMPSON

DESCRIPTION

A devoted parent striving to manage his family's health efficiently, looking for a hassle-free way to keep medical information organized and accessible.

CHALLANGES

- He struggles to keep track of family health records.
- Maintaining work and health care responsibilities.
- Lack of a system to monitor recurring health issues.

GOALS & NEEDS

- Wants the best way to access and organize health information.
- Needs a straightforward approach to track symptoms and past treatments.
- Want more efficient way to navigate healthcare for his family.

Persona 3

About

Age: 38
Gender: Female
Occupation: Lab Technician
Hospital: NYC Health + Hospital
Location: New York

EMILY CARTER

DESCRIPTION

A diligent coordinator responsible for keeping healthcare operations smooth, looking for an efficient way to manage appointments and patient records seamlessly.

CHALLANGES

- Managing a large volume of patient appointments manually.
- Ensuring that doctors' schedules are not overbooked.
- Keeping track of patient medical records efficiently.

GOALS & NEEDS

- Wants a streamlined system to handle patient bookings and cancellations.
- Needs an easy way to access inbound and outbound patient records.
- Requires integration with hospital management systems (HMS).

Persona 4

About

Age: 32
Gender: Female
Occupation: Software Employee
Company: Accenture
Location: Brooklyn

LISA BROWN

DESCRIPTION
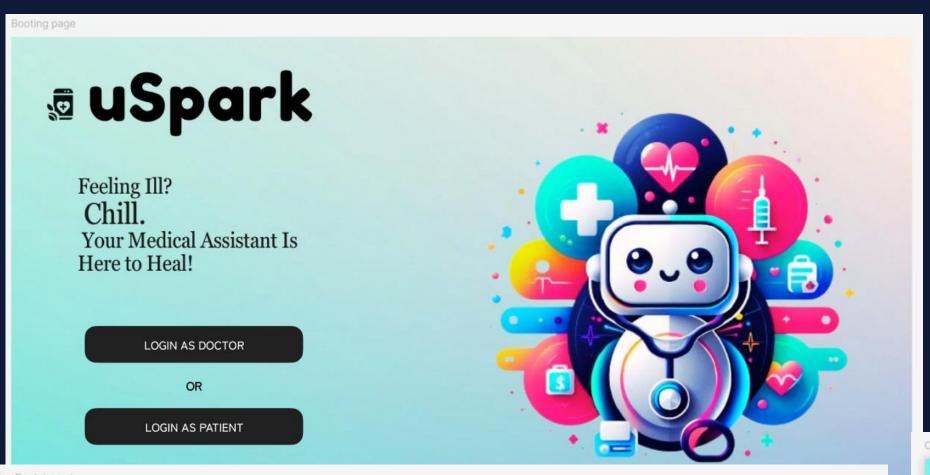
An individual who values convenience and reliable health guidance, looking for a simple way to make informed healthcare decisions without unnecessary hospital visits.
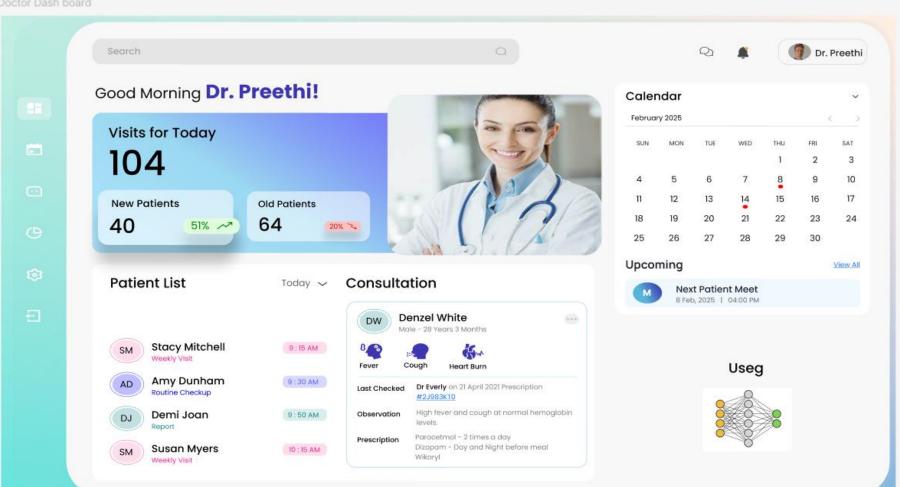
CHALLANGES
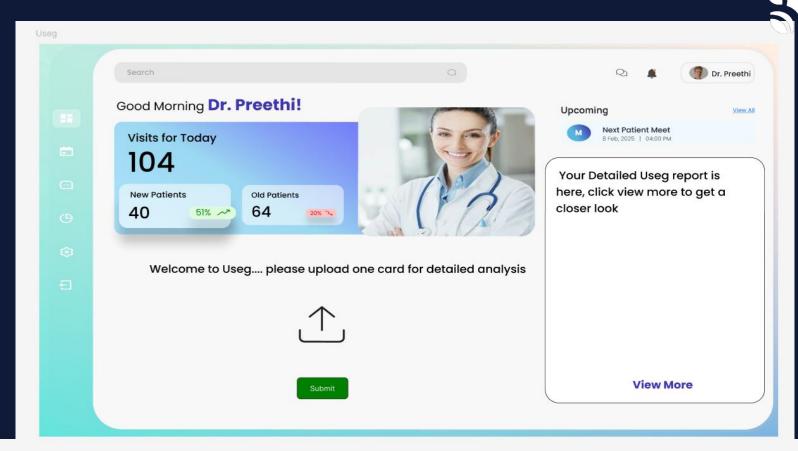
- Doesn't visit hospitals often but needs occasional medical guidance.
- Wants reliable health information instead of Googling symptoms.
- Prefers flexible, on-demand healthcare services.

