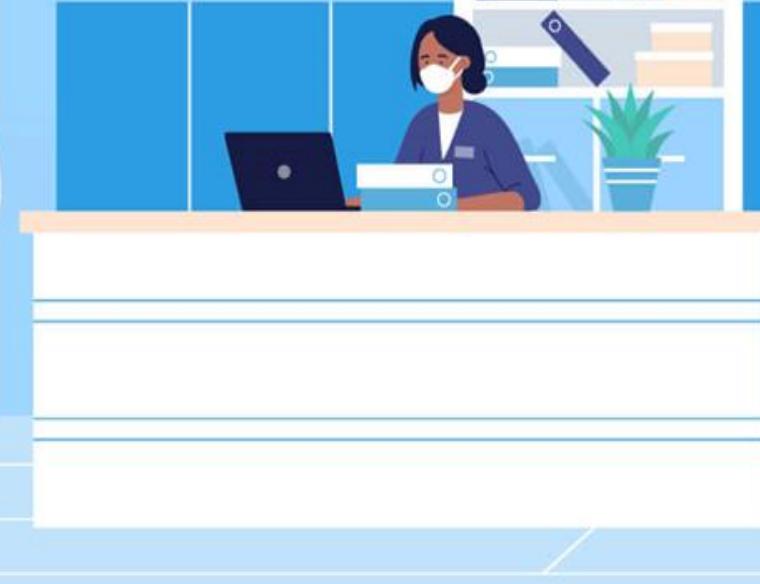




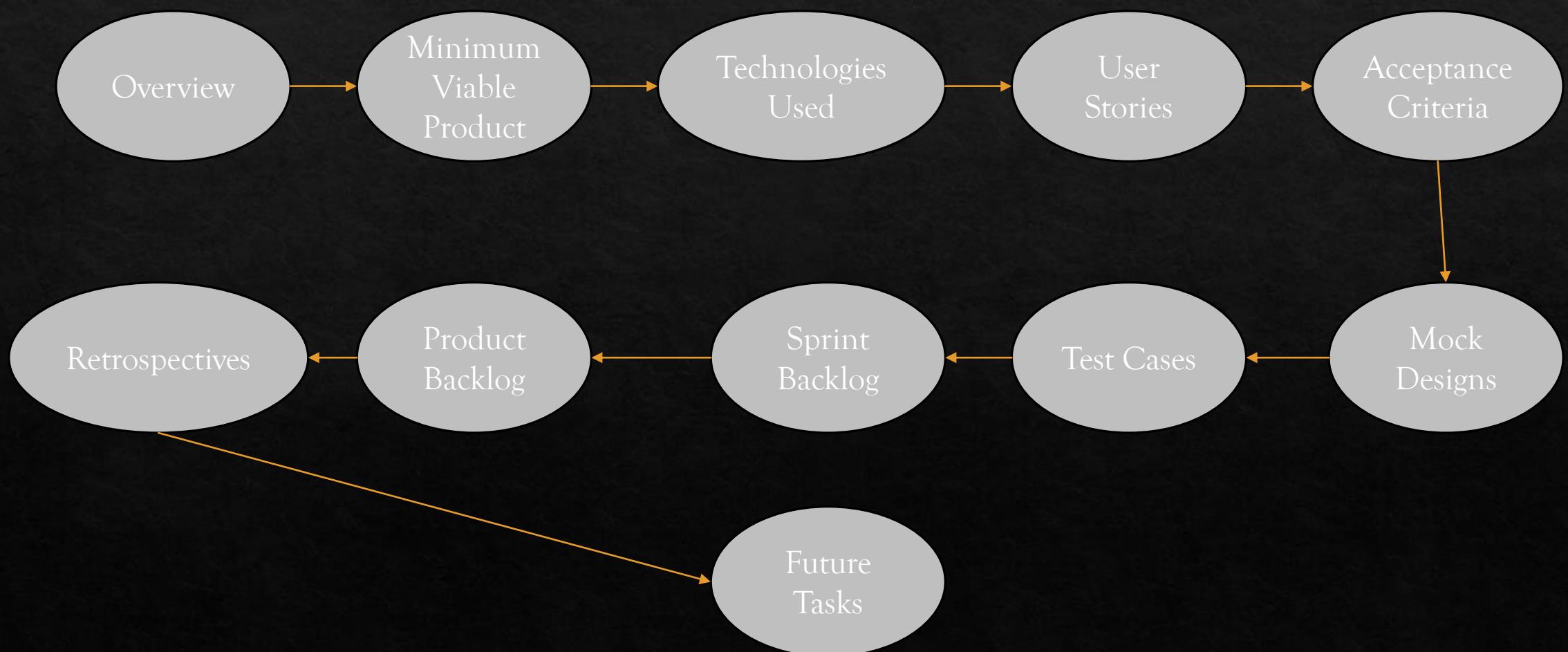
Hospital Management System



Cura

FALL 2022 CAPSTONE PROJECT
Guided by: - HENRY WONG

Agenda



Overview

- Defined our product and key technologies used.
- Developed a working understanding of the process:

Polished incorrect aspects such as :

1. Personas
2. Retrospective
3. Problem statement
4. Technology description
5. Worked on links attached in the presentation and submission.

Personas



Doctor

- ❖ Tori is a doctor who is working at New York Health Center.
- ❖ She will be having 30 to 40 appointments with patients everyday.
- ❖ It is very hard to keep track of the appointment details and other information related to patient.
- ❖ So by using hospital manage system, she can access the details of appointments easily.

Personas



Inventory Management

- ❖ Jack is an inventor who works in Osmania hospital in UK .
- ❖ He maintains the records of medical equipment's, drugs and surgical equipment.
- ❖ He need to keep track of these items every day for smooth running of operations.
- ❖ Using hospital management system, she can maintain database for this items and access their availability easily.

Personas

Patient

- ❖ Mary is 81 years old.
- ❖ She is suffering from auto-immune disease, lyme disease and asthma. Lives in Auburn in Alabama, US.
