Portfolio

Nakul Sharma

User Experience Designer



Who am I?

I am an impact-focused designer, using design to solve complex problems with a focus on successful user experience and journey. I am inspired by best-in-class design practices and my projects are reflections of meaningful improvements in overcoming the gaps in systems with potential to make large-scale impact. My background includes Product, UX/UI, Visual and Digital design.

Education

Reliance Aims Media Works - Pune
B.Sc in Animation, Live Action Film Making and Media Communications (2012-2015)

Anant National University - Ahmedabad
Master's in Integrated Product Design (2019-2021)

Digital Skills

Adobe Illustrator
Adobe Photoshop
Adobe Indesign
Figma
Adobe Lightroom
Adobe XD

Connect

nsharma.design@gmail.com

https://www.nakulsharmadesigns.com/

Interests

Photography
Travelling
Crossfit
Watching Movies
Cycling

Read My Resume

“Design is the intermediary between information and understanding”

Hans Hofmann

Contents

01 **SaaS Platform**
UX/UI - Company Project

02 **Scrutify**
UX/UI - Client Project

03 **CodeRed - AID**
Thesis Project - Academic

04 **UX - Case Study - Global Competition**
UX - Case study
Global UX Competition

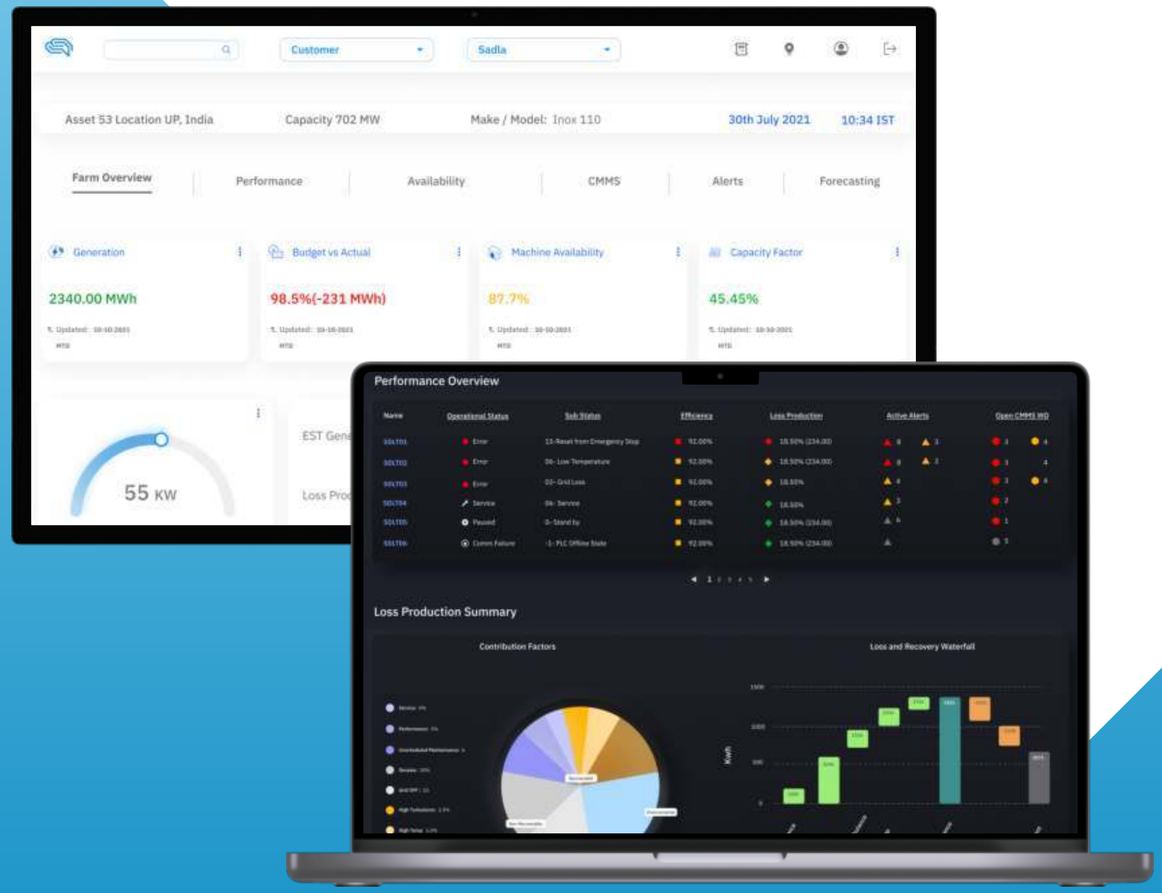
01

SaaS Platform

Renewable Energy Monitoring

This project focuses on a platform designed for renewable energy monitoring.

The overall idea of showing this process is to, how I designed an AI bases SaaS platform which can monitor Solar, wind and Battery Storage energy insights and can suggest the correct measures to be taken in order to improve the generation from renewables assets.



Research



Goal

The goal was predefined and I was given all the research done previously. The brief was to bring out an experience based on all the research and user understandings, focusing on the UI with a trendy look and feel along with a very strong user friendly interface.

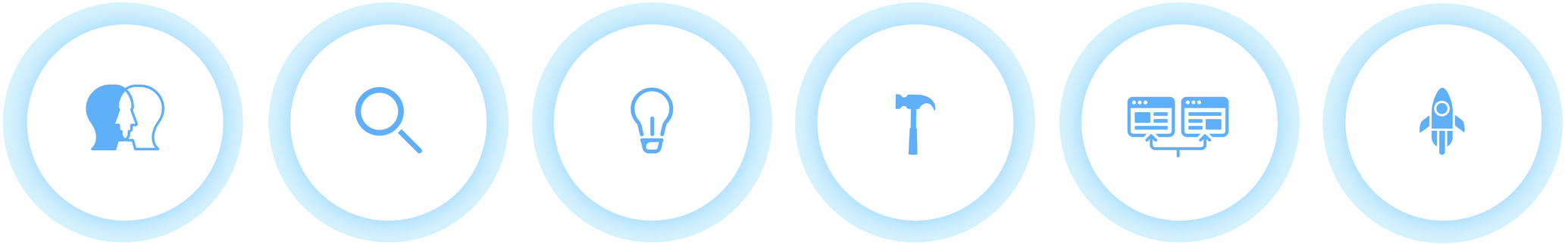
Result



Solution

As per the discussions and research done in the project there were many opportunities I figured out, primary ones was to do data and insights organization, data visualization and the sequencing of all the elements together. Figuring out the UI patterns for easy accessibility and usability.

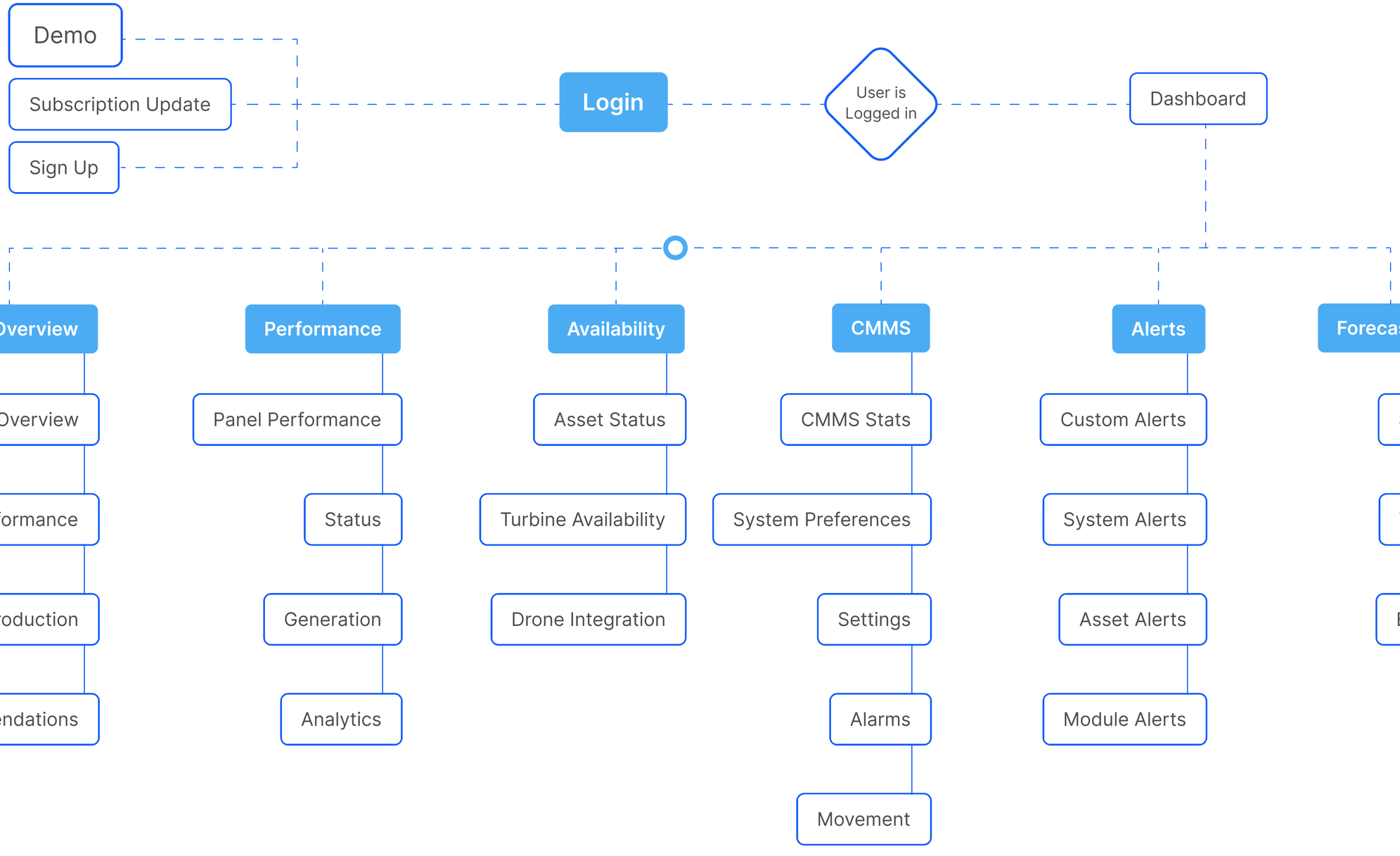
Design Process



Empathize Define Ideate Prototype Test Implement

User flow

Flowing out the entire process helped me understand on the initial steps of users, it brings a clarity on what can be a happy path for the user and in what areas it can become more challenging. This user flow approach focuses on a very simple journey, keeping the existing happy paths in mind.



