

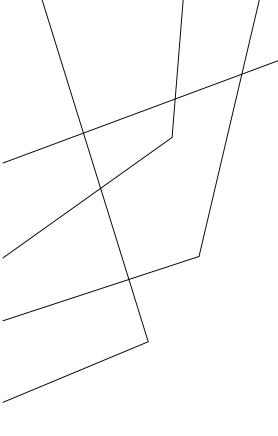
## CURA - HMS



## Improvements from Professor Feedback Team Member Roles and Responsibilities **Problem Statement** Project description Personas MVP Technologies CURA

### **AGENDA**

- Conceptual Architectural Diagram
- Sprint 3 Recap
- Product Backlog
- Sprint Backlog
- Metrics
- Retrospective
- Sprint 5



## IMPROVEMENTS FROM PROFESSOR FEEDBACK

### Feedback

- Story Points Missing.
- Mention Diagram name.

### **Improvements**

- Story points mentioned to every user story.
- Architectural Diagram mentioned.

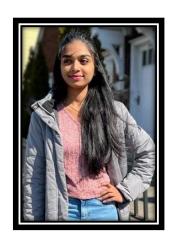
### MEET OUR TEAM



SAI TEJA KORIBILLI

SCRUM MASTER

DATA BASE ADMINISTRATOR



BINDU VALISETTY

UI/UX DEVELOPER



KULDEEP KALUVALA

DEVELOPER



MOUNIKA THALLA

PROJECT MANAGER

### MEET OUR TEAM



SHIVANSH TOMAR

DEVELOPER



NIKHIL

QUALITY ANALYST ENGINEER



JIGAR SHAH

DEVELOPER

## PROBLEM STATEMENT

Most hospitals are still facing several challenges with Hospital Management System because some of them are still using manual processes, while those who are using computerized method are also facing the challenge of adjusting to it. Like:

- The high cost of software development and deployment.
- Complex design in terms of User Interface and User Experience (UI/UX Design)
- Fear of data security breach.
- Difficulty in migrating from manual processes, because both staff and patients are used to the manual processes and so are unable to speedily cope with the new system.
- Lack of IT-friendly medical personnel is also presenting several challenges.
- A Huge influx of patients visiting government hospitals makes the process of migrating to automated
  processes highly difficult. They do not have the patience to wait for registration and data entry and often fail
  to understand the functioning of automated processes.

## PROJECT DESCRIPTION

HMS helps to automate routine tasks, optimize staff coordination, improve communication, distribute the workload, store different types of information, and provide financial and HR management.

A hospital management system (HMS) is a tool that collects data about patients, doctors, staff, hospital administrative details in one software. One of the biggest advantages of developing a hospital management system is that it makes the whole process paperless.

Finances are another essential side of the hospitals. Apart from administrative, operational, and medical services, healthcare units must cope with billing and insurance operations. Integrating a financial system into a medical organization is vital for its sustainable financial performance.



## PERSONAS 1



#### Demographics

Name Disha Shah Location New York

Age: 28

Occupation: Doctor

### Bio

Disha is a young doctor working at Newyork health center. On daily basis she booked for 30-40 appointments and also attends the emergency patients. She ensures every patient of her treated with correct medication and attention.

### Interests

- She loves to stay updated about new medicines and procedures in the medical field.
- · She loves to attend music concerts.

#### **Frustrations**

- She attends approximately 40 patients in a day, so it is hectic to keep up with the provided schedule.
- Mixing of patient's information may happen resulting in wrong medication.

### Goals

- Needs correct information of the patients receives appropriate medication and treatment.
- By using the CURA Hospital Management System, Disha is aided with correct records of the patient.
- Need to have proper inventory information, by using CURA Hospital Management System, Disha has records of the inventory.

## PERSONAS 2



### Demographics

Name : Mary

Location : New York

Age: 81

### Bio

Mary lives in New York suffering from Asthma, Lyme diseases and she has to undergo monthly check-ups with the Doctor.

### Interests

- She loves Jazz Music
- She is Die-hard of New York Knicks & frequently goes to matches to cheer them.

### Frustrations

- Every time Mary visits the hospital an appointment forms has to be filled and she is allotted a different doctor.
- She has to wait for long hours to visit the doctor.
- Every week her records get updated which becomes troublesome for her to manage.