- ❖ Undergoes checkup every month ,But every time she has to fill appointment form and wait hours for the doctor.
- ❖ By using Hospital management system, she can fill her details once and book appointment with doctor easily.



Personas

Admin

- ❖ Henry is an admin of Texas State Hospital.
- ❖ He plays a key role in the hospital management.
- ❖ He manages the scheduling and appointments of doctors.
- ❖ He plans departmental activities, evaluate doctors and other hospital employees, patient services
- ❖ He creates and deletes all the roles.
- ❖ By using hospital system management, he can organize the above activities easily.



MVP

AUTHENTICATION:-

- CREATE ACCOUNT/REGISTER :- When the new registers the system sends an authentication mail to the registered email-id.
- LOGIN/LOGOUT:-Every user can LOGIN and LOGOUT of the system.
- When a registered user forgets his/her password the system provides help in retrieving the password and create a new password for the registered user.

MVP

INVENTORY MANAGEMENT:-

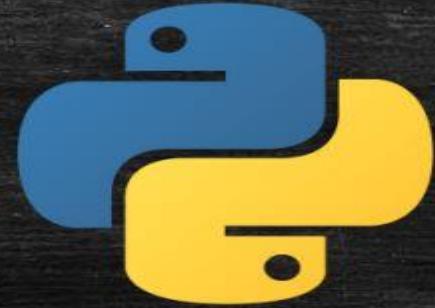
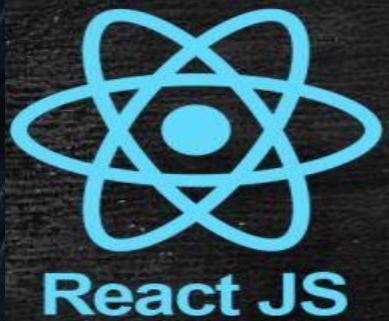
- Admin has access to the inventory so that he/she can order the products according to the need of the hospital.
- Doctors and staff also have access to browse the inventory details so that they can request for products.
- Doctor can see if they have specific article to conduct a procedure or can request the Admin for the article when they need.

