

CURA-HMS



AGENDA

The background of the slide features a close-up, slightly blurred image of a spiral-bound notebook. The notebook is open to a page with horizontal lines. A silver spiral binding is visible on the left side. A white pen lies on the right side of the page. The entire image is partially covered by a dark, semi-transparent overlay on the left and top, and a solid dark blue vertical bar on the far left. The word 'AGENDA' is written in a white, serif font across the center of the dark overlay.

Agenda



Team member roles and responsibilities

Improvements from professor feedback

Problem statement

Project description

Team working agreement

Personas

MVP

Technologies

Algorithms

Diagrams

Sprint 5 Recap

Product Backlog

Sprint 6 Backlog

Metrics

Retrospective

Stories Committed for Sprint 7

Project demo

Live Application

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

Improvements made from Professor Feedback

Feedback

- Add description to Jira section on Wiki Page.
- Labels were missing in the Technology slide.
- Use correct spellings and grammar in the presentation
- Specify and add details in Product Backlog, User Stories and Acceptance criteria.
- Consistent theme should be used.
- Retrospective should be more specific.

Improvements

- Added description to Jira section on Wiki page
- Added missing labels in the Technology slides.
- Corrected spellings and used correct grammar in the presentation
- Added details in Product Backlog, User Stories and Acceptance criteria.
- Consistent theme is used all over the presentation.
- Made efforts to make retrospectives more specific.

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

Project Description	
Project Name:	Cura HMS
Team Name:	Medical Maestros
Project Description:	<p>CURA helps to automate routine tasks, optimize staff coordination, improve communication, distribute the workload, store different types of information, and provide financial and HR management.</p> <p>For patients who want to book an appointments, the CURA is a web app that provides a hassle-less to book an appointment with doctor, unlike the traditional way where we had to call or text and ask for doctor's availability our cura app is a tool that collects data about patients, doctors, staff, hospital administrative details in one software.</p>
Benefit Outcomes:	<ul style="list-style-type: none">• Patients can book appointments with particular Doctor according to their preferred date and time .• Doctors can see the appointment list of patients and schedule his duties at hospital .
GitHub Wiki:	https://github.com/htmhw/HMS/wiki

Team Working Agreement

TEAM AGREEMENT



Introduction

The purpose of this team working agreement is to outline standardized expectations for the Lightning Bolt project concerning, but not limited to, the working relations and group structure among team members in CS-691. The contents herein addressed are:

1. Communication
2. Decision making
3. Responsibility
4. Participation
5. Leadership
6. Consequences

The members of the team are:

1. Sai Teja Koribilli
2. Jigar J Shah
3. Shivansh Tomar
4. Nikhil Kasireddy
5. Mounika Krishna Thalla
6. Kuldeep Raj Kaluvala
7. Bindu Valishetti

Communication:

Communication between team members shall be through e-mail, phone conversations, and weekly team meetings. Members will check their e-mail once daily and reply when requested or necessary.

Leadership

Leadership is strictly informal with a democratic debate system used for decision-making. A primary meeting facilitator will be assigned prior to each meeting. The facilitator will be responsible for compiling an agenda and directing the smooth flow of the meeting. Natural leadership will evolve over time, and this working agreement shall be edited to accommodate such future logistical changes.

Group Progress

The group will create a timeline that includes dates for expected completion of work and other group objectives. This timeline will help the group to determine progress and how rules should be enforced regarding participation of each group member.

Consequences

Consequences will be based on a strike program with three strikes resulting in a probationary status and four strikes resulting in removal from the team. While on probation the team member must demonstrate his/her ongoing commitment to the team by writing an explanatory paper and requesting reinstatement to the team.

Strikes may be given for any one of the following reasons:

1. Missed meetings without either communication 24 hours prior or a legitimate conflict.
2. Failure to abide by the rules presented in this working agreement.
3. Low commitment and substandard work presented in assigned tasks.

Summary

The ideas and requirements set forth in this working agreement are established to provide the best possible working conditions for completing the assigned project.

If you have any questions concerning this memo, or the contents therein, please direct them to the group secretary:

Sai Teja Koribilli

Sk30386n@pace.edu



Personas

Persona 1

Disha Shah



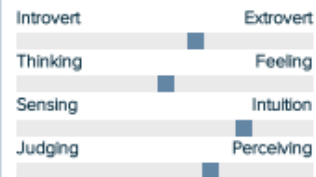
Demographics

Location : New York

Age : 28

Occupation: Doctor

Personality



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.

Persona 2

Mary



Demographics

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.

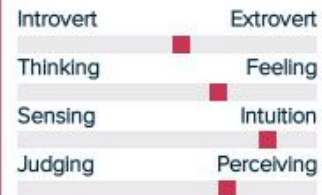
Frustrations

- 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 consultatio.

Personality



Persona 3

Tyler



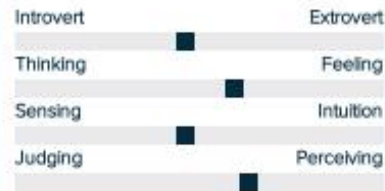
Demographics :

Location : New York

Age : 38

Occupation : Admin

Personality



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.

Interests

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

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.

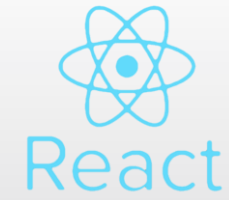
Minimal Viable Product (MVP)

1. Homepage
2. Registration
3. Login –Patient ,Doctor, Staff & Inventory
4. Scheduling duties
5. Appointment - booking & cancel