User Persona 1



I’m Ram, and I am Data Scientist

35 Years | Mumbai

Ram works closely with other data scientists, and face many problems which are related to codes and interactions on the platform. He recently realized that the platform needs to be upgraded on such a level that it can help him by reducing the task identification time and data division.

Device

Laptop/Desktop

SaaS Fluency

●●●●●

Behaviour

- Follow an organized way.
- Proactive in work
- Don’t like to waste time
- Do lot of planning
- Interacts a lot with Data Scientists

Frustrations

- Less data identification
- Clarity in understanding interface
- Making new data requests.

Desiers

- Better UI
- Reducing Interaction time
- Managing the data well
- Guiding users on the platform

User Persona 2



I’m Kapil, and I manage Renewable assets

40 Years | New Delhi

Kapil being an asset owner, controls and monitors multiple solar panels and wind turbines. He interacts with data scientists and managers who are responsible for assigning new updates on SaaS platform. Kapil has been facing problems in coordination and prioritizing tasks on the platform.

Device

Laptop/Desktop

SaaS Fluency



Behaviour

- Quick and time saving
- High Productivity
- Don’t like to waste time

Frustrations

- Coordinating with Managers
- Assigning new insights
- Loading speed of the interface
- Interface misguidance

Desiers

- Better interface
- Less flow time
- Making quick updates on platform
- Right set of symbols

Style Guide

Primary Colors

Blue Teal
Blue Teal symbolizes traquility and peace. Our planet earth is witness to its vastness, filling the sky and beyond.

RGB 37 186 250
HEX 25bafa
CMYK 65 10 0 0

Electric Blue
Blue symbolizes technology, trust, security. It is a color that reinforces support and confidence.

RGB 22 95 250
HEX 165ffa
CMYK 85 70 0 0

Charcoal black
Black symbolizes power, control and authority. Black is also a neutral that agrees with all colors.

RGB 34 37 45
HEX 22252d
CMYK 0 0 0 90

Data Quality Colors

Normal	Erroneous	Constant	Zero	Not Available
#6CC9FF	#4178FF	#91A6DE	#D3DFFF	#C2E9FE



Data Availability Colors

Red	Orange	Green
#FF0000	#FF9E0C	#00E886

Typography

A b

IBM Plex Sans

Bold and medium

30 px

20 px

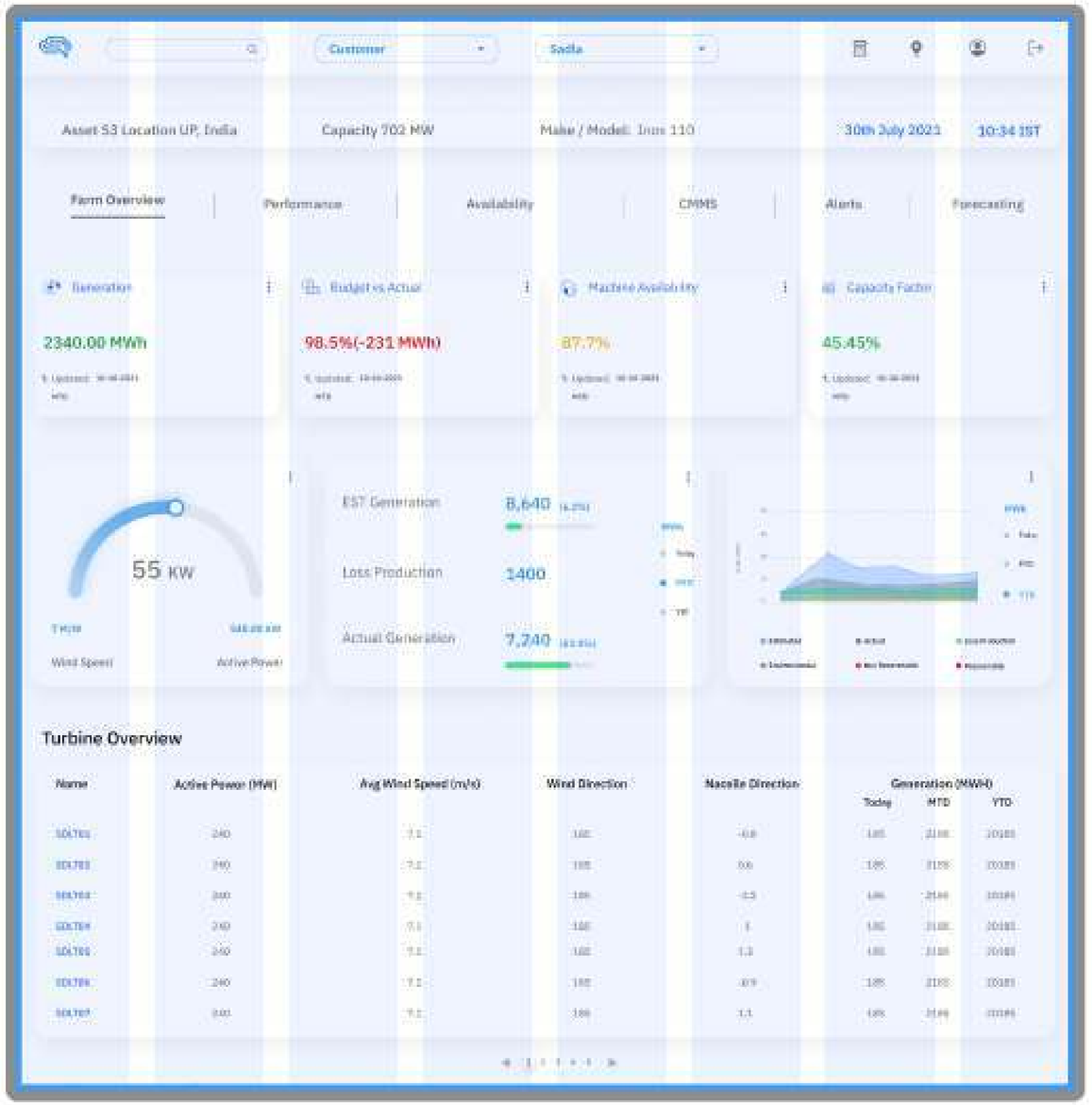
A b

IBM Plex Mono

Regular and Medium

14 px

12 px



Grid System

871 × 885px

8 Column

Type **Stretch**

Gutter width **20px**

Spacing

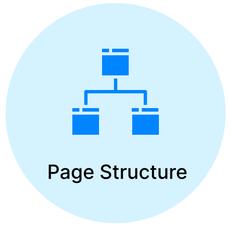


8 px 16 px 24 px 32 px 40 px 64 px 80 px 96 px 120 px

What UX Problems I Solved?



Users were facing issues with accessibility before as there was a layout with so many color and shape elements, which we aimed to minimize. Giving users the right set of elements and shapes with the correct meaning helped me increasing the accessibility.



The page structure was not organized accordingly before. Implementing the gestalt principles in the layouts helped the users to read and divide the information in such a way that it gives a pathway to user's eyes for reading the content according to the priority.