MVP

ACCESS TO RECORDS:-

- The Admin will have access to all records consisting of patient records, Doctor records and details and Inventory records. This will aid the Admin to run and serve the hospital.
- The Doctor will have access to records of all patients registered under him/her helping him/her to give a proper consultation to the patient. The doctor will also be able to see the inventory records.
- The patient will have all the records from bill statement to medical history and medication prescribed by the doctor coming under his/her name.

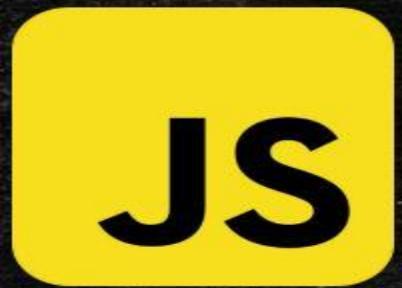
Technologies used



Python



Jira



Java Script

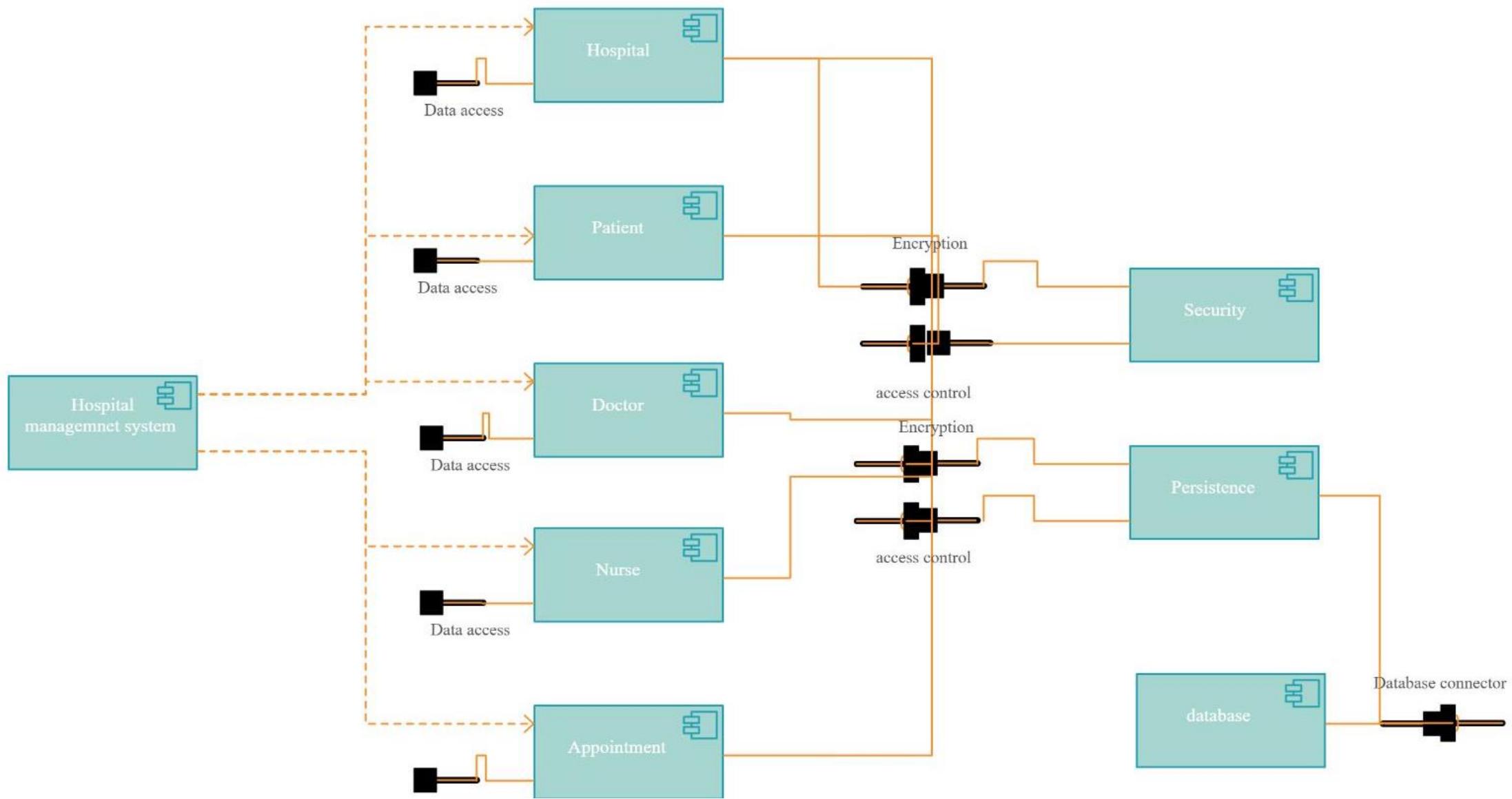


CSS



ARCHITECTURAL DIAGRAM





User Stories - Admin

Id	As	I want	so that
1	Admin	To add/delete/update a doctor/staff/patient profile.	I can manage the system accordingly.
2		To see the schedule of the doctor and staff of the hospital.	I can pay a doctor and staff according to his/her service time.
3		To see patient details and appointment history.	I can get an idea about patient's activity on the system.

User Stories - Doctor

Id	As	I want	So that
4	Doctor	To update my schedule and apply for leaves when needed.	I can have an idea of my schedule and leaves.
5		An option to cancel or reschedule an appointment.	I can notify the patients about the cancellation or rescheduling of an appointment.
6		To update my profile.	To view my own profile and update it.
7		To see the patient's information.	I can get an idea about the patient's current health situation.

User Stories - Patient

Id	As	I want	So that
8	Patient	An easy way to register.	I can have a hassle-free experience while creating my profile/account.