### Goals

- Needs to fill up the form only once during registration on CURA which saves her time and effort from filling the form every time.
- Through CURA she can book appointment with the preferred doctor.
- CURA provide proper slots to Mary, so she does not have to wait in queues & can also choose online consultation.

## PERSONAS 3



### Bio

Tyler is 38 years old residence of New York working as an Admin who manages the New York Health Center in various ways. He ensures proper stock of medicines and equipment needed in the hospital.

#### Demographics

Name Tyler

Location : New York

Age: 38

Occupation: Admin

### Interests

- He loves pets and frequently visits shelter care on holidays.
- He is shutterbug and loves travelling.

### Frustrations

- He manages appointments, inventory and other records on different platforms making it disordered for him.
- He has to be in the hospital to ensure the proper management of the hospital.

### Goals

- Needs a single platform where he can manage appointments, Doctor's profile and inventory.
- This problem is solved by CURA Hospital Management System so he can have records of patients, update doctor's profile and also, he allows to simplify all these tasks and remotely as well.



### REGISTRATION

• User can register into CURA through this

## MINIMUM VIABLE PRODUCT



### LOGIN PAGE

• User can log into CURA through this



### HOME

User can surf through CURA features through this



### SCHEDULING

User can plan his schedule using this and work accordingly



### **APPOINTMENTS**

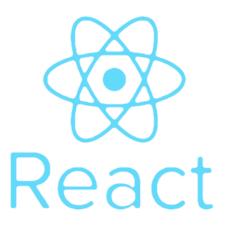
 User can schedule his appointment with doctor through this