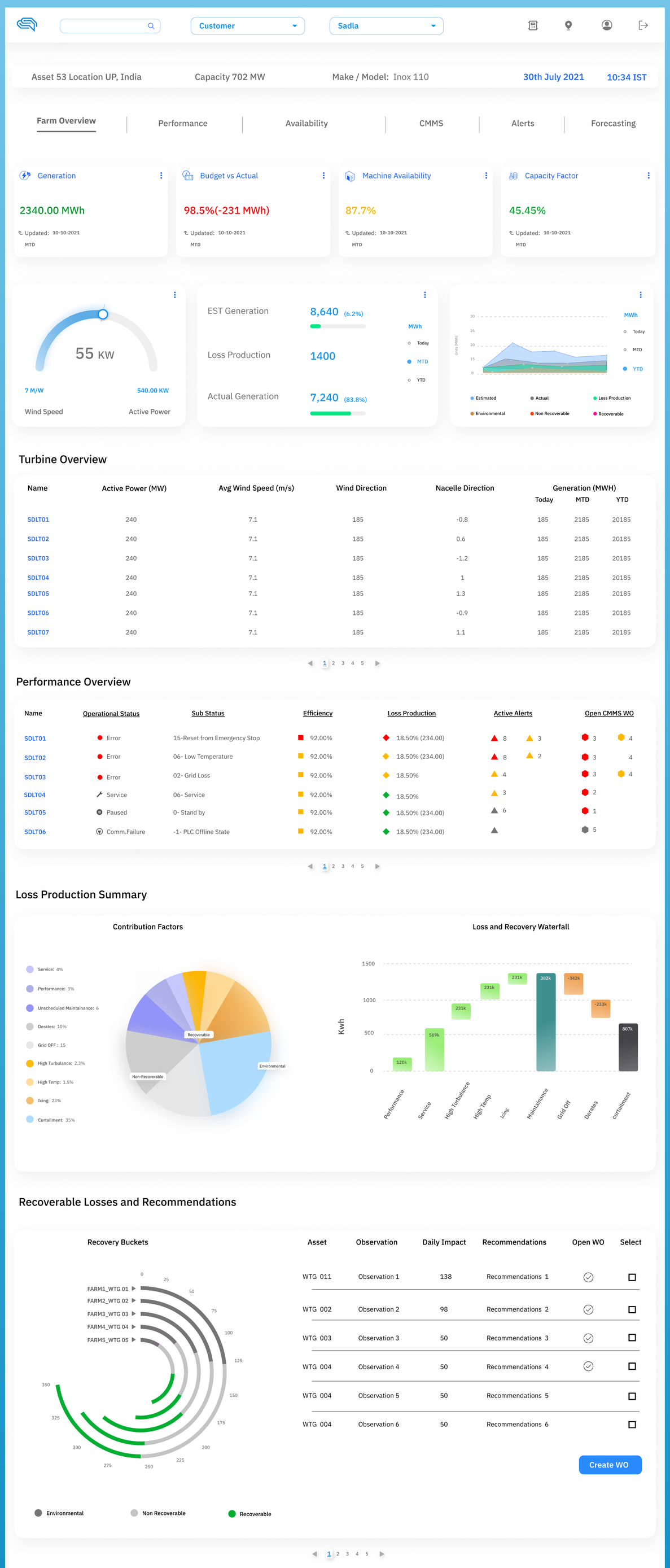


As calculated the time consumption was higher in performing a specific task. We decided map out the user journey task wise and perform those tasks again.
The new experience focus on high interactivity in less time.

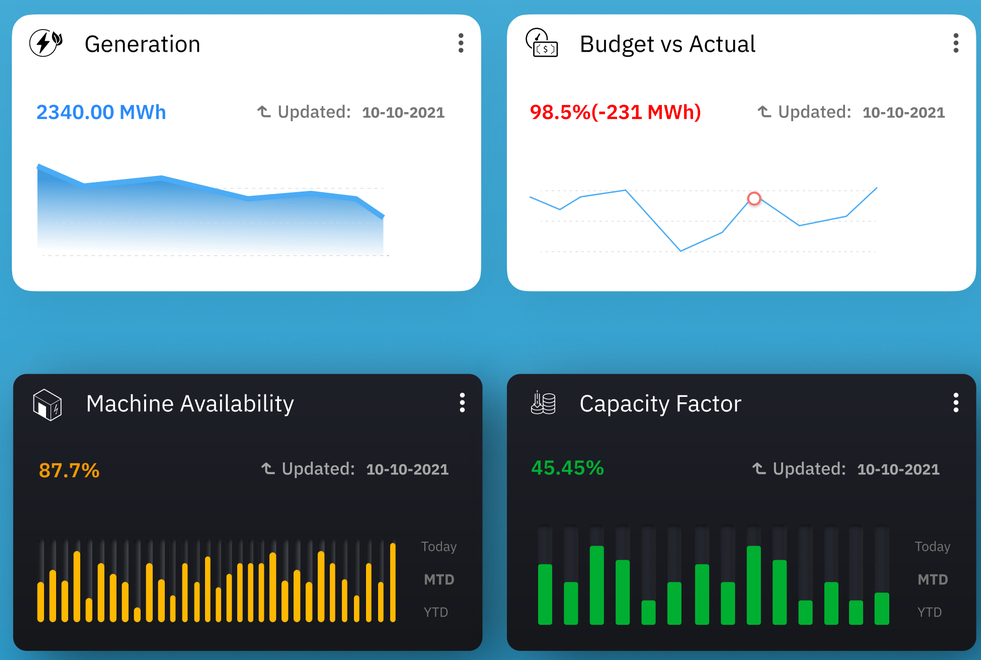
Outcomes of the Solution

- Reduced the time in performing the tasks.
- Higher accessibility for color blind people.
- Visually balanced and divided page structure.
- User can focus on one particular segment and flow.
- Small user journey to increase the amount of happy path.

Started UI design by iterating on the card layouts and implementing different card styles for a dashboard which provides insights of multiple parameters. Dividing sections based on the Gestalt's principles, helped me to organize elements and keep it clean.



I really had fun while designing this platform as I was like a short exercise where the research was already defined and the users were helpful in determining the existing journey and adapting on to the new one. **The data represented in this project is dummy data, as the real time meta data can not be presented.**



Following with a day and night theme, it makes it more easy to show time change as well as makes it more comfortable for user's eyes to relax in with the dark mode. Each card represents a parameter used to provide an insight of energy stored and used.

View Full Project

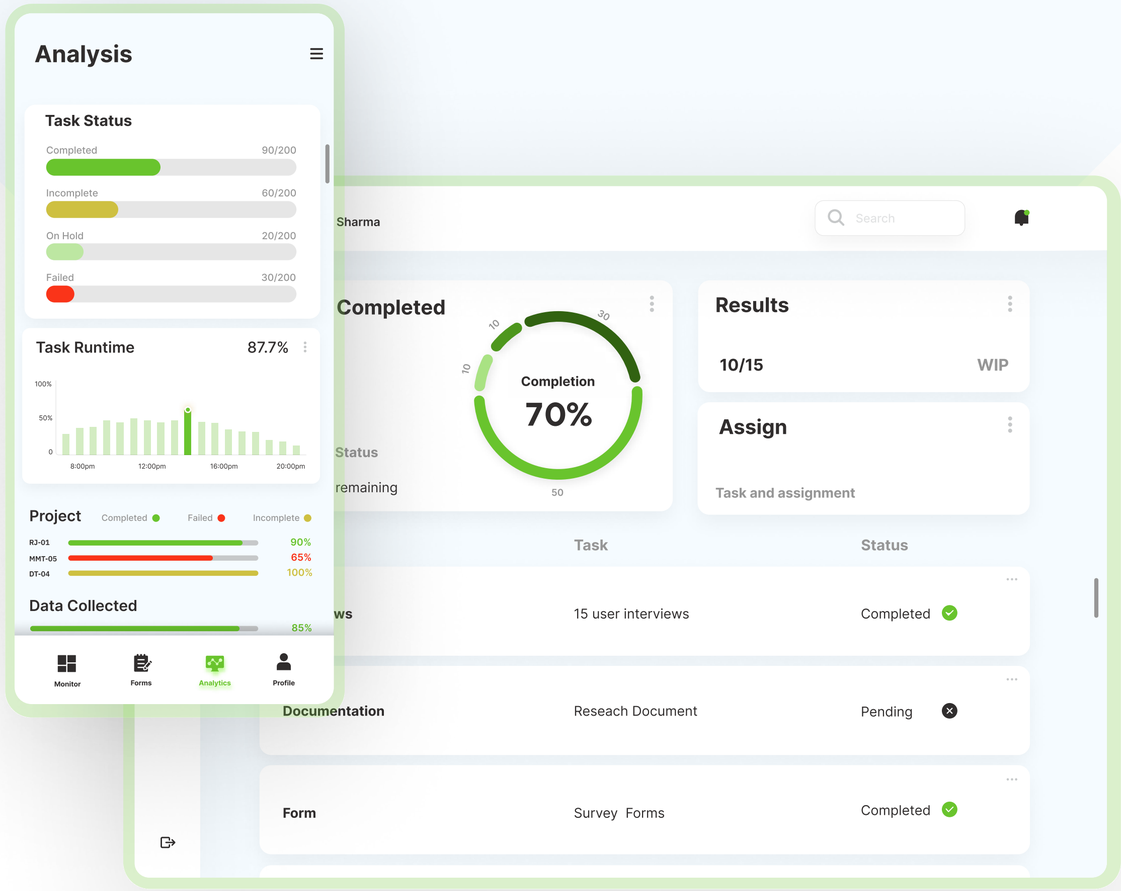
02

Scrutify

System Application Design

Goal is to design a research platform for field research and task assignment for an India Research based startup.

As this is a comprehensive client project, it has been represented in a short and different sequence. Explaining the UXUI process and approach.



Overview

A non-profit organisation is sending their team to map safe water sources and understand the water consumption for each village in Rajasthan. Their objective is to collect data in the form of interviews from the villagers to achieve this. The interview questions are like: where do they get their water from, how far do they have to travel to secure safe drinking water, what's their health status, have they fallen sick anytime within the last year, are they currently facing any medical issue, if yes then what kind of issue etc.

Problem Statement

Build interface for capturing information and displaying of information (visualizing the information) for both the stakeholders.