9		Some information from helpdesk to resolve my doubts.	I can get an idea to solve my doubts.
10		An option to search doctor's profile and his research works.	I can easily find a particular doctor with a specific specialization.
11		An option to download my prescription.	I can download the hardcopy of the prescription .

User Stories - Staff

Id	As	I want	So that
12	Staff	To know the supply of the inventory, drugs, medical and surgical equipment's.	I can know the update and availability on the supply for the inventory, drugs, medical and surgical equipment's.
13		To update the patient's details in the portal.	I can update the patient's profile on the portal so that patient can view their details at any time.

User Stories - Pathologist

Id	As	I want	So that
12	Pathologist	To add/update the equipment details in the portal.	Admin can help me update the supply of the equipments in the hospital.
13		To add/update the patient's test details in the portal.	Patient can view his test results at any moment.

Acceptance Criteria - Admin

Id	As a	Acceptance Criteria
1		<ul style="list-style-type: none">a) Administration can add/delete a doctor profile.b) Administration can also add necessary information in the doctor's profile.c) Administration can also add a tag to a doctor's profile.d) Administration can also delete a patient profile if needed.
2	Admin	<ul style="list-style-type: none">a) Administration can see the total working hours a doctor spends on consulting patients.b) Administration can see the doctor's log-in and log-out.
3		<ul style="list-style-type: none">a) Administration can see patient's information.b) Administration can check patient's total appointments scheduled.