**GIT HUB** 

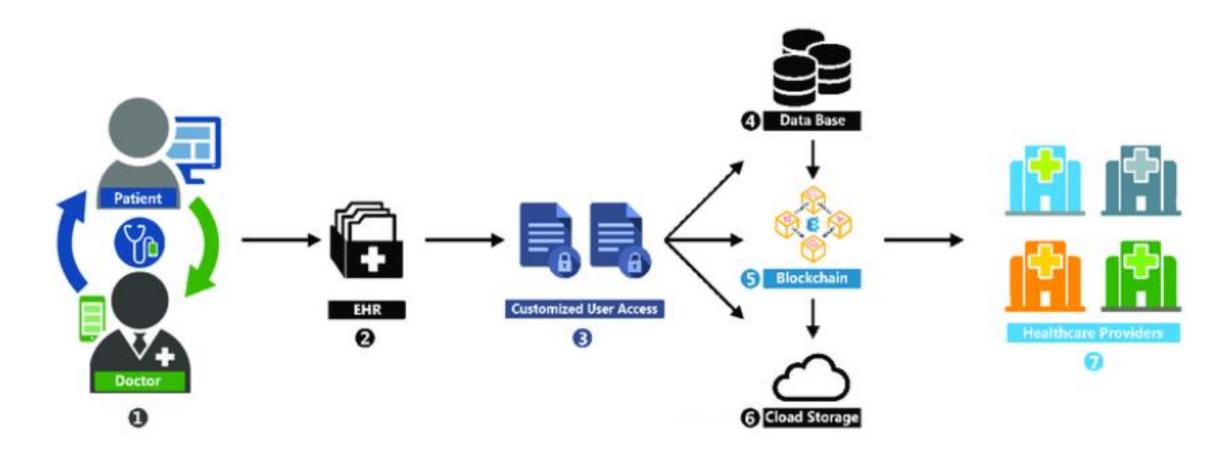




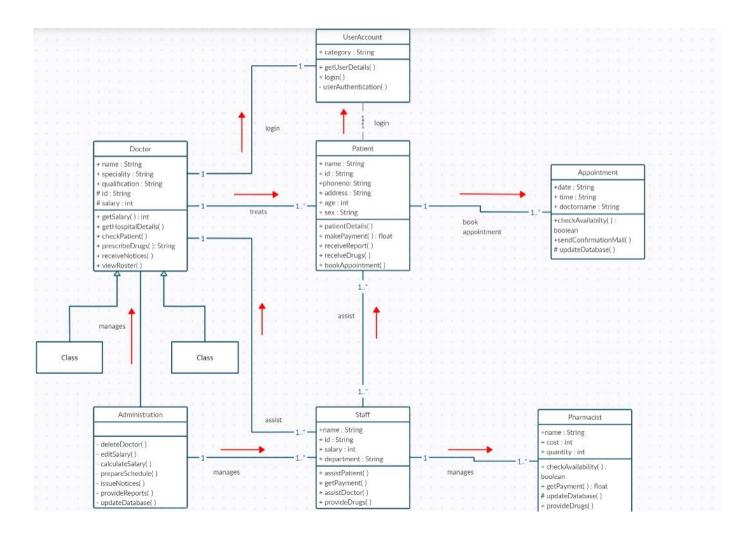
mongoDB



### CONCEPTUAL ARCHITECTURE DIAGRAM



# CLASS DIAGRAM of CURA



## SPRINT RECAP

### SPRINT 3 VS SPRINT 4

### SPRINT 3

- REGISTRATION
- LOGIN
- Appointments

### SPRINT 4

- SCHEDULE
- Multiple features like add data
- Created Proper UI

## PRODUCT BACKLOG



Issue Type	Id	Name			
Story	CURA - 29	As a Doctor, I want to see my particulars/schedule/profile on the application so that I can plan my duties at hospital.			
Story	CURA - 30	As a Patient, I want to confirm whether my appointment with the doctor is set up or no so that I can have an idea about myappointment with doctor.			
Story	CURA - 31	As a Patient, I want to submit my symptoms/previous history documents in the portal for assessment so that I may receive a accurate determination.			
Story	CURA - 32	As an Inventor, I want to know whether the supplies are as per the requirement or no, so that I can re-stock them.			
Story	CURA - 33	As a Pathologist, I want to know whether samples of the patient are correctly entered or no, so that there is no confusion with patient's details with others.			
Story	CURA - 34	As an Admin, I want to navigate to doctor/staff/nurse section to check the log-in time so that I can verify whether every doctor/nurse/staff is attending the hospital on time.			
Story	CURA - 35	As a Staff, I want to check room availability and manage rooms according to requirementso that it will be very helpful to doctors.			
Story	CURA - 36	As a Patient, I want to registers patient's for admittance to the hospital.			
Story	CURA - 37	As a Patient, I want to manages patient financial operations, including billing and insurance.			
Story	CURA - 38	As a Staff, I want to know the ward management which helps caregivers plan, track, and manage the various departments in the hospital so that it will very helpful to patients			

## SPRINT BACKLOG

Issue Type	Id	Name	Status
Story	CURA-16	As a Patient , I would like to update my profile so that I can update my Name, Address, and Phone No. in it.	Done
Story	CURA-18	As a Patient , I would like to book an appointment with a specific doctor so that will be easy to find solution for my problem.	Done
Story	CURA-20	As a Patient, I would like to have a landing page that det ails all the advantages of the platform in order to encourage me to sign up.	Done
Story	CURA-25	As a Doctor , I want to see appointment list so that I will get an idea how many patients book an appointment through portal.	Done
Task	CURA-26	Final Technical Paper	Done
Story	CURA-27	As a Pathologist I want to update the patient test details on portal	In Progress
Story	CURA-28	As a Pathologist I want to create new patient id and upload his test results in portal.	In Progress

## USER STORIES & ACCEPTANCE CRITERIA

Id	Summary	Acceptance Criteria	Place	<b>Story Points</b>
	As a Doctor,	Scenerio: Doctor wants to check his schedule		
	I want to see my particulars/schedule/profile on the application	Given I logged as Doctor		
CURA - 29	so that I can plan my duties at hospital .	When I open the application	Appointments	3
		then as a doctor see the appointment details per day/week/month		
		and also see the details of the patients .		
	As a Patient,	Scenerio: Patient wants to check with his appointment details		
	I want to confirm whether my appointment with the doctor is set up or no	Given I logged as Patient		
CURA - 30	so that I can have an idea about my appointment with doctor.	When I open the application and go to this page	Appointments	3
		then see my appointment details with the doctor		
		and I plan accordingly.		
	As a Patient,	Scenerio: Patient wants to upload his previous history documents		
	I want to submit my symptoms/previous history documents in the portal for assessment	& symptoms		
	so that I may receive a accurate determination.	Given I logged as Patient		
CURA - 31		When I open the application and go to this page	Medical Records	4
		then see the browse option for uploading the documents		
		and see the page to enter the details of my previous history &		
		symptoms.		