Design Parameters

Design for both the stakeholders — Field Team Member (capturing information) as well as Program Manager (viewing information)

Programe Manager

Programe manager from Mumbai has assigned research related tasks to a field resercher in Rajasthan. The task is to collect data, in the forms prepared by research team and programe manager. Programe manager wants all the updates, tasks status, project status, form completion, and success rate of the project.

Solution: **Research forms can be edited and the programe manager may add some new questions in it.**

Field Researcher

The field researcher gets all the requirments (forms and tasks) updated on the app, on the basis of which researcher starts to collect data, interviews and information about the village.

Solution: **Everytime researcher completes a form or a task, the project gets analysed and the information keeps on updating on the dashboard, which is visible to the programe manager.**

Programe Manager

Manage, assign tasks and monitor

Researcher

Research and task completion

Possible Directions

- Flexible Dashboards
- Data Collection
- Monitoring

Design Process

Understand
Requirment & User Needs



Research & Insights
Identifying the Problem



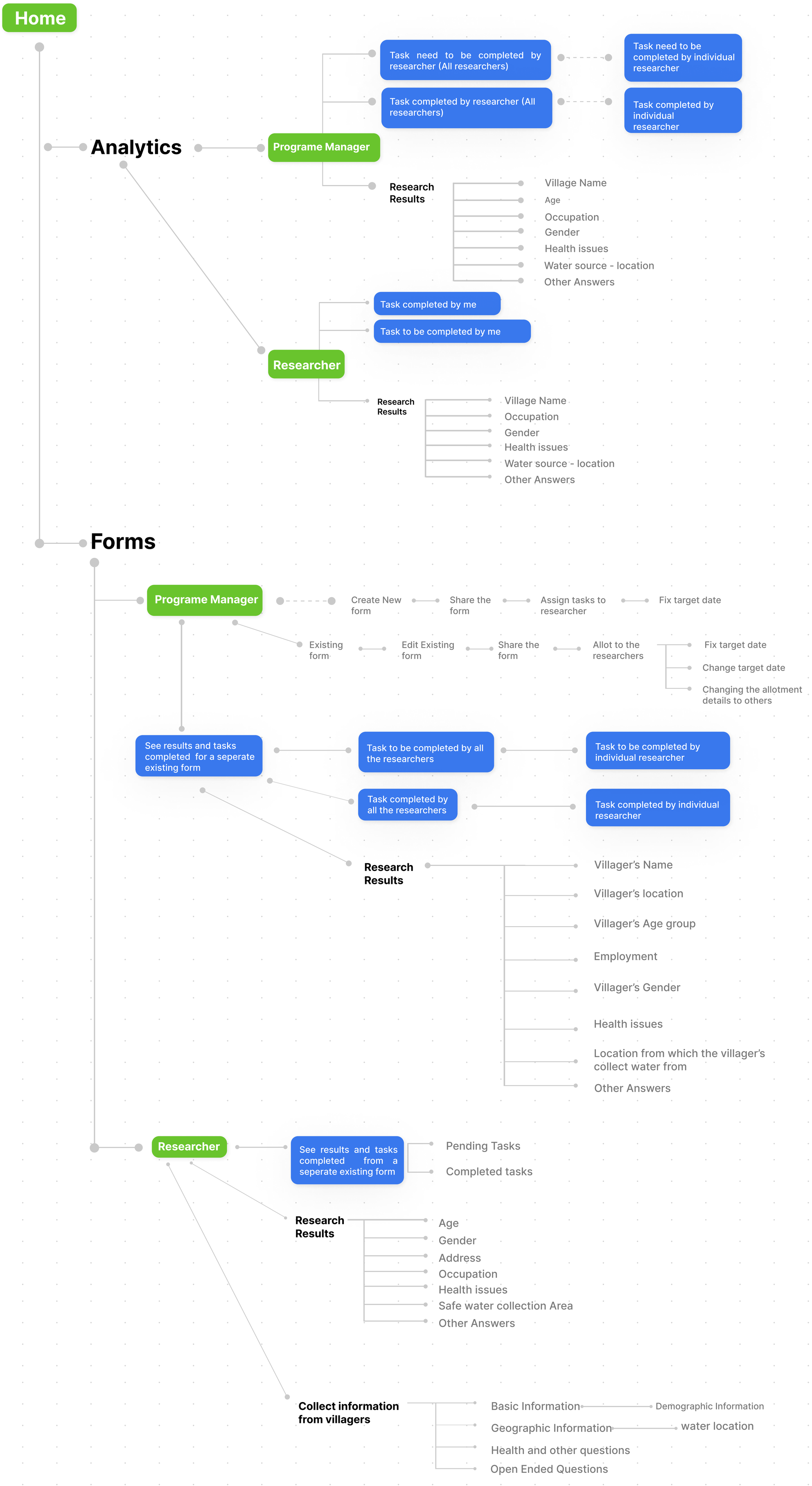
Ideate
Solution Ideation



Design & Test
Testing design implementation



User Journey



User Personas



I’m Niketan, and I manage research programes

28 Years | Mumbai

Niketan works as a reserch programe manager. He coordinates on different projects related to social activities like clean water supply and management. As these are field projects, Niketan have to assign multiple tasks in a day and manage data.

Work Volume

50-70 Tasks/day

Device

Laptop/Desktop

System Fluency

Behaviour

- Follow a organised way of living
- Proactive in work
- Don’t like to waste time
- Do lot of planning
- Interacts a lot with researchers

Frustrations

- Not able to identify the tasks
- Difficulty in Managing Projects
- Making new requests.

Desiers

- Better Tech specs
- Time management
- Hiring more people
- Do lot of planning
- Interacts a lot with researchers



I’m Vicky, I am a field research agent

25 Years | New Delhi

Vicky is a field researcher. He goes out on field and ask questions related to the project, he works on multiple projects having different forms. Everyday he visits new locatoin for taking interviews and to practice ethnographic research.

Work Volume

3-5 Forms/day

Device

Mobile/Laptop

System Fluency

●●●●●

Behaviour

- Spontaneous Response
- Crisp talking and collecting points
- Time management
- Public interaction
- Interacts a lot with researchers

Frustrations

- Organising questions and forms
- Updating reports
- 100s of phone calls and messages
- Sudden requirment change.

Desiers

- Coordination with manager
- New updates accessability
- A system to update information
- Checking the completion status

What UX Problems I Solved?



Creating a platform for two kinds of users, solving the primary problems for both users. Focusing on a connected environment and enabling users to initiate, assign and manage tasks.

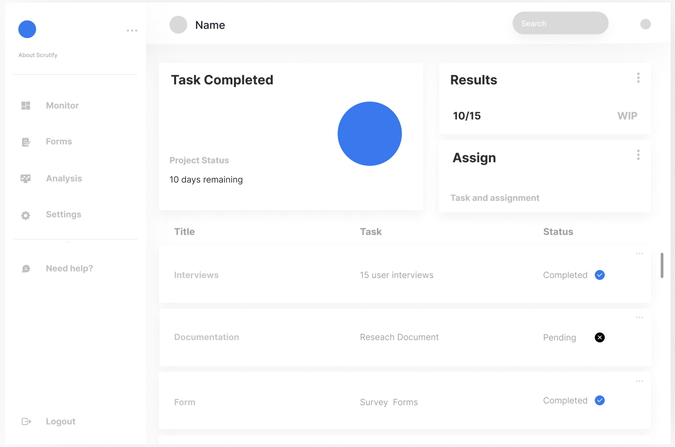


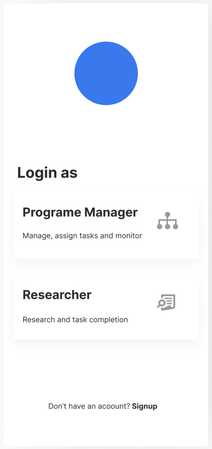
Presenting and managing insights of information in an organized way along with all the categories of data. Calculating and measuring the performance of each task and project gives an overall understanding and helps in comparing different projects.

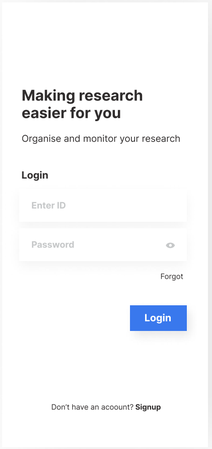
Outcomes of the Solution

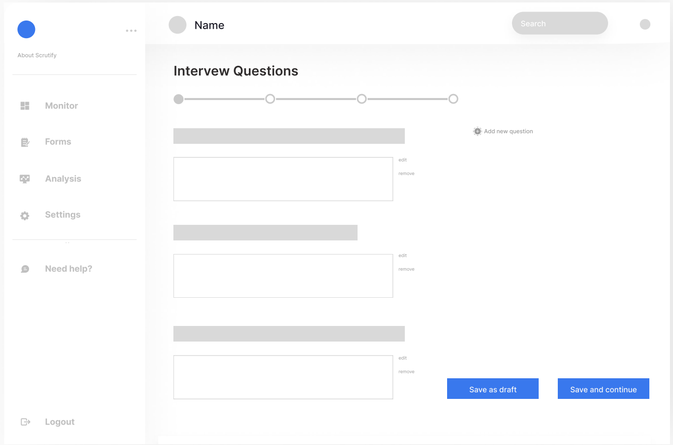
- Since it is a new platform, users can manage tasks and projects.
- Higher accessibility from both the stakeholders.
- Potential management tool for big organisations in managing daily tasts and operations.