Acceptance Criteria - Doctor

Id	As a	Acceptance Criteria
4	Doctor	<ul style="list-style-type: none">a) Doctor will see the necessary information of the patient.b) If there is an availability of previous prescriptions, doctor will be able to proceed further for any treatment or diagnosis.c) Doctor will also be able to give downloadable prescriptions to the patient.
5		<ul style="list-style-type: none">a) If needed, the doctor will be able to cancel an appointment at least prior 8 hours of the consultation scheduled.b) If the patient agrees, the doctor will be able to reschedule an appointment.c) The patient will be notified through SMS/Email.

Acceptance Criteria - Patient

Id	As a	Acceptance Criteria
6	Patient	a) Anyone can register in this system, providing some necessary information. b) The information can be changed anytime after creation of the profile. c) User has to give some necessary information about his health status.
7		a) User can ask his questions or doubts to the help desk. b) After providing symptoms, the best suggestion will be given from the help desk. c) User can contact by email or conduct a virtual meeting with the desk if necessary.
8		a) The search result will contain doctors' names with their rating rated by other patients. b) The available time and date of the doctors will be in the search result. c) User can also search a doctor by typing the disease name/tag or specialization field.
9		As soon as the doctor provide the prescription, then he will be able to download the same.

Mock-up design

A screenshot of a medical website's homepage. At the top, there is a navigation bar with icons for booking appointments, consulting online, buying medicine, booking health checks, finding hospitals, booking lab tests, viewing health records, and health and wellness. Below the navigation bar is a search bar with the placeholder text "Find hospitals, locations, doctors...". Underneath the search bar is a horizontal menu with links: PATIENT CARE ▾, CENTRES OF EXCELLENCE ▾, HEALTH INFORMATION ▾, INTERNATIONAL PATIENT ▾, ACADEMICS & RESEARCH ▾, HOSPITALS ▾, and CONTACT US ▾. Below the menu is a large, colorful cartoon illustration of three medical professionals in a hospital setting. One person is standing by a window, another is sitting at a desk with a computer monitor, and a third is lying in a hospital bed. The background shows a modern hospital interior with glass walls and a blue sky outside.

A screenshot of a page titled "LOCATIONS" featuring a section titled "Hospitals In India". It states: "Apollo's presence encompasses over 10,000 beds across 73 hospitals, 4500+ pharmacies, over 300 clinics, 1100 diagnostic centres and 200 Telemedicine units across 17 countries...". Below this is a grid of city names grouped into three columns:

Ahmedabad	Bangalore	Chennai
Delhi	Guwahati	Hyderabad
Indore	Kolkata	Kakinada
Karur	Lucknow	Mumbai
Aragonda	Bhubaneshwar	Bilaspur
Madurai	Mysore	Nashik
Nellore	Trichy	

At the bottom of the page is a dark blue button with the text "FIND YOUR NEAREST LOCATION". Below this is a footer with five sections: "Book Appointment" (Choose by name, specialty, city and more), "Consult Online" (Talk to doctor online), "Buy Medicines" (Order online), "Book Health Check" (Choose by location, Age, gender, disease), and "Find Hospital" (Find location & contact details). Each section has a list of related services or categories.

Testcases

Test Scenario	Test cases	Test data	Expected output
Sign Up / Registration	<ol style="list-style-type: none">1) Click on signup button.2) Filling all the fields.3) Selecting username & password.4) Submit the signup form.5) Email validation.6) Password validation.	abc@gmail.com abc123	<ol style="list-style-type: none">1) Should open Signup form.2) Able to fill all the fields and if left empty it should raise error.3) Able to choose unique username & strong password.4) Able to submit the signup form after entering all fields and data sent to server.5) If entered incorrect form of email, it should raise the error6) If password length is less than minimum length it should raise the error.

Testcases

Test Scenario	Test cases	Test data	Expected output
Sign In / Login	1) Opening Login Form 2) User Login 3) User Forgot Password 4) Submit the login Form	abc@gmai l.com abc123	1) Able to open login page. 2) If entered incorrect username or password it should raise the error. 3) If incorrect password entered it should raise error and give reset option. 4) Able to submit and get logged in.