## USER STORIES & ACCEPTANCE CRITERIA

	Id	Summary	Acceptance Criteria	Place	Story Points
С		As an Inventor,  I want to know whether the supplies are as per the requirement or no, so that I can re-stock them.	Scenerio: Inventor wants to see the list of stock  Given I'm in a role of Inventor or logged-in inventor  When I open the web application  then see the inventory supply details page, clicking on the page I should be able to see all the inventory details  and option to restock.	Inventory Supply	3
С		As a Pathologist,  I want to know whether samples of the patient are correctly entered or no, so that there is no confusion with patient's details with others.	Scenerio: Pathologist wants to check patient's samples Given I am in a role of logged-in Pathologist When I open web-application and goto this page then verify the patient's samples entered correctly or not	Medical Records	3
С		As an Admin,  I want to navigate to doctor/staff/nurse section to check the log-in time  so that I can verify whether every doctor/nurse/staff is attending the hospital on time.	Scenerio: Admin wants to check the login & log-out time of hospital staff Given I logged as Admin When I open the portal then in the system I can check total hour a doctor/staff/nurse spends on seeing patients and also verify doctor/staff/nurse time.	Admin	3

## USER STORIES & ACCEPTANCE CRITERIA

Id	Summary	Acceptance Criteria	Place	Story Points
	As a Staff,	Scenerio: Staff wants to check availability of rooms at hospital		
	I want to check room availability and manage rooms according to requirement	Given I am in role of logged-in staff		
CURA - 35	so that it will be very helpful to doctors.	When I open the portal	Rooms	3
		then click on this page so I can able to verify availability rooms		
		and manage them.		
	As a Patient,	Scenerio: Patient wants to easy way for registration		
	I want to registers patient's for admittance to the hospital.	Given I am in role of logged-in patient		
CURA - 36		When I open application for first time then I see a link as Register Now	Registration	2
CORA - 30		then clicking on the link redirects to the registration form page	Registration	2
		and it will be very easy for patients to register in application.		
	As a Patient,	Scenerio: Patient wants to know about financial operations & insurance		
	I want to manages patient financial operations, including billing and insurance.	policies		
		Given I am in role of logged-in patient		
CURA - 37		When I open the application I will be able to see all plans included	Registration	3
		then I able to should select my insurance plan		
		and also have other related financial operations		
	As a Staff,	Scenerio: Staff wants to know caregivers plan in hospital		
	I want to know the ward management which helps caregivers plan, track,	Given I am in role of logged-in staff		
CURA - 38	and manage the various departments in the hospital	When I open the application	Managamant	3
CURA - 38	so that it will very helpful to patients.	then click on this page I can able to verify plans	Management	3
		and able to track them.		

## TEST CASES

Te ID		User Story ID	Test Case	Current State	Test Data	steps to follow	Expected Result
TS	-11	CURA-34	navigate to doctor section	admin logged into his application	Email:- test@cura.com pwd:- Qura	admin->doctor_section	admin should be able to navigate to doctor section to check their in&out times
TS	-12	CURA-34	navigate to staff section	admin logged into his application	Email:- test@cura.com pwd:- Qura	admin->staff_section	admin should be able to navigate to staff section to check their in&out times
TS	-13	CURA-34	navigate to nurse section	admin logged into his application	Email:- test@cura.com pwd:- Qura	admin->nurse_section	admin should be able to navigate to nurse section to check their in&out times
TS	-14	CURA -29	loading appointment details page	User login into the application as a doctor	Email:- aabc@gmail.com pwd:- abc	doctor->schedules	User should be able to see his schedules and patient details
TS	-15	CURA -30	loading appointment details page		Email:- aabc@gmail.com pwd:- abc	patients->appointments	User should be able to see his appointment details
TS	-16	CURA -31	Uploading patient datails page	User login into the application as a patient	Email:- aabc@gmail.com pwd:- abc	patients->symtoms	user should be able to upload his previous medical documents and symtoms details