TECHNOLOGIES

FRONT END



BACK END/
SERVER



DATABASE



TESTING



API



TOOLS

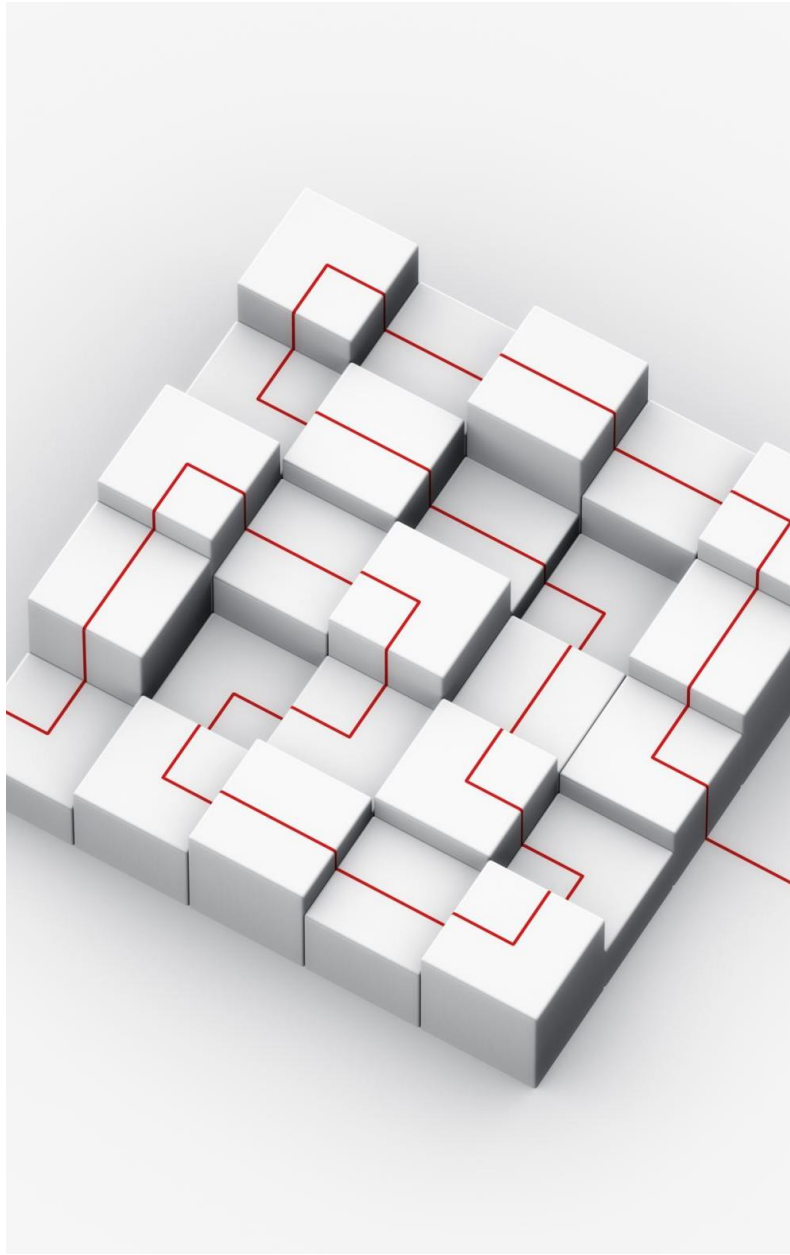


Algorithm

- The proposed system has five modules for doctors, admin, pathologist, inventor and patients providing facilities of appointments schedules, payment, viewing online information, register on hospital website. The whole process of information sharing and processing in this systems is automated through Decision Tree ID3 algorithm

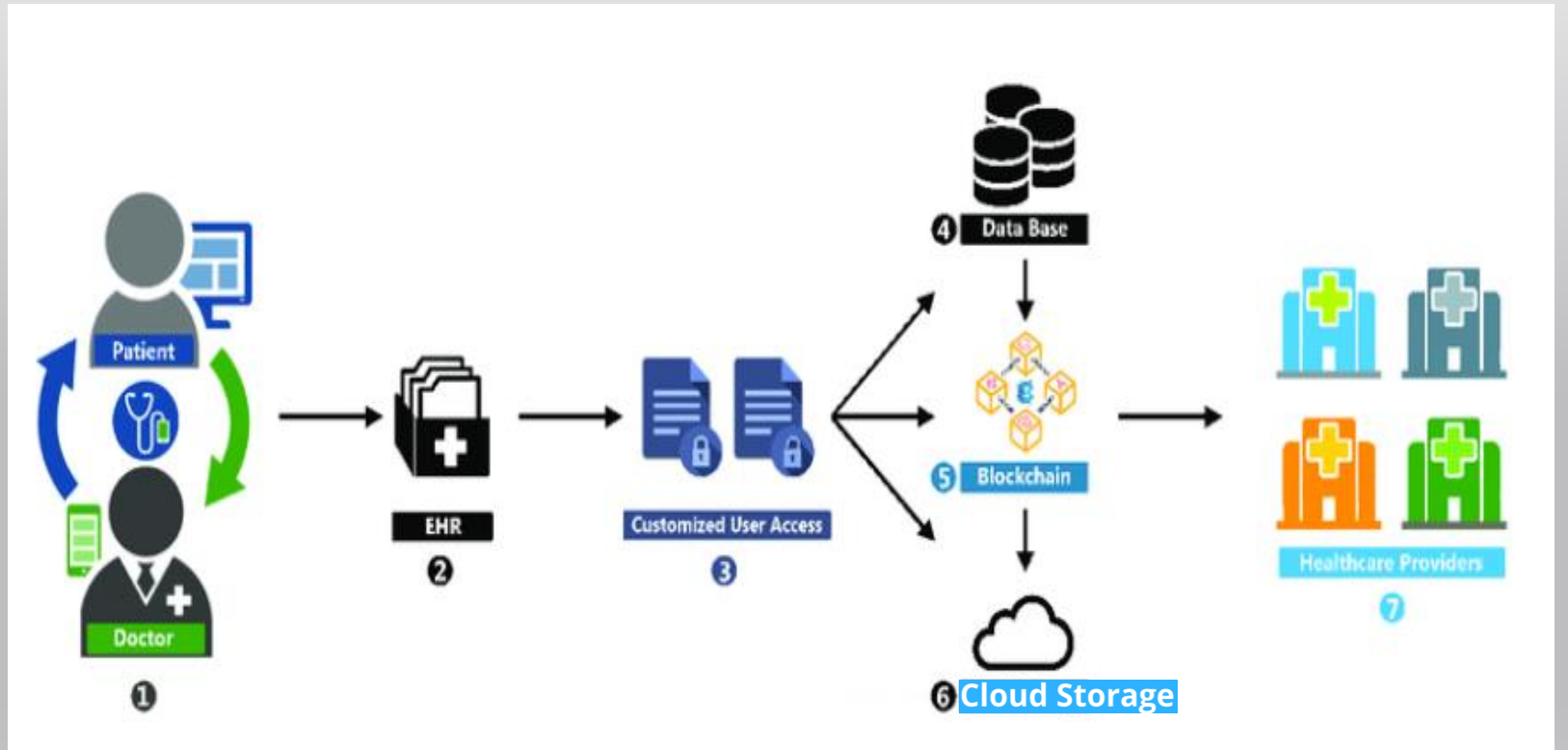
What is ID3 Algorithm ?

- ID3 stands for Iterative Dichotomiser 3 and is named such because the algorithm iteratively (repeatedly) dichotomizes(divides) features into two or more groups at each step.
- ID3 uses a top-down greedy approach to build a decision tree. In simple words, the top-down approach means that we start building the tree from the top and the greedy approach means that at each iteration we select the best feature at the present moment to create a node. Attempts to create the smallest possible decision tree.