Sprint Backlog

Key	Summary	Asignee	Priority	Status	Created	Updated
SB-1	Create mock-up designs	Jigar	P2	Done	13-Oct-22	25-Oct-22
SB-2	Research React JS and MongoDB Framework	Kuldeep & Shivansh	P2	Done	13-Oct-22	25-Oct-22
SB-3	Complete Deliverable 2 Powerpoint Presentation	Mounika	P3	Done	13-Oct-22	25-Oct-22
SB-4	Complete User Stories	Sai	P3	Done	13-Oct-22	25-Oct-22
SB-5	Complete Test Cases	Bindu	P3	Done	13-Oct-22	25-Oct-22
SB-6	Complete Acceptance Criteria	Nikhil	P3	Done	13-Oct-22	25-Oct-22

ProductBacklog

- | | |
|--|----|
| PB1 As a user, I want to know that I have reached the correct page to use HMS application so that I can be sure I am uploading my details to the portal. | P2 |
| PB2 As a user I want to use the application web application so that I can get the understanding of what might be causing the symptoms/what the potential recommendation might. | P2 |
| PB3 As a user I want to upload a photo/image of the symptoms/affected area/illness so that application can diagnose and I can gain insights as to what I might be affected with. | P2 |
| PB4 As a user I want to submit my symptoms for assessment so that I may receive an accurate determination. | P2 |
| PB5 As a user I want to find the nearest emergency center so that I can seek immediate medical attention for what I deem to be a extremely critical/time-sensitive condition. | P3 |
| PB6 As a user I want to return to the Homepage so that I can read the application mission statement, disclaimer, etc | P3 |
| PB7 As a user I want to know whether or not I should see a doctor so that I can gauge how much of a priority a visit a doctor/medical facility is based on a general nature of my symptoms | P3 |
| PB8 As a user I want to navigate back to the homepage so that to manually start over or to read the application's mission statement | P3 |
| PB9 As a user I want to aware the quality/accuracy of the result given relative to those from a medical facility | P2 |