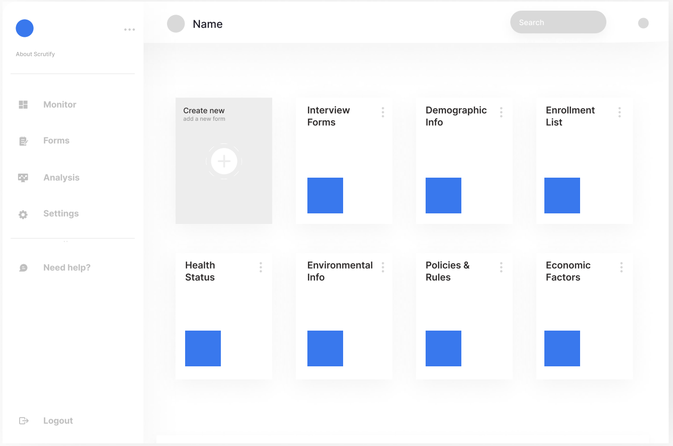
Hi-Fi Wireframing

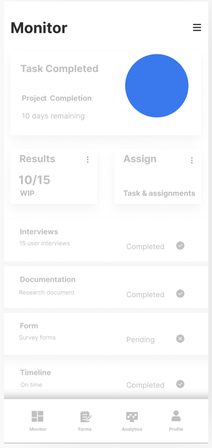


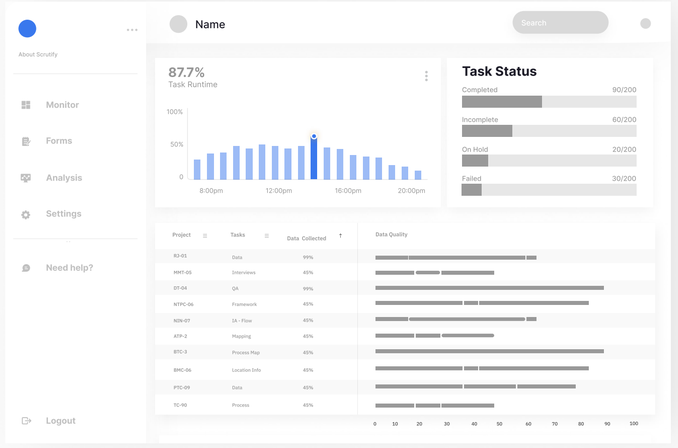


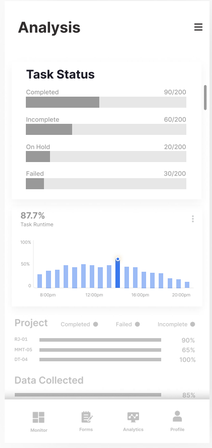


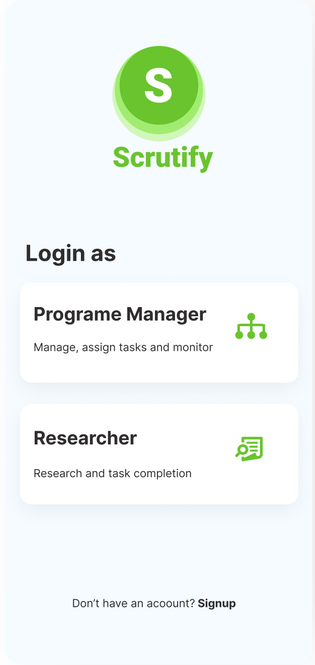


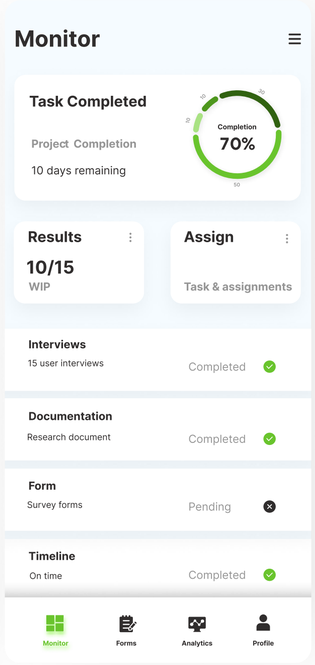


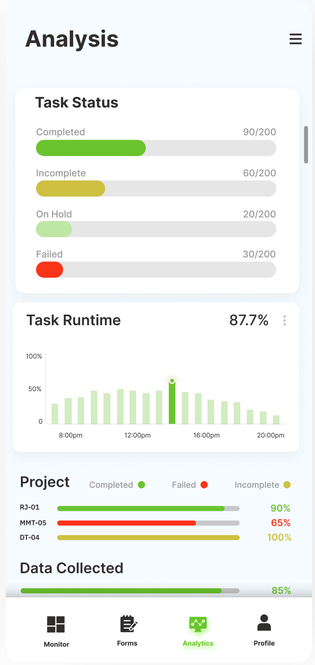








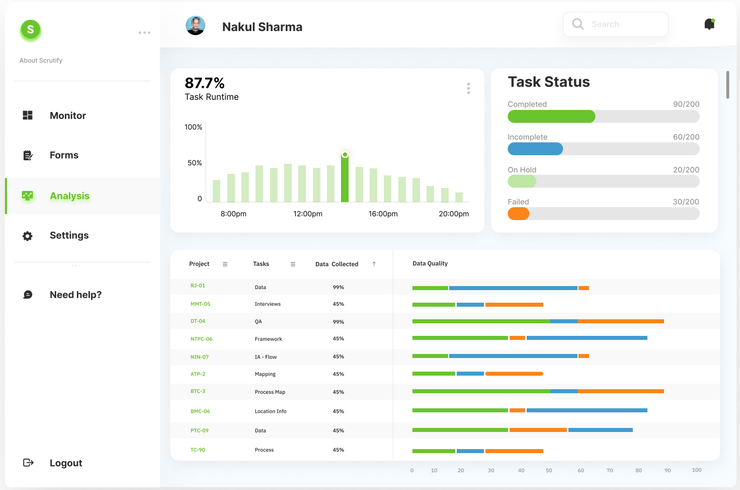


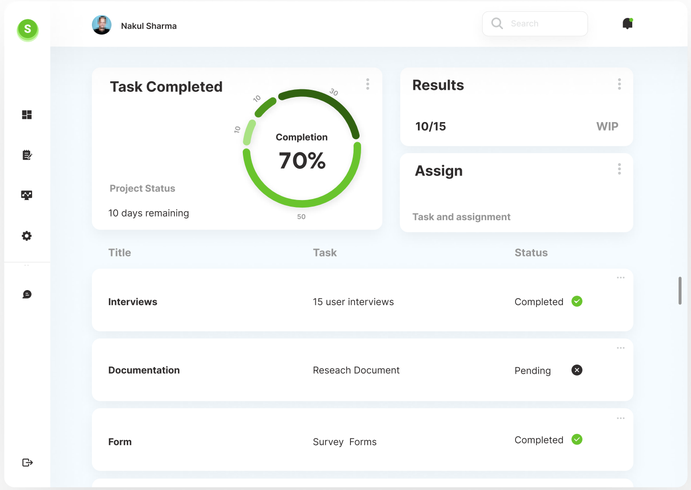


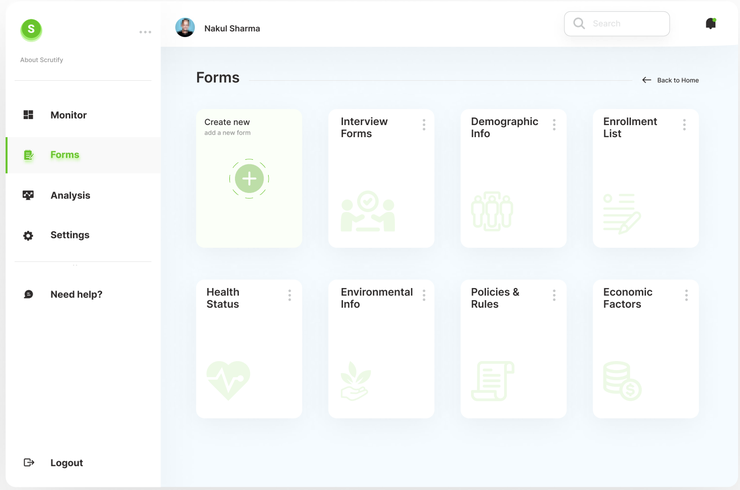
Solution

As this is a client project, there are many things which have been shown differently. Keeping the overall Idea same and relevant to the user needs the experience has been designed. The UI is based on the brand identity provided by the client. The aim of this project is to make a customizable dashboards for a research based startup, making the interaction between the program manager and the field researcher super easy.