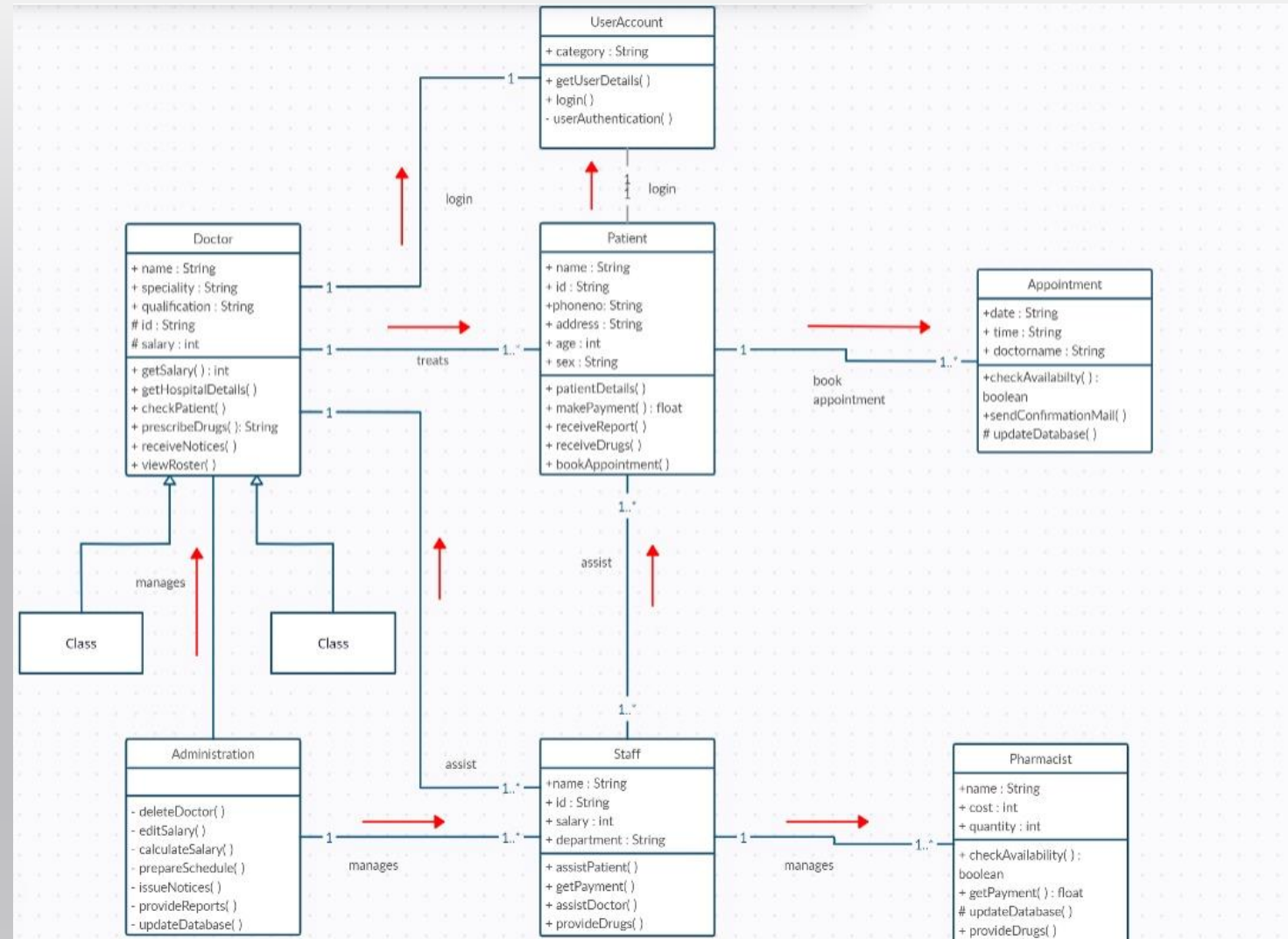


Diagrams

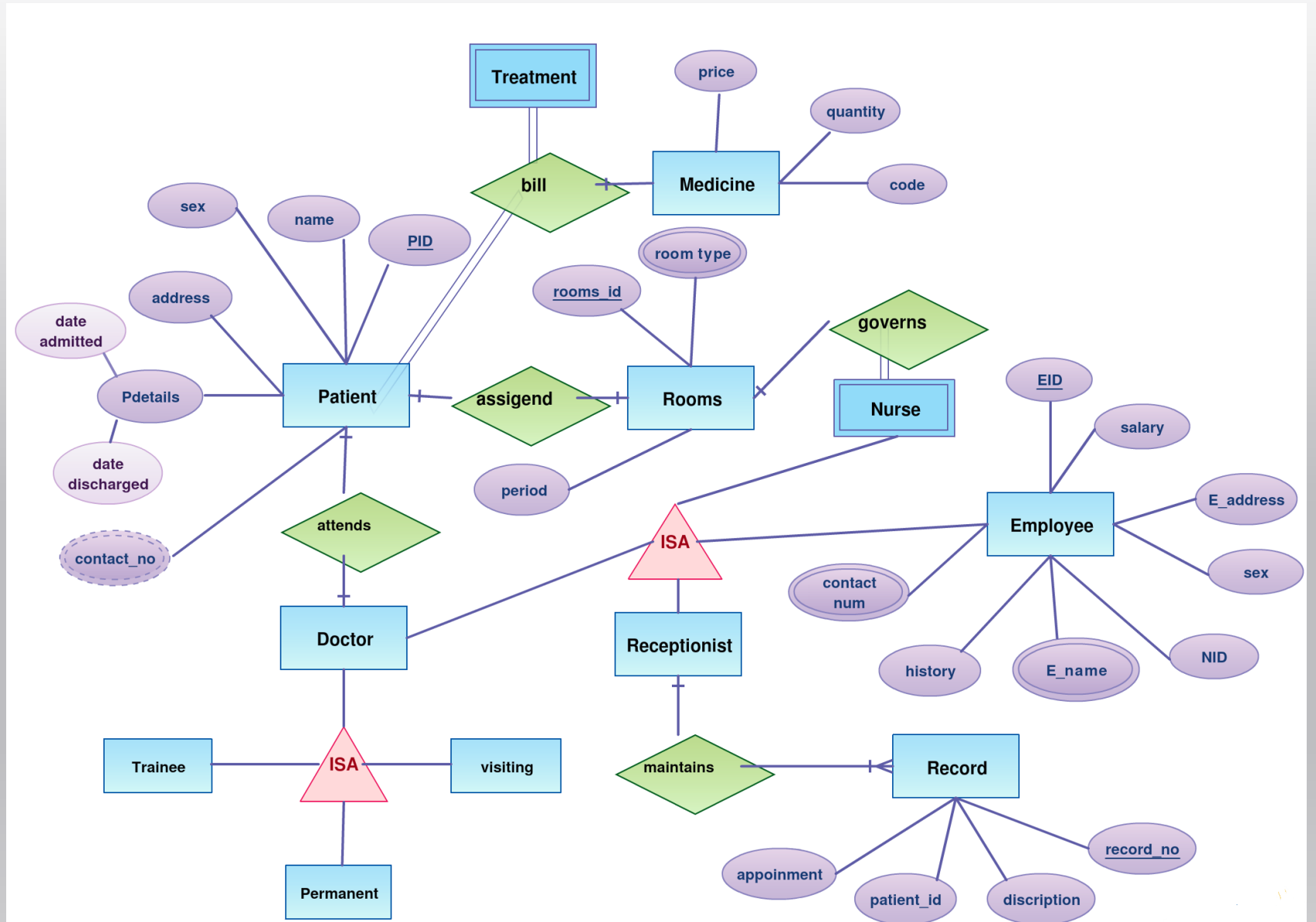
CONCEPTUAL ARCHITECTURE DIAGRAM



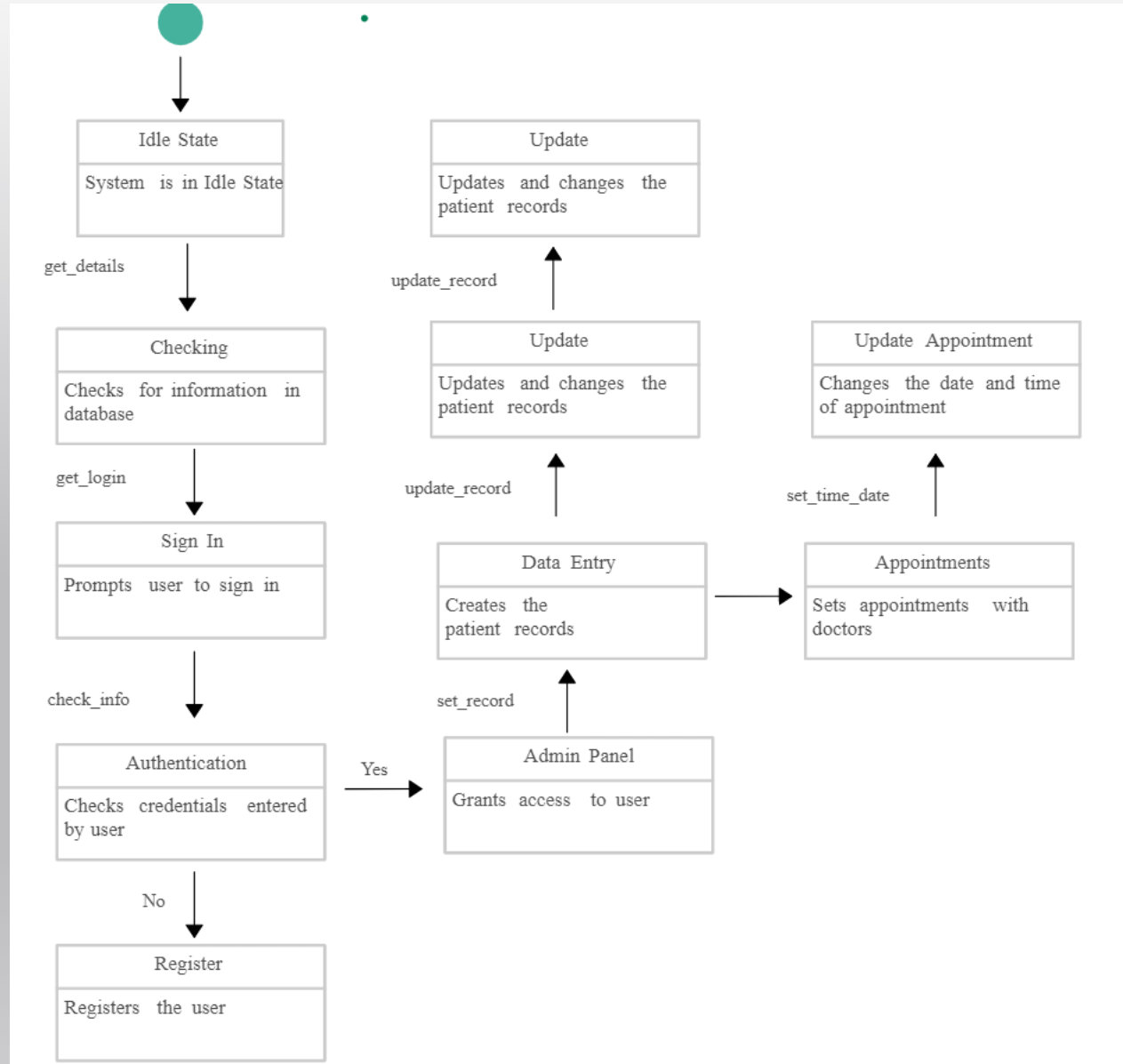
CLASS DIAGRAM OF CURA



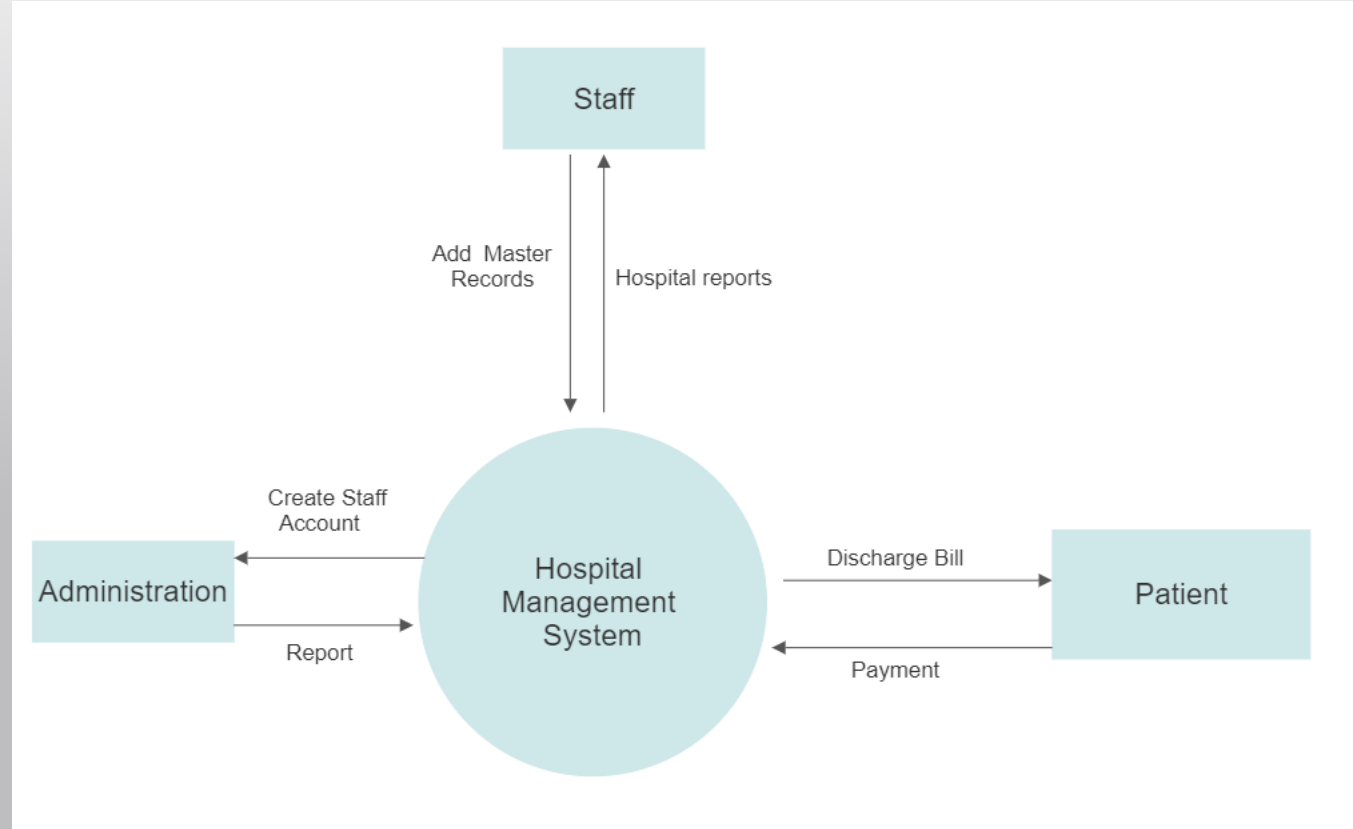
ER DIAGRAM



STATE DIAGRAM



Dataflow
Diagram
Level 0



SPRINT 5 RECAP

- Surfing through the options according to the role of the person using the application.
- Updating the current profile status by uploading files.

A clear acrylic cube stands on a white surface against a light gray background. The cube is empty and its edges are sharp. The text 'PRODUCT BACKLOG' is centered over the cube in a black, serif font.

PRODUCT BACKLOG

Product Backlog

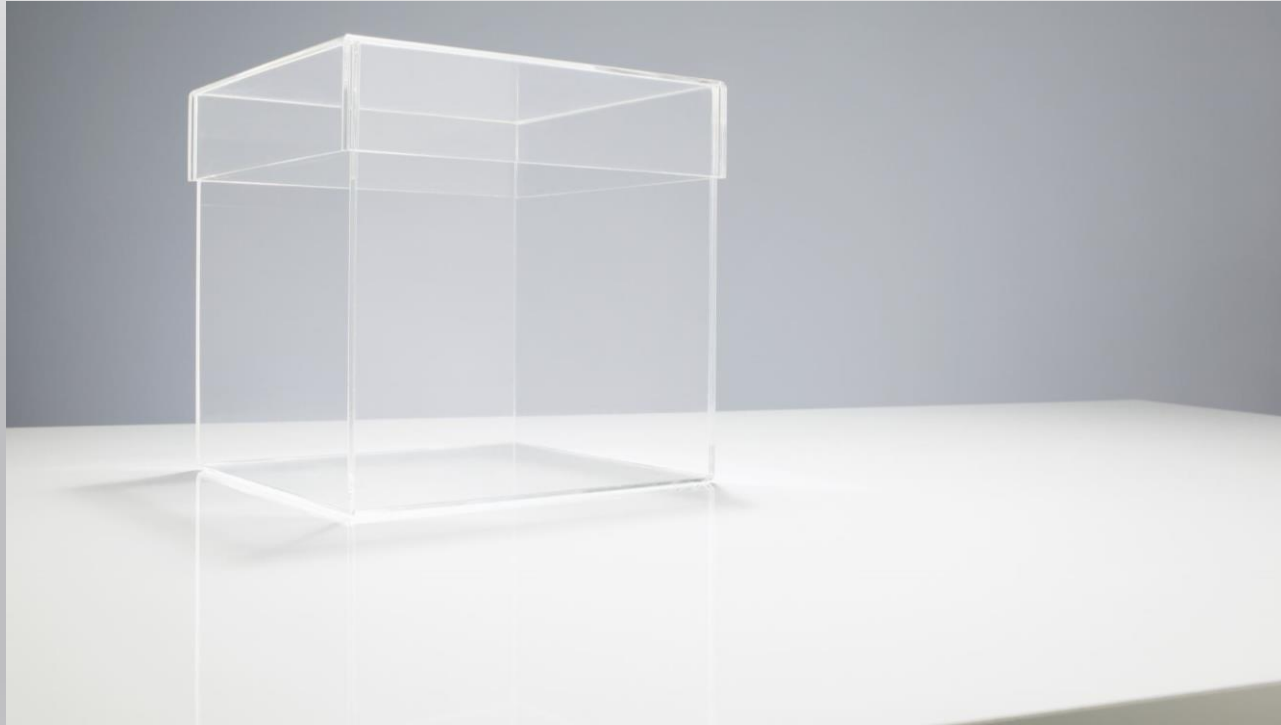
Issue Type	ID	Summary	Status	Story Points	Priority
Story	CURA-29	As a Doctor, I want to see my particulars/schedule/profile on the application so that I can plan my duties at hospital .	To-do	3	Medium
Story	CURA-30	As a Patient, I want to confirm whether my appointment with the doctor is set up or no so that I can have an idea about my appointment with doctor.	Done	4	Medium
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	Done	4	Medium
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.	To-do	3	Medium
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.	Done	2	Low
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.	To-do	5	High
Story	CURA-36	As a Staff, I want to check room availability and manage rooms according to requirement so that it will be very helpful to doctors.	To-do	2	Low
Story	CURA-37	As a Pathologist I want to upload patient test results in portal so that it will be easy to check report for Doctor before patient's appointment .	Done	4	Low
Story	CURA-38	As a Patient, I want to manages patient financial operations, including billing and insurance.	To-do	3	Medium
Story	CURA-39	As a nurse, I want to see the prescriptions given by the doctor to the patients through the nurse portal.	To-do	2	Low

A 3D wireframe cube is centered in the frame, resting on a reflective surface. The cube is composed of thin, light gray lines. The background is a dark gray gradient. The text "SPRINT 6 BACKLOG" is centered within the cube in a white, serif font.