## TEST CASES

1	ΓS-17		Loading inventory supply details page	User logged into the application as inventor	Email:- aabc@gmail.com pwd:- abc	inventor->supply	User should be able to see all inventory supply details
7	ΓS-18		Loading patients test sample data details page	User logged into the application as pathologist	Email:- aabc@gmail.com pwd:- abc	pathologist-> sample test data	User should be able to see all patients test sample data for examining
1	ΓS-20	CURA -16	editing profile data	User logged into the application as patient	Email:- aabc@gmail.com pwd:- abc	patient->profile	User should be able to edit and save his profile information
7	ΓS-21	CURA -35	check room availability	User logged into the application as staff	Email:- aabc@gmail.com pwd:- abc	staff->rooms	User should be able see the list of available room details
7	ΓS-22		assigning room to the specific doctor.	User logged into the application as staff	Email:- aabc@gmail.com pwd:- abc	staff->rooms->assign	User should be able to assign room to a doctor
7	ΓS-23		loading details of members in different departments	User logged into the application as staff	Email:- aabc@gmail.com pwd:- abc	staff->departments- >profile	User should the able see different department members details
7	ΓS-24	CURA -37	Selecting insurance plan	User logged into the application as patient	Email:- aabc@gmail.com pwd:- abc	patient->insurance plan	User should be able to see all available insurance plans and select one of them
7	rs-25	CURA -36	loading quick registration form	User logged into the application as patient	Email:- aabc@gmail.com pwd:- abc	patient->check box- >min registration form	User should be able to click check box and should taken to minimal information registration form

## TEST CASES

Test	User					
ID	Story ID	Test Case	Current State	Test Data	steps to follow	Expected Result
			user logged in as	Email:- testinventor@cura.com		
TS-26	CURA-32	order supply stock	inventor	pwd:- Qura Email:-	inventor->supply-> order	inventor should be able to place stock order successfully
				teststaff@cura.com		staff should be able to reserve a room for upcoming
TS-27	CURA-35	reserving a room	user logged in as staff	pwd:- Qura Email:-	staff->rooms->reserve	operation or patient
TS-28	CURA-27	updating patient test data	user logged in as pathologist	pathologytest@cura.com pwd:- Qura		pathologist should be able to update patients' data without any problem
TS-29	CURA -28	creating new record	user logged in as pathologist	Email:- aabc@gmail.com pwd:- abc		pathologist should be able to add new patient in test data records

## **Stories**

### Completed

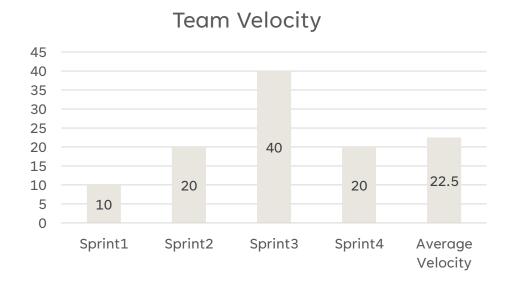
- As a Patient, I would like to update my profile so that I can update my Name, Address, and Phone No. in it.
- As a Patient, I would like to book an appointment with a specific doctor so that will be easy to find solution for my problem.
- As a Patient, I would like to have a landing page that det ails all the advantages of the platform in order to encourage me to sign up.
- As a Doctor, I want to see appointment list so that I will get an idea how many patients book an appointment through portal.

### Incomplete

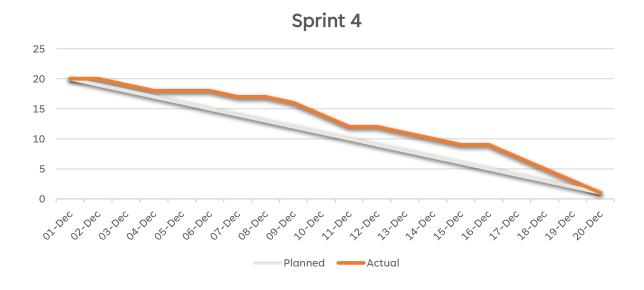
- As a Pathologist I want to update the patient test details on portal
- As a Pathologist I want to create new patient id and upload his test results in portal.