GOALS & NEEDS

- Wants access to trusted medical advice without needing an appointment.
- Needs a way to consult a doctor only when necessary.
- Require better way to understand symptoms and health concerns.

Product Design

MVP Design

Old Patient Dashboard

Welcome User!

uSpark

- Dashboard
- Profile
- Appointment
- Setting

Take Initial Assessment
General

Upload Previous reports
5 Reports

Previous Assessments
2 Assessments

Previous Visits

Date	Doctor	Treatment
12 Jan 2025	Dr.Jacob Ryan	Check up
12 Jan 2025	Dr.Jacob Ryan	X-Ray

Ongoing Treatments

Fever:
Paracetamol
Headache:
Dart

Calendar

February 2025

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Medication

Fenofibrate (48mg)
Take With Food Every Morning.
Last Refil 21/01/2023

Alfuzosin (10mg)
Take 1 With Food Twice A Day And Avoid
Drinking Aalcohol For 2 Hours After
Last Refil 27/01/2023

Top Health news today

A new HMPV virus identified
It's always hard to be the only person in a
company who is responsible for product
design. Your day can be insanely...

March 01, 2021   440

**Daily omega-3 supplements and
regular exercise may slow aging**

March 01, 2021   440

Chat With Us

- Log Out
- Delete Profile

One Card

Welcome User!

uSpark

- Dashboard
- Profile
- Appointment
- Setting

About Patient:

Name: Kunal pandey   Age: 27   Gender: Male

Email   Phone Number   Address

johnsmith@gmail.com   +1 5514357894   842 communipaw avenue, jersey city

Insurance Details:

Insurance Provider: United Health Care   Insurance ID: UA12379908

Intial Assesment Results:

10 jan 2025 –patient having cough and cold
and mild symptoms of fever.

For Detailed Diagnostics of the patient:

Past Visit History

Date	Doctor	Treatment	Charges	Actions
12 Jan 2025	Dr.Jacob Ryan	Check up	$145	
12 Jan 2025	Dr.Jacob Ryan	X-Ray	$52	

- Log Out
- Delete Profile

Technologies and Tools

Mongo DB

Amazon S3

Jira

Docker

Node JS

React

Python

AWS

MERN Stack

Faiss Vector Database

Figma

VS code

Redux

Axios

Material UI

Pytorch

Flask

TensorFlow

GitHub

Postman

Full Stack /ML AI Programming Languages

Libraries, Algorithms and Frameworks, Database

Tools

Algorithms And Models:

- Rag - Retrieval-Augmented Generation

- Densnet

- Resnet

- DialoGPT

Diagrams

Architecture Diagram

Context Diagram

Sequence Diagram

State Diagram

Class Diagram

patient

pk	patient_id int not null
	p_age INT not null
	p_sex INT not null
	p_weight INT not null
	p_health_issues varchar(200) not null
	p_images

Doctor

pk	doctor_id int not null
	d_specialization varchar(200) not null
	d_experiance INT not null
	d_verification_status varchar(200) not null

Insurance

pk	insurace_id INT not null
	provider_name varchar(200) not null
	start_date Datetime not null
	end_date Datetime not null

Product Backlog

S.NO	USER STORIES	ACCEPTANCE CRITERIA	FEATURE	STORY POINTS
US_1	As a patient, I want to sign up using email, phone, or social media so that I can access the application.	Given a patient accesses the signup page, When they enter valid credentials (email, phone, or social media), Then they should successfully create an account and log in.	Patient sign-up via email, phone, or social media	3
US_2	As a patient, I want to reset my password in case I forget it.	Given a patient clicks on "Forgot Password," when they enter a registered email or phone, then they should receive a reset link or OTP.	Password reset functionality	
US_3	As a patient, I want to create and update my profile with personal details, and insurance information.	Given a patient is logged in, when they update personal, medical, or insurance details, then the changes should be saved.	Patient profile management	
US_4	As a patient, I want to view my past appointments and prescriptions in my profile.	Given a patient accesses their profile, when they navigate to "Appointments" or "Prescriptions," then they should see a history of their records.	View past appointments & prescriptions	
US_5	As a patient, I want to store my past medical assessments and reports for future reference.	Given a patient uploads a report, when the file is successfully processed, then it should be saved securely	Upload & store medical assessments and reports	
US_6	As a patient, I want to share my medical history with doctors for better diagnosis.	Given a patient selects a doctor, when they choose to share medical history, then the doctor should be granted access.	Share medical history with doctors	
US_7	As a patient, I want to schedule an appointment with a doctor based on available time slots.	Given a patient search for a doctor, when they select a time slot and confirm, then the appointment should be booked.	Appointment scheduling via Uheal.	
US_8	As a patient, I want to choose between virtual or in-person appointments.	Given a patient is booking an appointment, when they select "Virtual" or "In-Person," then the system should confirm their choice.	Choose virtual or in-person consultation via Uheal.	