SPRINT 6 BACKLOG

Sprint 6 Backlog

Issue Type	Key	Summary	Story Points Estimate
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 .	4
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 my appointment with doctor.	4
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.	3
Story	CURA-37	As a Pathologist I want to upload patient test results in portal so that it will be easy to check report for Doctor before patient's appointment .	4



User Stories & Acceptance criteria

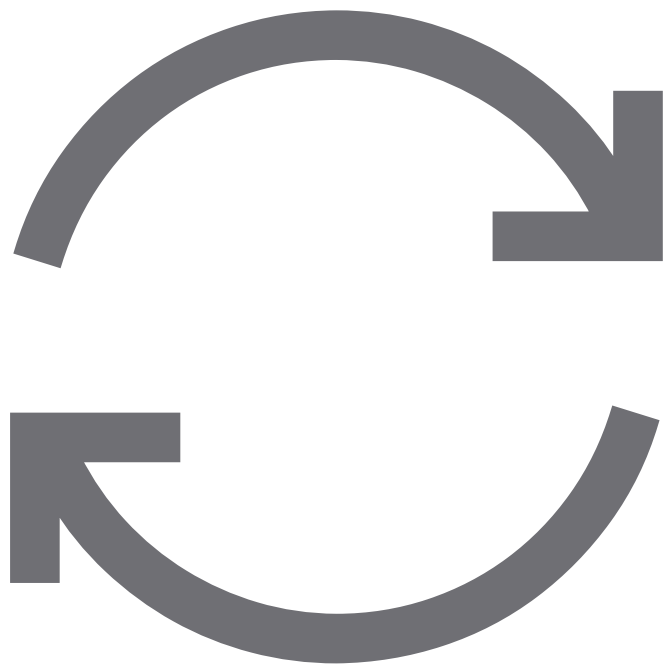
User Stories & Acceptance Criteria		
User Story ID	Summary	Status
CURA-31	<p>As a Patient, I want to submit my symptoms/previous history documents in the portal for assessment so that I may receive a accurate determination</p>	Done
	<p>Scenario : Patient wants to upload his previous history documents & symptoms Given I logged as Patient When I open the application and go to this page then see the browse option for uploading the documents and see the page to enter the details of my previous history & symptoms.</p>	
CURA-30	<p>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 my appointment with doctor</p>	Done
	<p>Scenario : Patient wants to check with his appointment details Given I logged as Patient When I open the application and go to this page then see my appointment details with the doctor and I plan accordingly.</p>	
CURA-33	<p>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.</p>	Done
	<p>Scenario : Pathologist wants to check patient's samples Given I am in a role of logged-in Pathologist When I open web-application and go to this page then verify the patient's samples entered correctly or not</p>	
CURA-37	<p>As a Pathologist I want to upload patient test results in portal so that it will be easy to check report for Doctor before patient’s appointment .</p>	Done
	<p>Scenario : Pathologist wants to upload test reports Given I'm in a role of Pathology or logged-in pathology When I open the web application then see the reports tab and click on it and upload test results in portal.</p>	

Test Cases

Test ID	User Story ID	Test Case	Current State	Test Data	Steps To Follow	Expected Results
TS-30	CURA – 30	Loading Appointment Details Page	User Login Into The Application As a Patient	Email:- aabc@cura.com Pswd:- abc	Patients -> Appointments	User should be able to see his appointment details
TS-31	CURA-31	Uploading Patient Details Page	User Login Into The Application As a Patient	Email:- aabc@cura.com Pswd:- abc	Patients -> Symptoms	User should be able to upload His previous Documents and symptoms details
TS-32	CURA-33	Loading Patient Test Sample Data Details Page	User Login Into The Application As a Pathologist	Email:- aabc@cura.com Pswd:- abc	Pathologist -> Sample Test Data	User should be able to see all patients test data for examining
TS-33	CURA-37	Uploading Patient Test Results Data	User Login Into The Application As a Pathologist	Email:- aabc@cura.com Pswd:- abc	Pathologist -> Test Results Data	User should be able to Upload patient test results before doctors appointment

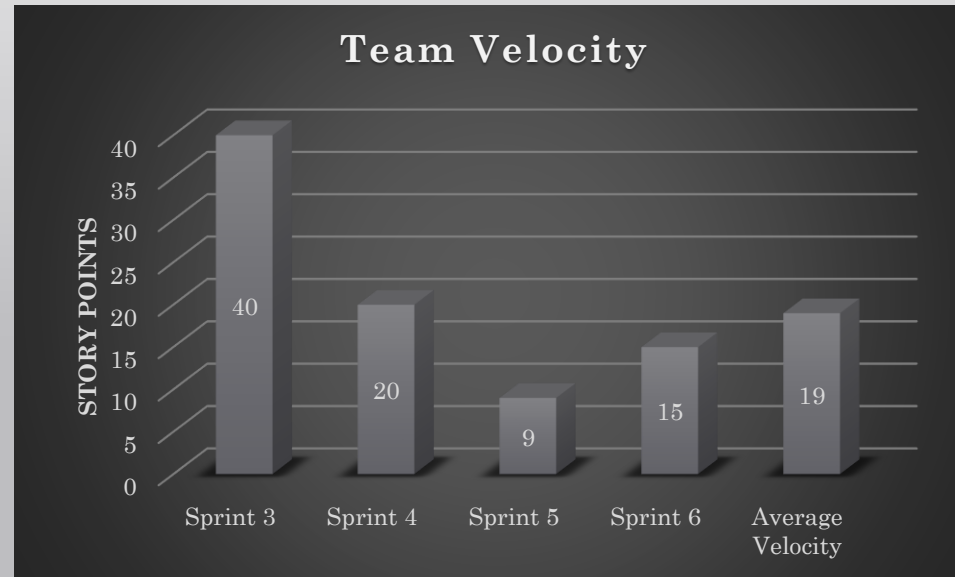
Stories Completed and Stories Not Complete

User Story Id	Summary	Story Points Estimate	Status
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 .	4	Completed
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 my appointment with doctor.	4	Completed
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.	3	Completed
CURA-37	As a Pathologist I want to upload patient test results in portal so that it will be easy to check report for Doctor before patient's appointment .	4	Completed