## METRICS

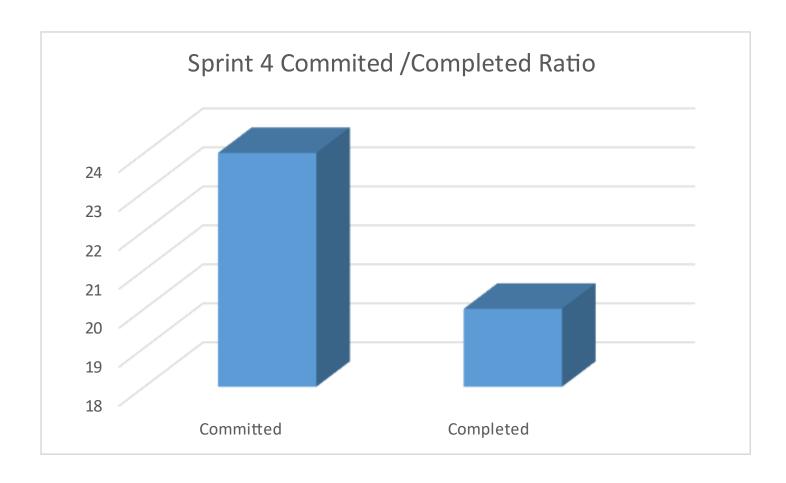
## Team Velocity



## Burndown chart

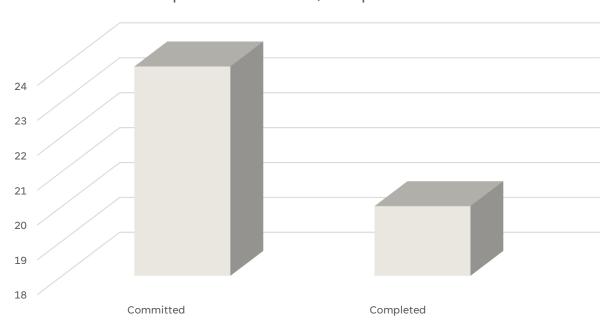


## COMMITTED/ COMPLETED RATIO



### SPRINT 4 - STORIES PLANNED AND COMMITTED

Sprint 4 Committed /Completed Ratio



## Retrospectives

### What went well??

- Team completed the task before due date.
- Teammates being more responsible than previous sprint.
- All teammates attended the meeting when team scheduled

## What didn't went well??

- Still some teammates are not actively participated in team meetings or chat groups.
- Coping up with the technical skills

### What next??

- Collectively team will cross check the individual's work so that we can remove latency and teammates will work more actively.
- Will improve the team coordination by scheduling the weekly status calls

## SPRINT 5

Issue Type	ld	Name
Story	CURA- 39	As a patient, I want to able to search on the app, so that I can find the necessary information .
Story	CURA- 40	As a patient, I want to update my profile and also upload reports so that doctor can know the patient condition.
Story	CURA- 41	As an admin, I want to see all the doctor's list in the application so that, I can manage the system according to my need.

## APPLICATION SCREENSHOT

Welcome

Patient Doctor Admin

Register as Patient

First Name \*

Your Email \*

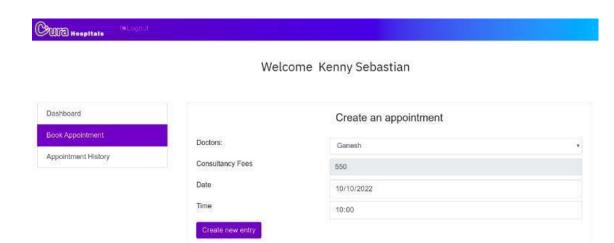
Password \*

Male © Female

Already have an account?

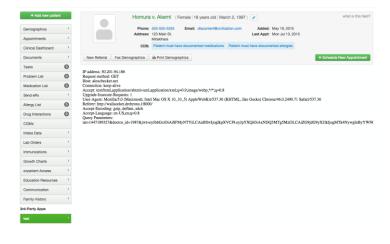
Register

Register





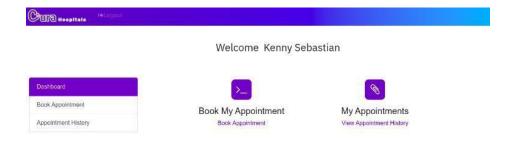




## API USED



## LIVE APPLICATION DEMO







### THANK YOU

- Sai Teja Koribilli
- Jigar Shah
- Mounika Thalla
- Kuldeep Raj
- Bindu Valishetti
- Nikhil
- Shivansh Tomar