US_9	As a patient, I want to receive appointment confirmation via email or SMS.	Given a patient books an appointment, when it is confirmed, then they should receive an email or SMS notification.	Appointment confirmation via email/SMS via Uheal.	
US_10	As a patient, I want to reschedule or cancel an appointment.	Given a patient has an appointment, when they request to reschedule or cancel, then the system should update accordingly.	Reschedule or cancel appointments via Uheal.	
US_11	As a patient, I want to search for doctors based on specialty, availability, and location.	Given a patient is on the search page, when they filter by criteria, then only matching doctors should be displayed.	Search doctors based on specialty, availability, and location via Uheal.	
US_12	As a patient, I want to see ratings and reviews for doctors before booking an appointment	Given a patient views a doctor's profile, when reviews exist, then they should be displayed.	View doctor ratings and reviews via Uheal.	
US_13	As a patient, I want to receive a preliminary diagnosis from application based on my symptoms.	Given a patient interacts with the chatbot, when they provide symptoms, then the chatbot should generate a preliminary diagnosis.	AI-based preliminary diagnosis via Uheal.	
US_14	As a patient, I want suggestions whether I need an in-person visit, virtual consultation, or self-care.	Given a patient enters symptoms, when the AI assesses them, then it should suggest self-care, virtual, or in-person visits.	AI-based consultation suggestions via Uheal.	
US_15	As a patient, I want to join a video call for virtual consultations	Given a patient has a virtual appointment, when they click "Join Call," then they should be connected.	Video call for virtual consultations via Uheal.	
US_16	As a patient, I want recommend doctors based on my condition.	Given a patient provides symptoms, when AI processes the data, then it should recommend the best doctor.	AI doctor recommendations based on condition.	

US_17	As a patient, I want to link my health insurance to cover consultation charges.	Given a patient has insurance, when they enter valid details, then the system should verify and apply coverage.	Link health insurance for payment coverage	5
US_18	As a doctor, I want to register and submit my credentials for verification.	Given a doctor registers, when they submit credentials, then the system should send it for admin approval.	Doctor registration and Onboarding	5
US_19	As a doctor, I want to login to my profile, and view my details	Given a doctor logs in, they should be directed to their dashboard and should be able to view their profile details.	Doctor profile management	3
US_20	As a doctor, I want to see a list of my upcoming and past appointments.	Given a doctor is on the dashboard, when they check "Appointments," then they should see scheduled consultations.	Appointment Management	
US_21	As a doctor, I want to manage my patients' health records and notes.	Given a doctor accesses a patient profile, when they add or update notes, then the system should store the data securely.	Manage patient health records and notes can be done with one card	
US_21	As a doctor, I want to upload medical images (X-rays, MRIs, CT scans) for AI processing.	Given a doctor uploads an image, when AI processes it, then results should be displayed.	Upload medical images (X-rays, MRIs, CT scans) for AI processing via Useg.	
US_22	As a doctor, I want to get heat maps and segmented outputs for easier diagnosis.	Given an image is processed, when AI detects anomalies, then the doctor should receive a heatmap/segmentation output.	AI-based heat maps & segmented output via Useg.	8
US_23	As a doctor, I want to get potential diagnoses based on biomedical images.	Given a doctor uploads an image, when AI evaluates it, then the system should provide diagnostic insights.	AI-generated potential diagnosis based on biomedical images via Useg.	
US_24	As a doctor, I want to receive notifications when a patient books or cancels an appointment.	Given a patient books or cancels, when the status changes, then the doctor should receive a notification.	Receive notifications for appointments	
US_25	As an admin, I want to manage and verify doctors' credentials before they are approved.	Given a doctor submits credentials, when the admin reviews them, then they should be able to approve or reject the request.	Manage doctor verification & approval via Admin dashboard.	5
US_26	As an admin, my dashboard needs access by me only not by others for security purposes.	Given an admin only accesses the dashboard, when they check logs, then they should see activity reports.	Monitor system activity & security	5

SPRINT 1 STORIES

S.NO	USER STORIES	ACCEPTANCE CRITERIA	FEATURE	STORY POINTS
US_01	As a patient, I want to sign up using email, phone, or social media so that I can access the application.	Given a patient accesses the signup page, When they enter valid credentials (email, phone, or social media), Then they should successfully create an account and log in.	Patient sign-up via email, phone, or social media	3
US_03	As a patient, I want to create and update my profile with personal details and insurance information.	Given a patient is logged in, when they update personal, medical, or insurance details, then the changes should be saved.	Patient profile management	4
US_18	As a doctor, I want to register and submit my credentials for verification.	Given a doctor registers, when they submit credentials, then the system should send it for admin approval.	Doctor registration and Onboarding	5
US_22	As a doctor, I want to get heat maps and segmented outputs for easier diagnosis.	Given an image is processed, when AI detects anomalies, then the doctor should receive a heatmap/segmentation output.	AI-based heat maps & segmented output via Useg.	8
US_25	As an admin, I want to manage and verify doctors' credentials before they are approved.	Given a doctor submits credentials, when the admin reviews them, then they should be able to approve or reject the request.	Manage doctor verification & approval via Admin dashboard.	5
US_19	As a doctor, I want to login to my profile, and view my details	Given a doctor logs in, they should be directed to their dashboard and should be able to view their profile details.	Doctor profile management	3