View Full Project







03

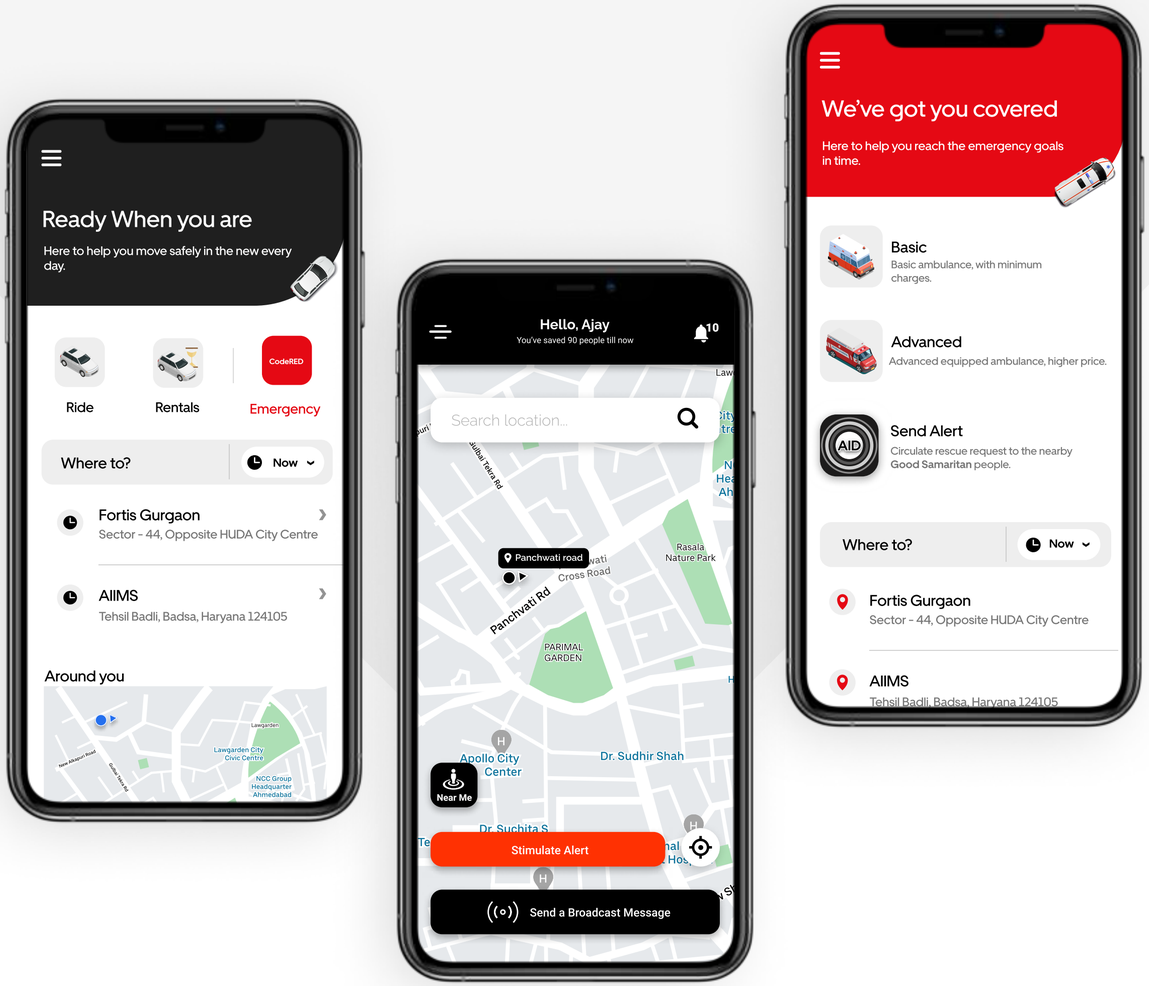
CodeRED

EMR - Medicine

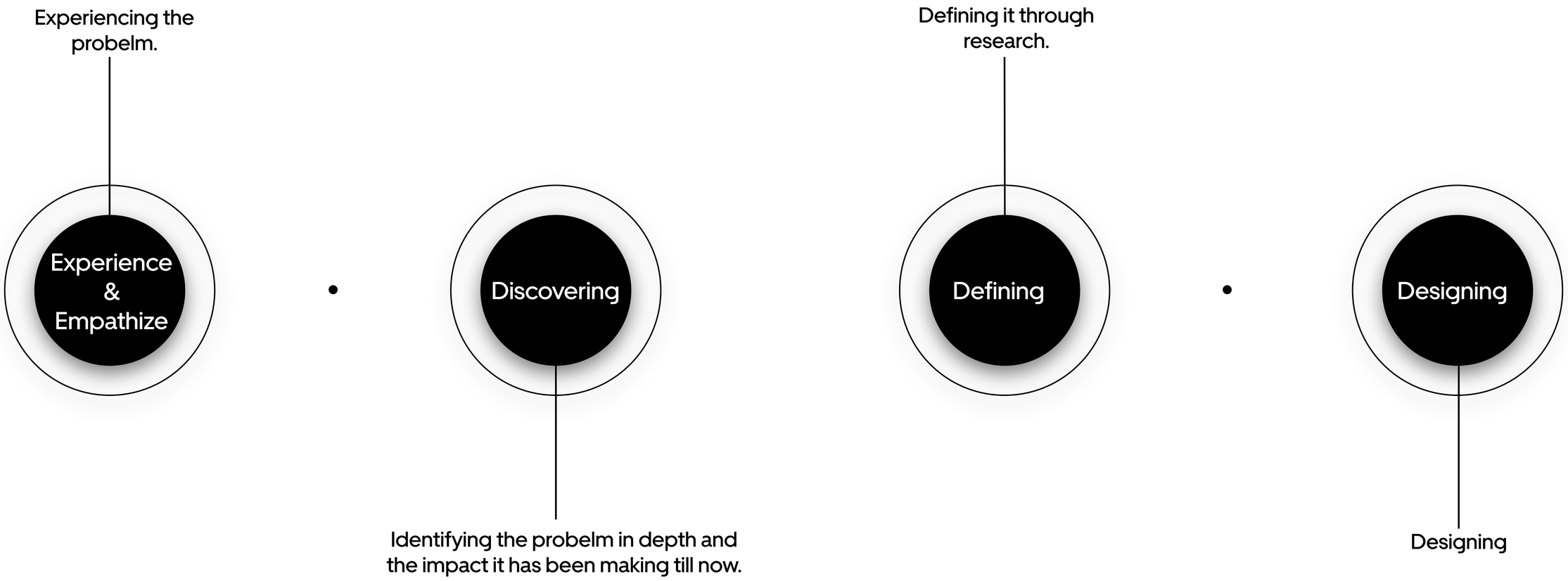
Service Design

Thesis project aiming to overcome the shortage of ambulances by systematic level planning.

This project started from my real-life catastrophic experience, when it took 3 hours for the hospital to arrange an ALS ambulance for my father, while he was in the process of transfer to an advanced hospital in another city. The main concern was availability and access to ambulances and a driver.



Design Process



Introducing **Two Services**

CodeRED

CodeRED is a service connecting emergency rescue systems directly with users, giving them direct access and visibility of actions.

AID
SAVING LIVES

AID acts as a backup for CodeRED and focuses on encouraging current users to come up and be good samaritans in an emergency by creating a network of nearby people who can come for instant help.