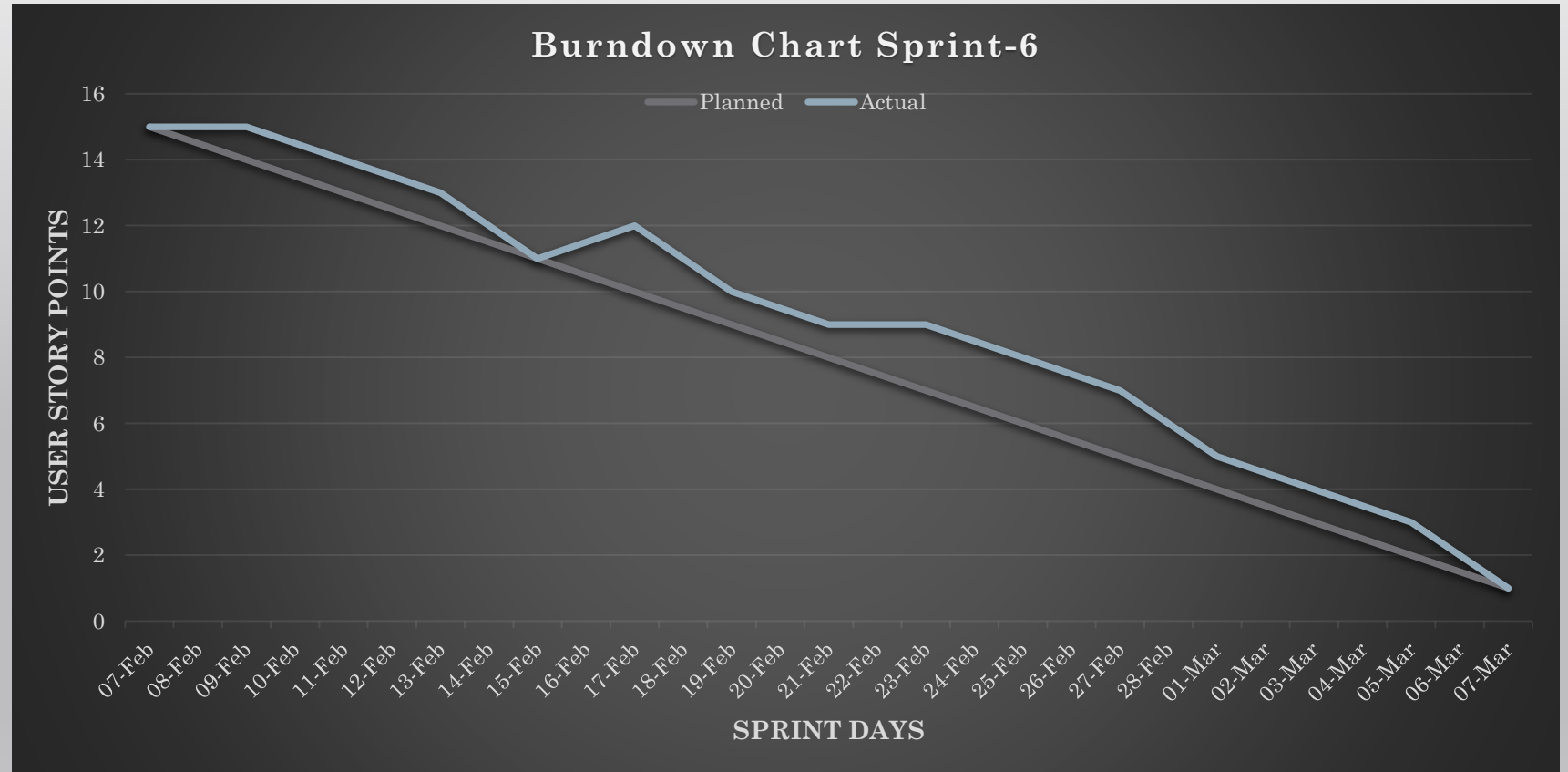


METRICS

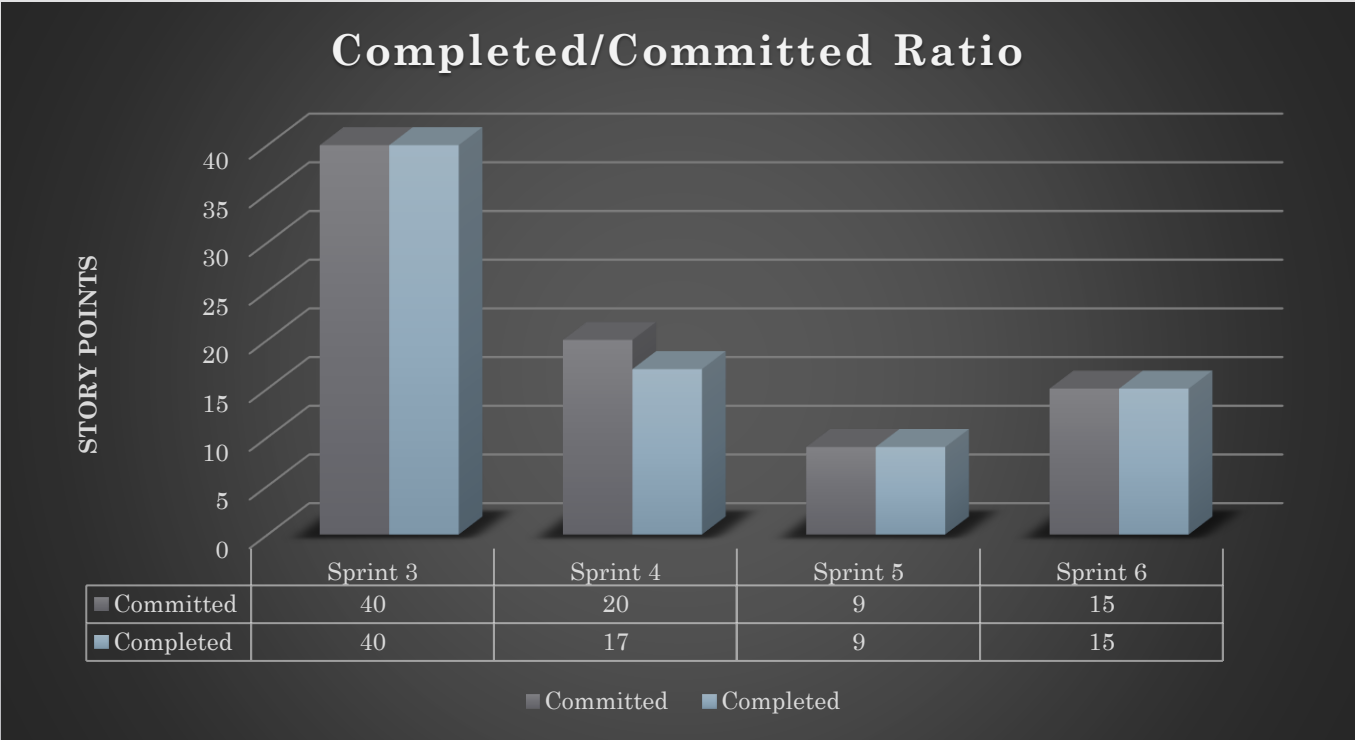
Team Velocity



Burndown chart



COMMITTED/ COMPLETED RATIO



What went well??

- Team productivity is improved.
- Improved communication among the team members.
- Time Management is efficient.
- Each team member understood their role and performed well in their allocated tasks

What didn't go well??



We have not reached to desired UI of the application.



Bugs raised at the unit testing were delayed in handling.



Took more than expected time to complete the User stories.



Employ more precise methods to determine the magnitude of the story.

What needs improvement?



Time management needs to be effective.



Should be able to articulate the User Stories clearly.