SPRINT 1 TEST CASES

US_19: As a doctor, I want to login to my profile, and view my details.
.

TC	Test Case	Steps	Expected Result	Status	Execution date	Tester
TC_19_01	Load Login Page	1. Navigate to /login 2. Check if the login page loads successfully	Login page should be displayed with all necessary elements visible	Pass	Feb-20	Uday
TC_19_02	Invalid Login	1. Enter an incorrect email and password 2. Click the login button	An error message should be displayed indicating incorrect credentials	Pass	Feb-20	Uday
TC_19_03	Valid Login	1. Enter a valid email and password 2. Click the login button 3. Wait for authentication and redirection	User should be successfully logged in and redirected to the onboarding page or dashboard	Pass	Feb-20	Uday

Us_01 As a patient, I want to sign up using email, phone, or social media so that I can access the application.

TC	Test Case	Steps	Expected Result	Status	Execution date	Tester
TC_01_01	Load Signup Page	1. Navigate to /signup 2. Check if the signup page loads successfully	Signup page should be displayed with all necessary elements visible	Pass	Feb-22	Sairam
TC_01_02	Password Mismatch	1. Enter a valid name and email 2. Enter two different passwords 3. Click the signup button	An error message should be displayed indicating that passwords do not match	Pass	Feb-22	Sairam
TC_01_03	Successful Signup	1. Enter a valid name, email, and matching passwords 2. Click the signup button 3. Wait for redirection	User should be successfully registered and redirected to the onboarding page	Pass	Feb-22	Sairam
TC_01_04	Required Fields	1. Click the signup button without entering any details	Error messages should be displayed indicating that all fields are required	Pass	Feb-22	Sairam
TC_01_05	Google Signup	1. Click the 'Sign up with Google' button 2. Wait for Google OAuth to initiate	User should be redirected to Google's authentication flow	Pass	Feb-22	Sairam
TC_01_06	Apple Signup	1. Click the 'Sign up with Apple' button 2. Wait for Apple OAuth to initiate	User should be redirected to Apple's authentication flow	Pass	Feb-22	Sairam

US_18: As a doctor, I want to register and submit my credentials for verification.

TC	Test Case	Steps	Expected Result	Execution Status	Execution date	Tester
TC_18_01	Signup and Complete Onboarding	1. Navigate to the signup page and signup with new user 2. Click the signup button 3. fill in onboarding details and Submit the onboarding form	User should be successfully signed up and redirected to the dashboard with a welcome message	Pass	Mar-03	Sujit
TC_18_02	Redirect Unauthenticated Users	1. Open a new browser session 2. Directly visit the /onBoarding URL without logging in	User should be automatically redirected to the login page, preventing unauthorized access	Pass	Mar-03	Sujit
TC_18_03	Login and Go to Dashboard	1. Navigate to the login page 2. Enter valid credentials of an already onboarded user 3. Click the login button 4. Verify successful login and redirection to the dashboard	User should be redirected to the dashboard and see a welcome message	Pass	Mar-03	Sujit

US_03: As a patient, I want to create and update my profile with personal details and insurance information.

TC	Test Case	Steps	Expected Result	Execution Status	Execution date	Tester
TC_03_01	Signup and Complete Onboarding	1. Navigate to the signup page and signup with a new user 2. Click the signup button 3. Fill in onboarding details and submit the onboarding form	User should be successfully signed up and redirected to the dashboard with a welcome message	Pass	Mar-05	Sairam
TC_03_02	Redirect Unauthenticated Users	1. Open a new browser session 2. Directly visit the /onBoarding URL without logging in	User should be automatically redirected to the login page, preventing unauthorized access	Pass	Mar-05	Sairam
TC_03_03	Login and Go to Dashboard	1. Navigate to the login page 2. Enter valid credentials of an already onboarded user 3. Click the login button 4. Verify successful login and redirection to the dashboard	User should be redirected to the dashboard and see a welcome message	Pass	Mar-05	Sairam
TC_03_04	Setup and Unlock OneCard	1. Enter a 4-digit PIN 2. Click set PIN button 3. Verify PIN is stored in localStorage 4. Enter PIN and unlock OneCard 5. Verify access to Patient Profile	User should successfully set up and unlock OneCard using the correct PIN	Pass	Mar-05	Sairam