Experiencing & Identifying **The Current Problem**

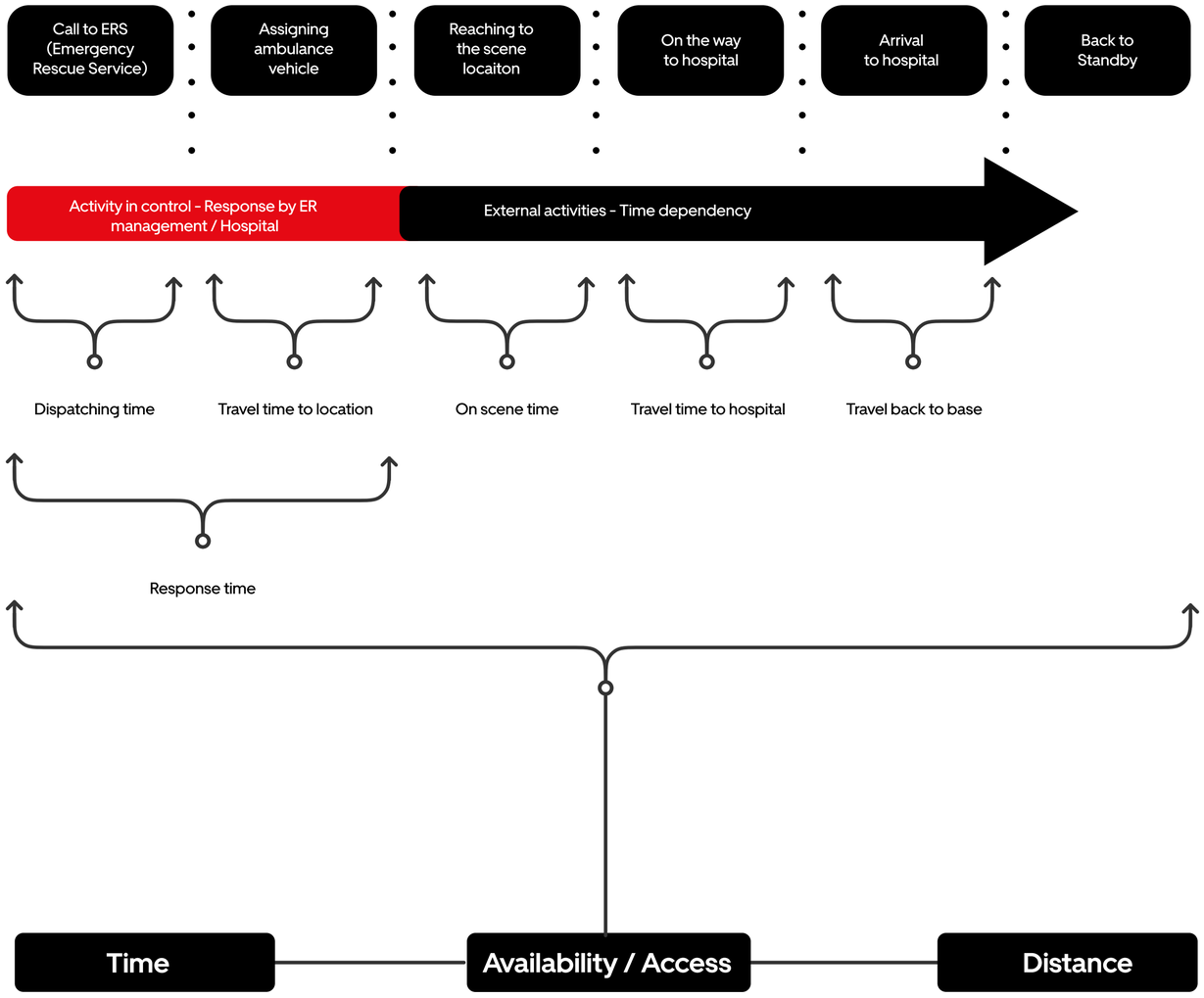
Experience

This project comes out from my real-life catastrophic experience, when it took 4 hours for the hospital to arrange an ALS ambulance for my father, while he was in the process of transfer to an advanced hospital in another city. The main concern was the availability and access to ambulances and drivers, also a clear path way for the ambulance to move faster.

Identification

Currently, there are many challenges and formalities to sign for ambulance allotment. It gets difficult for hospitals to manage fewer ambulances and search for the availability of drivers. This leads to illegitimate charges for a basic and advanced ambulance. Most people don’t know what and how to call for help in any medical emergency.

Current Rescue **System Map and System Gaps**



Time

The time factor is connected with availability. When a request comes for any rescue, the whole process takes 15 minutes to check the availability of drivers and vehicles. A limited number of vehicles and over occupancy of rescue teams make it more time-consuming to allocate a vehicle for any particular call.

Access / Availability

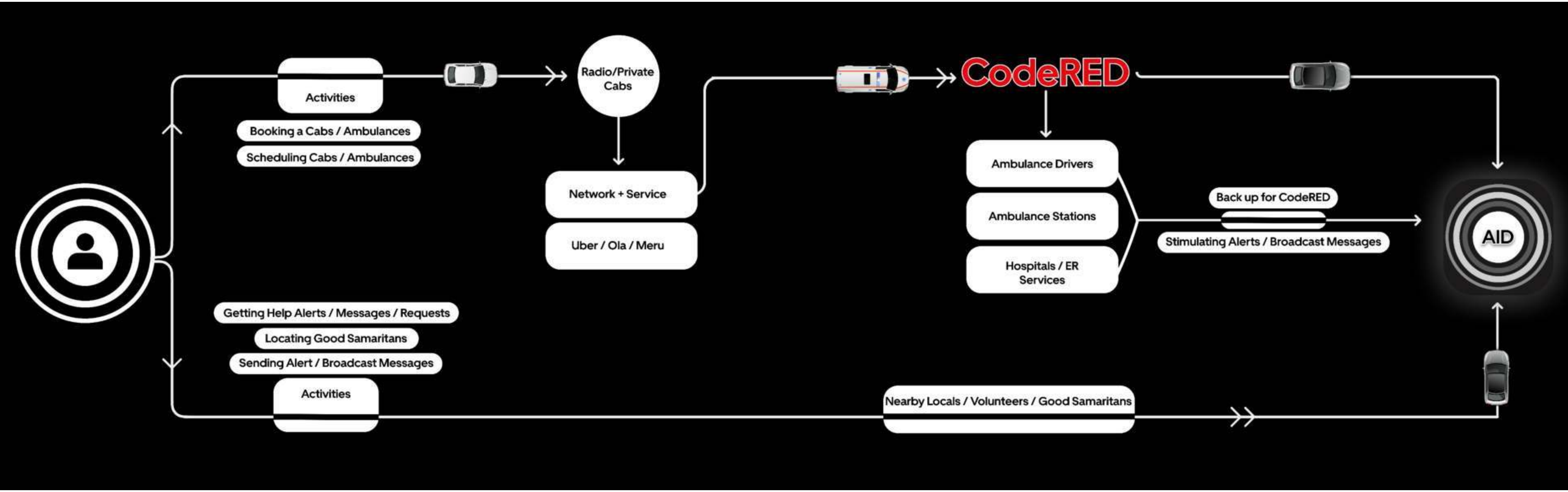
It gets difficult for the management to access the vehicles and drivers.

Availability is not only about the vehicle and the driver or nearby resources, it also indicates us about the medium of communication.
Lack of coordination from helpline services and unanswered phone calls also result in delays.

Distance

In most cities, ambulance stations are at the center or somewhere near the corner, private hospitals and rescue services are mostly occupied and short. It takes time to cover long distances, especially in bad traffic conditions.

Systems **Map**


Activities
Booking a Cabs / Ambulances
Scheduling Cabs / Ambulances
Radio/Private Cabs
Network + Service
Uber / Ola / Meru
CodeRED
Ambulance Drivers
Ambulance Stations
Hospitals / ER Services
Back up for CodeRED
Stimulating Alerts / Broadcast Messages
AID
Getting Help Alerts / Messages / Requests
Locating Good Samaritans
Sending Alert / Broadcast Messages
Activities
Nearby Locals / Volunteers / Good Samaritans

The **Process**



Experience And Identification

60 days

- Facing the Problem
- Concept Generation & Study
- Problem Breakdown



Research, Defining And Ideating

35 days

- Field Research (3 Villages, 4 cities)
- Quantitative Research
- Understanding the Current System
- Empathizing
- Reframing the Concept



Service And System level Planning

20 days

- Current Rescue System Flow
- Human Bevaiour Study
- Mobility Service Working
- Medical Rescue Line of Action
- System Map



Experience And Interface Design

60 days

- User Experience Design
- Stakeholder Flows
- Rescue System UI Design
- **Writing The Thesis Book**

User Personas



Shanti Prasaad

45 Years | Chhattarpur Village

Shanti Prasad lost his friend, while the ambulance was on the way to rescue. In Chhattarpur village there is a high rate of accidents as compared to city, due to highway connectivity. Ambulance takes a lot of time in reaching to the spot.

Occupation

Farmer

Age

55

Behavior

- Helpful
- Hardworking
- Good Samaritan of the village
- Humble and Polite

Frustrations

- No Medical help in the village
- Travelling to city in medical emergency
- No quick rescue in the time of emergency
- Lack of help

Desiers

- To get the fastest medical help
- Helpline number and trust
- Visibility of actions
- Medical rescue in less time

User Personas



Kamla Devi

54 Years | Agra

Kamla Devi faced an emergency in her family during covid times and faced a big delay in the rescue.

There was no ambulance service provider and faced lack of response on the helpline number.

She tried to take help from neighbors and was not able to reach hospital on time.