Metrics



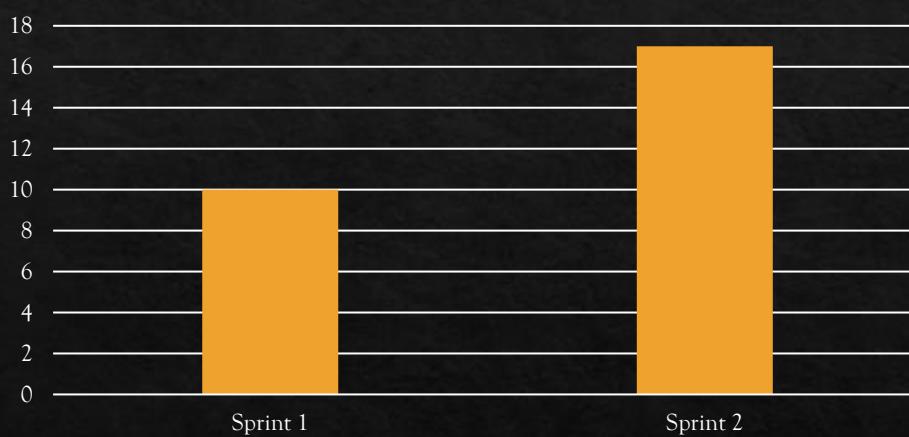
TEAM VELOCITY



BURNDOWN CHARTS

Team velocity

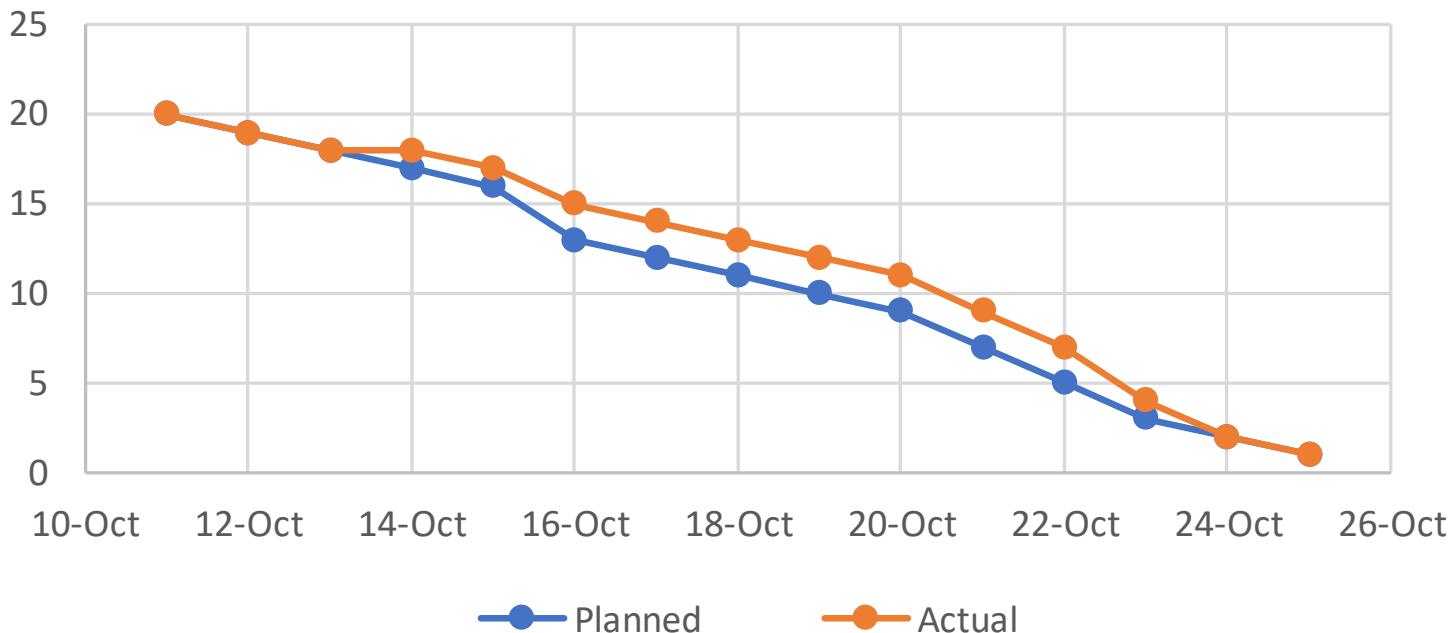
Sprint.no	No. of tasks
1	10
2	17



X-axis : Sprint

Y-axis : No. of days taken

Burndown Chart



Burndown chart

MVP	11-Oct	20	20	
Technolgies to be used	12-Oct	19	19	
Architectural diagram	13-Oct	18	18	
Product Backlog	14-Oct	17	18	
Product Backlog	15-Oct	16	17	
User stories with acceptance criteria	16-Oct	13	15	
User stories with acceptance criteria	17-Oct	12	14	
Sprint Backlog	18-Oct	11	13	
Test cases	19-Oct	10	12	
Test cases	20-Oct	9	11	
Stories completed	21-Oct	7	9	
Stories not completed	22-Oct	5	7	
Stories or tasks committed	23-Oct	3	4	
Metrics	24-Oct	2	2	
Burndown charts	25-Oct	1	1	

Retrospectives

What went well?

Team improved in working and involving to task which was assigned to them.

What need to be improved?

Helping and tracking progress of each other's work

Retrospectives

What next?

Although we had idea, we need to more research about the front and backend technologies to be used in our project

What went well?

To develop login page, we specifically worked on react js

Wikilink

<https://github.com/SaiTejj/HMS/wiki/CURA--HMS>

Thankyou from Team.