TC_03_05	Submit Initial Assessment	1. Navigate to Initial Assessment 2. Enter details and comments 3. Submit the form	Assessment should be submitted successfully, and confirmation should be visible	Pass	Mar-05	Sairam
TC_03_06	Edit and Save Insurance Details	1. Click the edit icon in insurance details 2. Modify insurance provider, start date, end date, and holder name 3. Click save and verify details are updated	Insurance details should be updated successfully and displayed correctly	Pass	Mar-05	Sairam
TC_03_07	Fetch and Display Health News	1. Check for 'Health Tip of the Moment' 2. Ensure news cards are displayed	Health tips and news cards should be visible	Pass	Mar-05	Sairam
TC_03_08	Navigate and Logout	1. Click the sidebar menu 2. Select logout 3. Verify redirection to login page	User should be logged out and redirected to the login page	Pass	Mar-05	Sairam

SPRINT 1 STORIES COMPLETED AND NOT:

US_ID	User Story	Completed Date	Story Points	Completed
US_01	As a patient, I want to sign up using email, phone, or social media so that I can access the application.		3	3
	ReactJs with Vite for frontend	Feb 16		
	User OnBoarding Flow (Register / Login using Firebase)	Feb 20		
	Creating Documentation for Login and Registration Screens in React and Nodejs	Feb 27		
US_17	As a patient, I want to link my health insurance to cover consultation charges.		5	5
	Test the One Card Flow and landing page flow after login.	Mar 7		
	Create specific routes in backend - One card Questionaries	Mar 7		
	Document the Landing and One Card Pages and routes	Mar 7		
US_18	As a doctor, I want to register and submit my credentials for verification.		5	5
	Routes creation for backend and user validations	Feb 20		
	Doctor Registration and verification process	Feb 20		
	Setting up State management using Redux.	Feb 20		
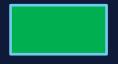
	User OnBoarding Flow (Register / Login using Firebase)	Feb 20		
US_22	As a doctor, I want to get heat maps and segmented outputs for easier diagnosis.		8	8
	Data collection for Image Analysis	Feb 15		
	Processing the data for Image Analysis	Feb 20		
	Prototype Design for Image Analysis	Feb 27		
US_25	As an admin, I want to manage and verify doctors' credentials before they are approved.		5	5
	Admin Portal to control	Feb 20		
	Create Valid schema in the backend	Mar 7		
US_26	As an admin, my dashboard needs access by me only not by others for security purposes.		5	5
	Admin Portal to control	Feb 20		
	Create Valid schema in the backend	Mar 7		
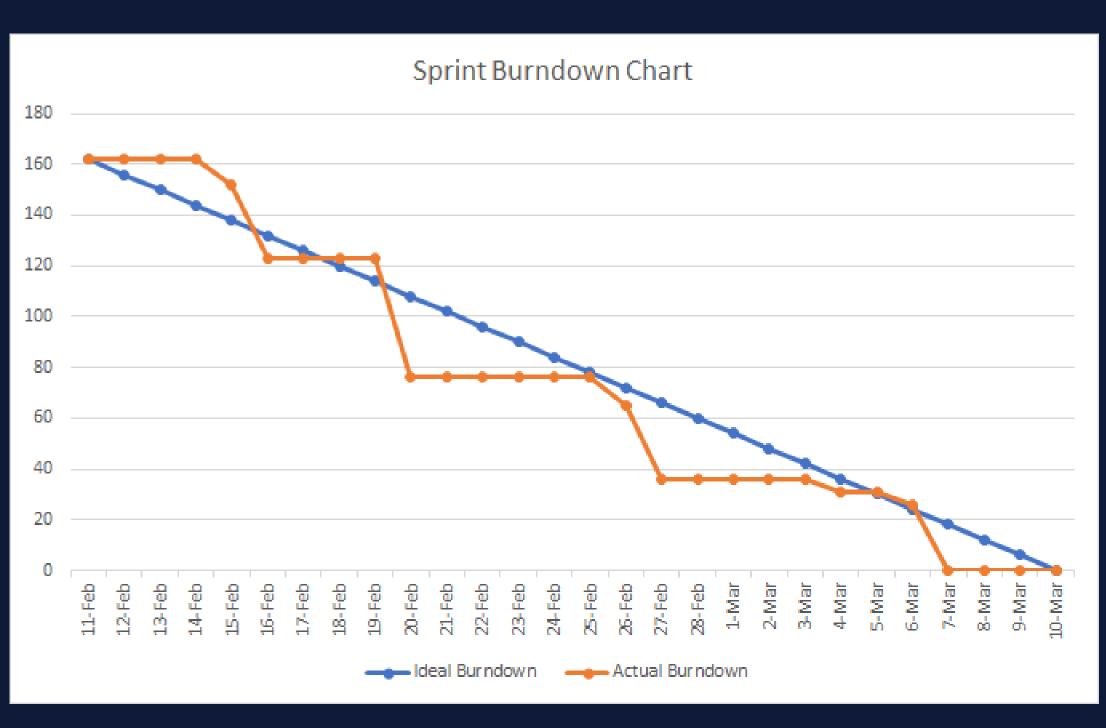
METRICS - BURNDOWN CHART

Sprint Burndown Chart

METRICS - COMMITTED RATIO

Committed Ratio : 100%

Sprint Retrospective:

Sprint Boards ®

CREATE BOARD   BOARD HISTORY   TEAM MEMBERS   ACTIONS TRACKER

Went well 🔓 ➕

work flow integration
No description provided.
🕐 Mar 10, 2025 at 21:46 PM
👤 Avinash Manchala
✏️ Edit   ⊘ Delete   👍 2

Prototype design
The prototype for useg and uheal went well and there was good coordination between team
🕐 Mar 10, 2025 at 21:46 PM
👤 Pranay Kumar
✏️ Edit   ⊘ Delete   👍 6

Collaboration
good team communication and flexibility
🕐 Mar 10, 2025 at 21:47 PM
👤 Sairam Maddela
✏️ Edit   ⊘ Delete   👍 4

Very Good and Friendly.
All the team members helped each other whenever required.
🕐 Mar 10, 2025 at 21:47 PM
👤 Sujit Suprabhat Tubki
✏️ Edit   ⊘ Delete   👍 4

Team lead Help
Insights from team lead helped really well
🕐 Mar 10, 2025 at 21:46 PM
👤 Murali Kummari
✏️ Edit   ⊘ Delete   👍 4

Deployment Process
Deployment Process went well
🕐 Mar 10, 2025 at 21:47 PM
👤 Koundinya Pidaparthy
✏️ Edit   ⊘ Delete   👍 4

team work flow
The overall integration of the ML group and the full stack group looks solid
🕐 Mar 10, 2025 at 21:47 PM
👤 RATHAN JAYANATH
✏️ Edit   ⊘ Delete   👍 6

Leadership
Full stack and ML team leads well directed and helped the team well to be on time .
🕐 Mar 10, 2025 at 21:48 PM
👤 L Uday Kumar Reddy
✏️ Edit   ⊘ Delete   👍 6

Didn't go well 🔓 ➕

Need better models
The model couldn't generate better accuracy with current models. need to research for better models
🕐 Mar 10, 2025 at 21:47 PM
👤 Pranay Kumar
✏️ Edit   ⊘ Delete   👍 5

Structure
The way in which things are done was clumsy at times.
🕐 Mar 10, 2025 at 21:47 PM
👤 RATHAN JAYANATH
✏️ Edit   ⊘ Delete   👍 3

Issues with medical images
The availability data and accessibility to datasets is less. With the existing medical images we have less training data
🕐 Mar 10, 2025 at 21:48 PM
👤 Pranay Kumar
✏️ Edit   ⊘ Delete   👍 5

Work Energy
Sometimes the work energy of the team was low.
🕐 Mar 10, 2025 at 21:49 PM
👤 Sujit Suprabhat Tubki
✏️ Edit   ⊘ Delete   👍 2

Recursive errors
Recursive errors while login and registration setup
🕐 Mar 10, 2025 at 21:47 PM
👤 Koundinya Pidaparthy
✏️ Edit   ⊘ Delete   👍 5

Issues with data
The availability of quality of data for medical conversations are less
🕐 Mar 10, 2025 at 21:48 PM
👤 Murali Kummari
✏️ Edit   ⊘ Delete   👍 3

admin portal access
hard coded my mail for verification requests
🕐 Mar 10, 2025 at 21:48 PM
👤 Avinash Manchala
✏️ Edit   ⊘ Delete   👍 2

Action items 🔓 ➕

Research for models
We need to better research for models with better accuracy and chatbot with better conversational flow
🕐 Mar 10, 2025 at 22:03 PM
👤 Pranay Kumar
✏️ Edit   ⊘ Delete   👍 5

File structure
Need to focus on understanding file structure. So that it is easy in future understanding and development
🕐 Mar 10, 2025 at 22:05 PM
👤 Koundinya Pidaparthy
✏️ Edit   ⊘ Delete   👍 3

testing
need to know more about backend testing
🕐 Mar 10, 2025 at 22:05 PM
👤 Sairam Maddela
✏️ Edit   ⊘ Delete   👍 2

Division and combination
Redoing of work needs to be limited for better results
🕐 Mar 10, 2025 at 22:04 PM
👤 RATHAN JAYANATH
✏️ Edit   ⊘ Delete   👍 4

try to be more focus on merge conflicts after push
No description provided.
🕐 Mar 10, 2025 at 22:05 PM
👤 Avinash Manchala
✏️ Edit   ⊘ Delete   👍 2

maintaining pipelines
Sometimes the code is breaking and unable to login , need to be maintain proper commits.
🕐 Mar 10, 2025 at 22:05 PM
👤 L Uday Kumar Reddy
✏️ Edit   ⊘ Delete   👍 2

Sprint 2 Planning:

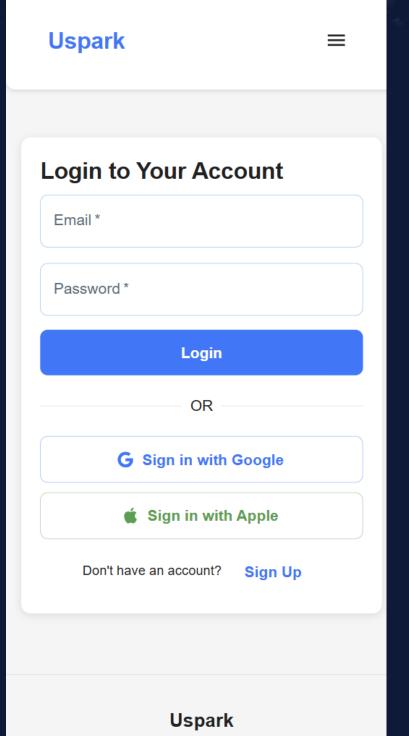| S.NO	USER STORIES	ACCEPTANCE CRITERIA	FEATURE	STORY POINTS
US_2	As a patient, I want to reset my password in case I forget it.	Given a patient clicks on "Forgot Password," when they enter a registered email or phone, then they should receive a reset link or OTP.	Password reset functionality	2
US_5	As a patient, I want to store my past medical assessments and reports for future reference.	Given a patient uploads a report, when the file is successfully processed, then it should be saved securely	Upload & store medical assessments and reports	3
US_7	As a patient, I want to schedule an appointment with a doctor based on available time slots.	Given a patient search for a doctor, when they select a time slot and confirm, then the appointment should be booked.	Appointment scheduling via Uheal.	2
US_8	As a patient, I want to choose between virtual or in-person appointments.	Given a patient is booking an appointment, when they select "Virtual" or "In-Person," then the system should confirm their choice.	Choose virtual or in-person consultation via Uheal.	3
US_9	As a patient, I want to receive appointment confirmation via email or SMS.	Given a patient books an appointment, when it is confirmed, then they should receive an email or SMS notification.	Appointment confirmation via email/SMS via Uheal.	2
US_10	As a patient, I want to reschedule or cancel an appointment.	Given a patient has an appointment, when they request to reschedule or cancel, then the system should update accordingly.	Reschedule or cancel appointments via Uheal.	1