Knowledge-sharing time into each sprint.



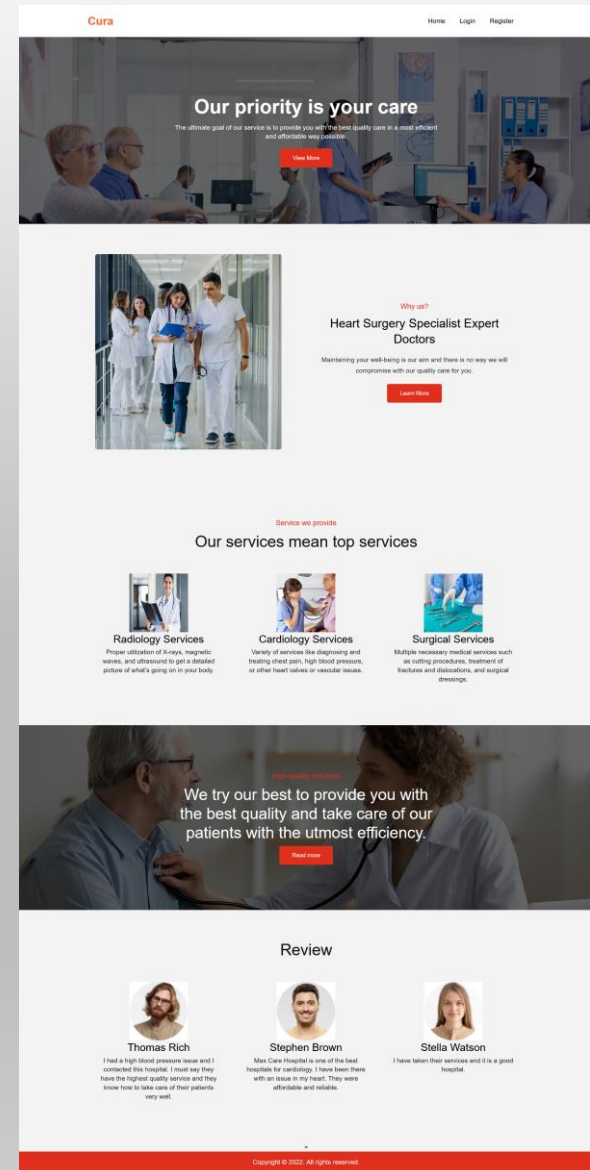
Better testing should be done to prevent bugs.

Stories Planned and Committed for Sprint 7

User Story Id	Summary	Status
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 .	To-do
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.	To-do
CURA-39	As a nurse, I want to see the prescriptions given by the doctor to the patients through the nurse portal.	To-do
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.	To-do

Application Screenshots

Home Page



Register & Login Screen

Cura Home Login Register

Register

Register

First Name	Last Name
<input type="text"/>	<input type="text"/>
Username	Password
<input type="text"/>	<input type="text"/>
Age	Gender
<input type="text"/>	Select Gender
Contact Number	Email
<input type="text"/>	<input type="text"/>
Address	
<input type="text"/>	

Register

Cura Home Login Register

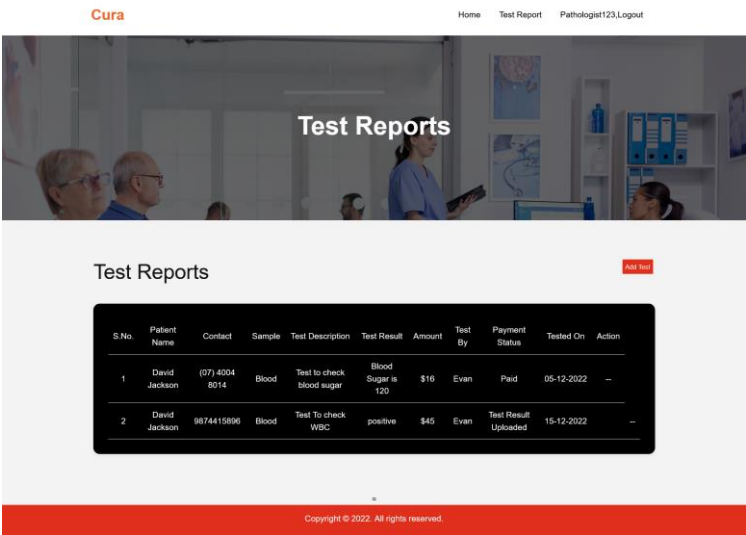
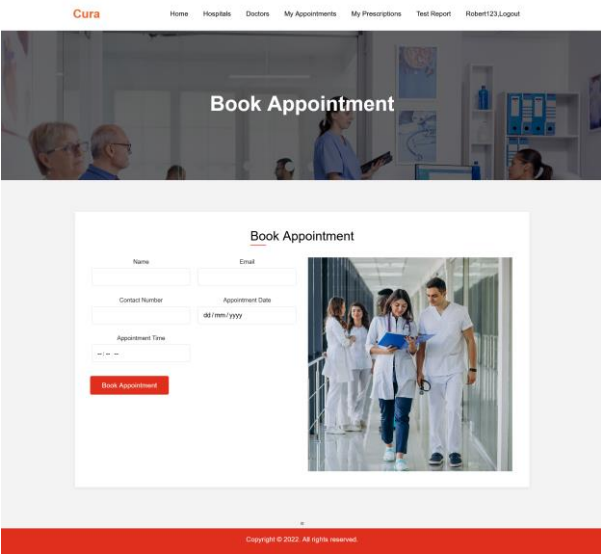
Login

Username

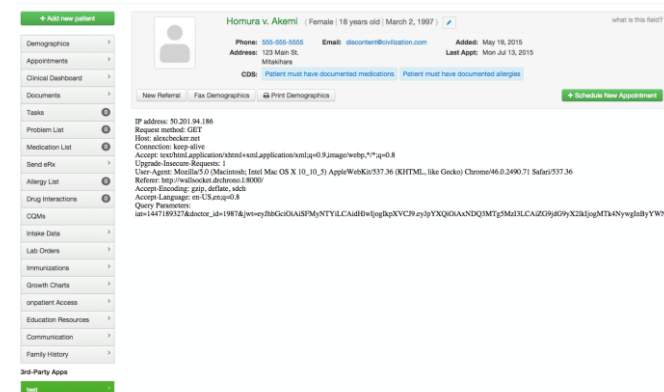
Password

Login

Appointments Screen



Api used



HUMAN / API

A red flag pin is stuck into a map background. The flag is red with a black outline and a black pole. The map shows a grid of streets and some green areas.

GITHUB LINK

[HTTPS://GITHUB.COM/SAITEJJJ/HMS/WIKI/CURA---HMS](https://github.com/saitejjj/hms/wiki/CURA---HMS)



THANK YOU

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