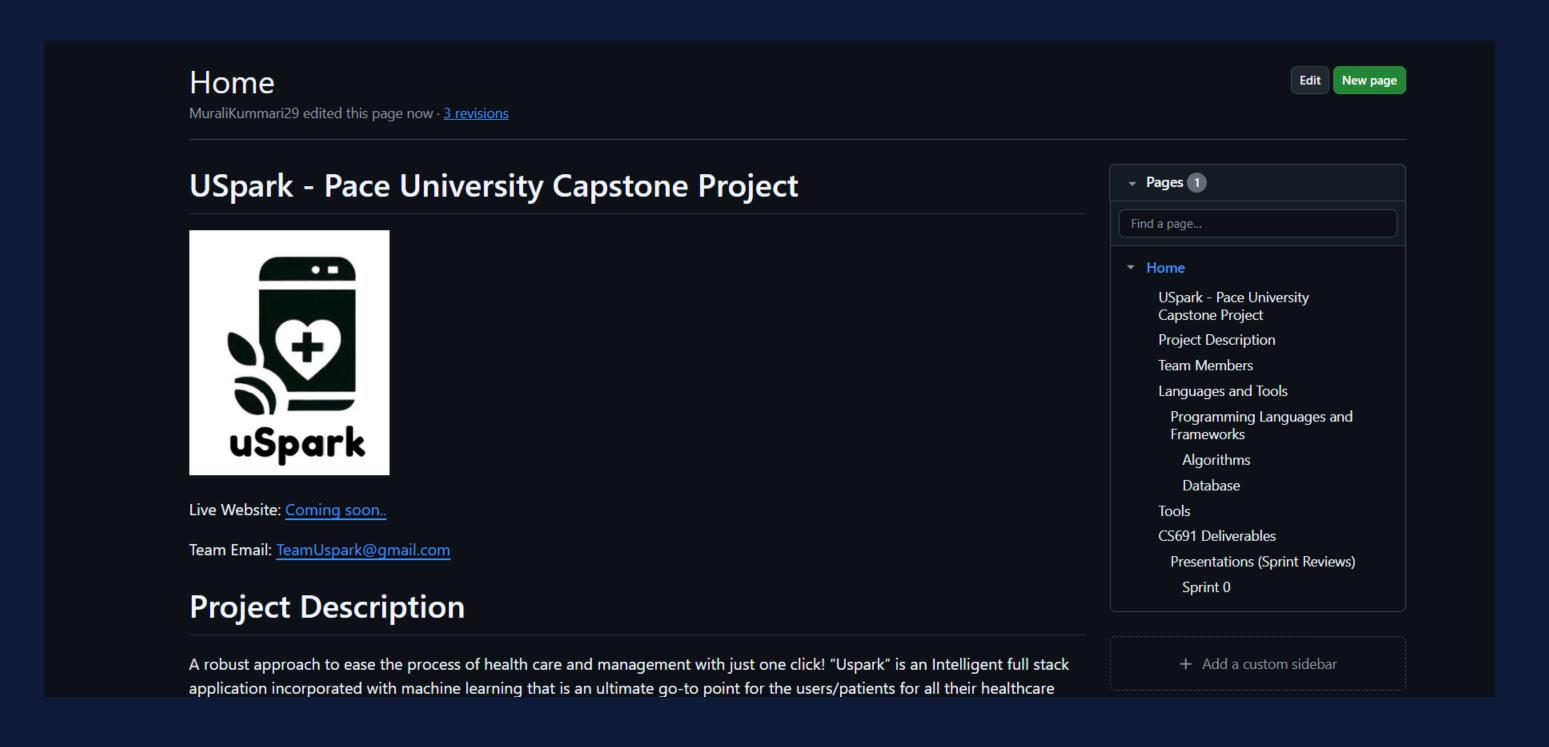| US_13	As a patient, I want to receive a preliminary diagnosis from application based on my symptoms.	Given a patient interacts with the chatbot, when they provide symptoms, then the chatbot should generate a preliminary diagnosis.	AI-based preliminary diagnosis via Uheal.	3
US_16	As a patient, I want recommend doctors based on my condition.	Given a patient provides symptoms, when AI processes the data, then it should recommend the best doctor.	AI doctor recommendations based on condition.	1
US_19	As a doctor, I want to manage my profile, including my specialty, availability, and appointment preferences.	Given a doctor logs in, when they update their specialty, availability, or preferences, then the changes should be saved.	Doctor profile management	2
US_20	As a doctor, I want to see a list of my upcoming and past appointments.	Given a doctor is on the dashboard, when they check "Appointments," then they should see scheduled consultations.	Appointment Scheduling	2
US_21	As a doctor, I want to upload medical images (X-rays, MRIs, CT scans) for AI processing.	Given a doctor uploads an image, when AI processes it, then results should be displayed.	Upload medical images (X-rays, MRIs, CT scans) for AI processing via Useg.	5
US_24	As a doctor, I want to receive notifications when a patient books or cancels an appointment.	Given a patient books or cancels, when the status changes, then the doctor should receive a notification.	Receive notifications for appointments	1
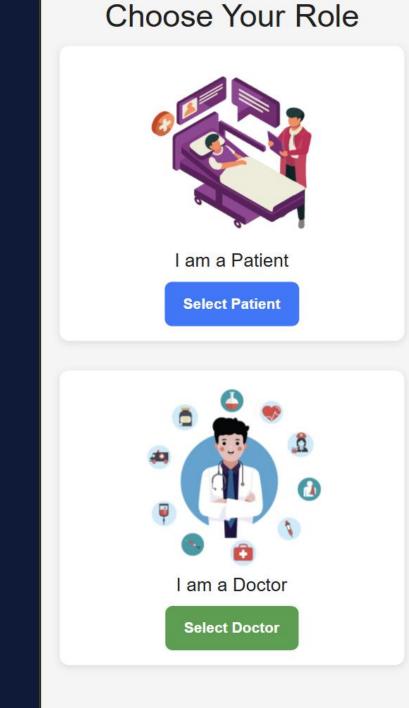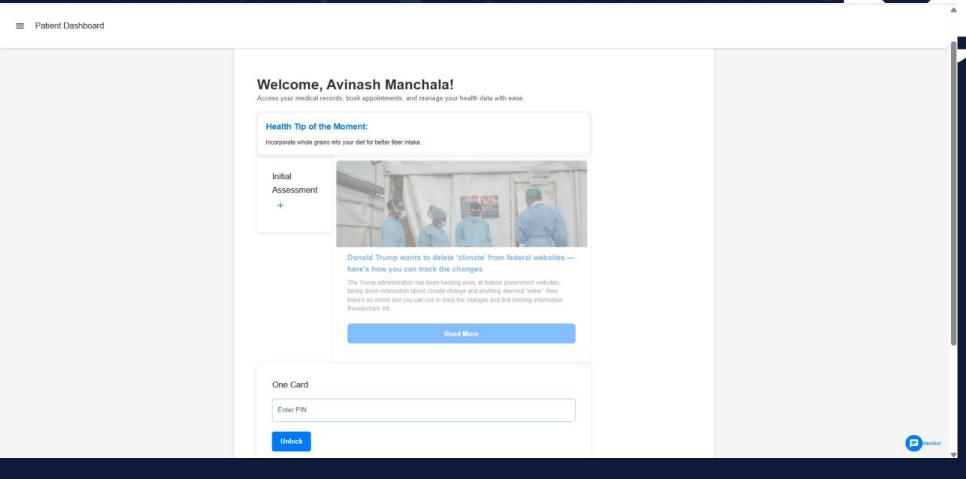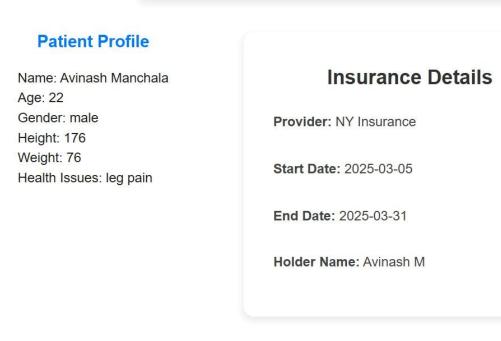
WIKI PAGE

https://github.com/htmw/2025S-RushHour/wiki

THANK YOU

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