Occupation

Cattle rearing

Age

49

Behaviour

- Happy and Polite
- Helpful
- Caring towards other people

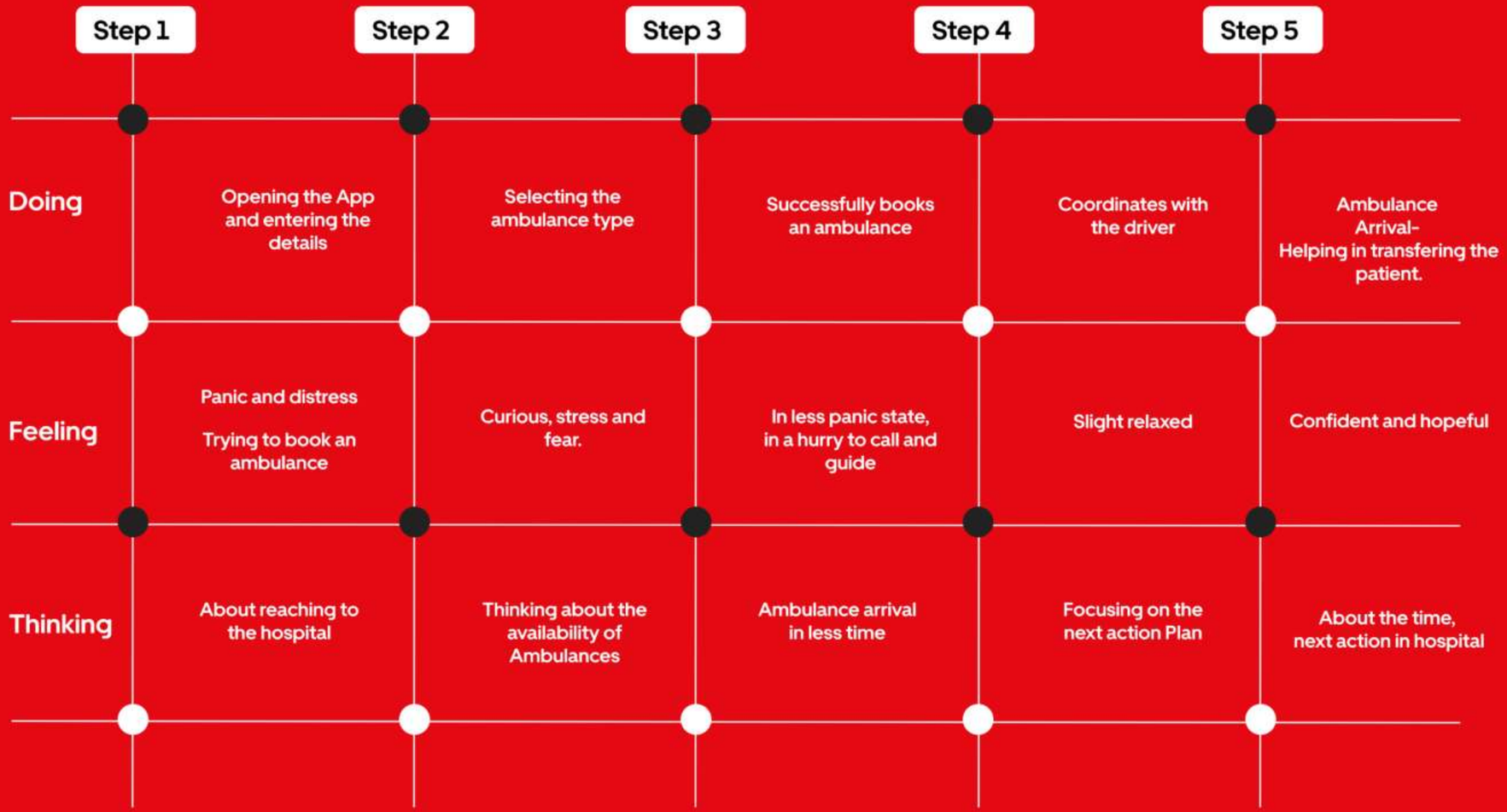
Frustrations

- Less medical facilities
- Zero rescue awareness
- Delay in response time

Desiers

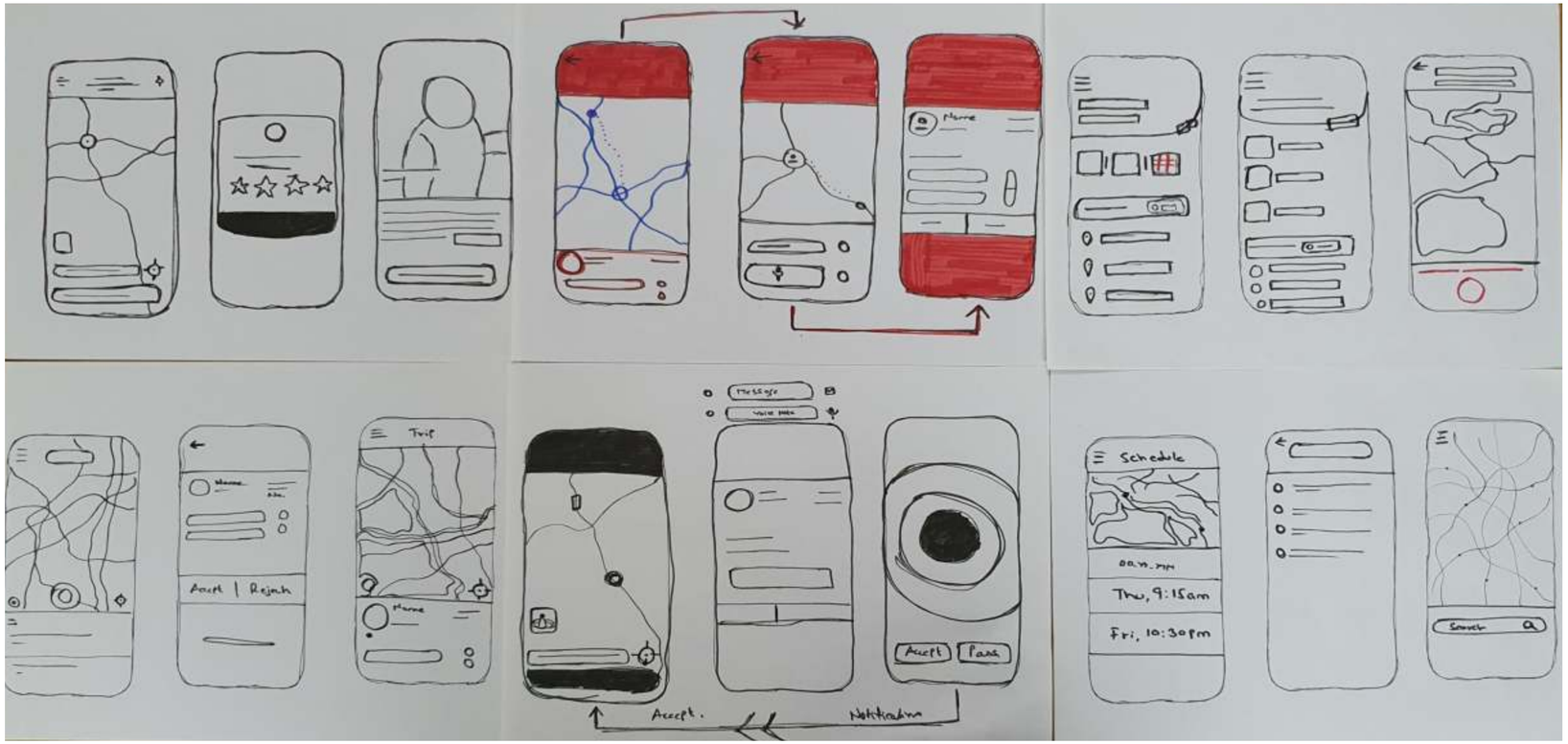
- To get the fastest rescue
- Medical awareness
- High connectivity
- Assurance and trust

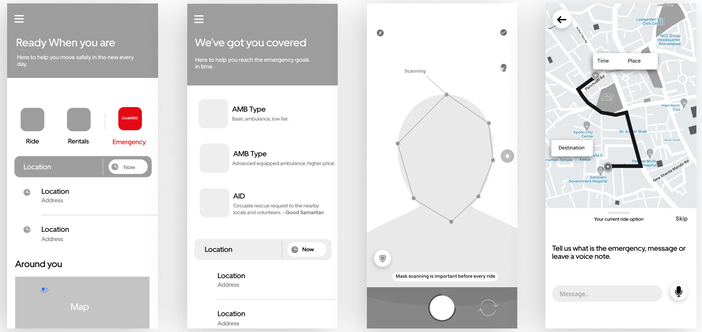
User **Journey**

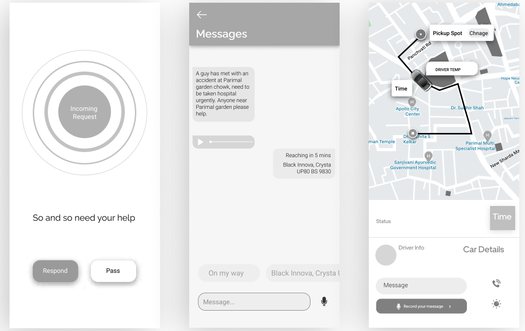


Wireframe

Ideation And Development



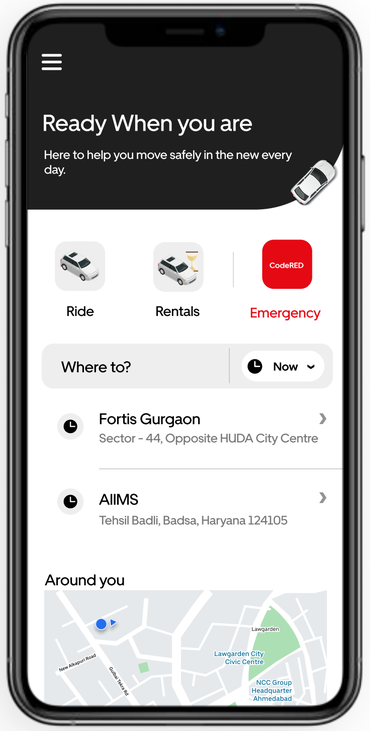






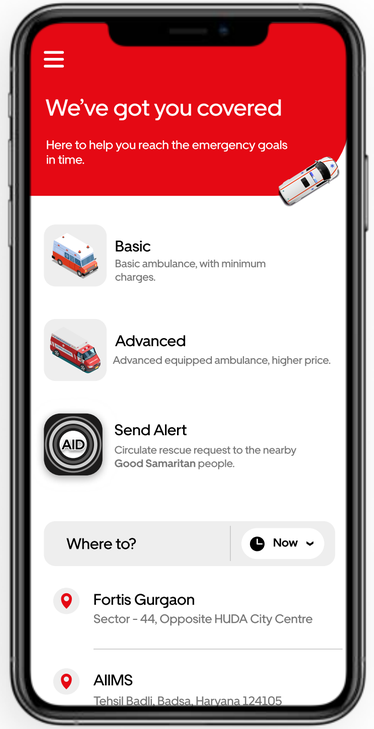
Implementation of **codeRED** will build connectivity between mobility services and emergency rescue systems, through which the existing and new users can get direct access to Ambulances/rescue vehicles.

Uber

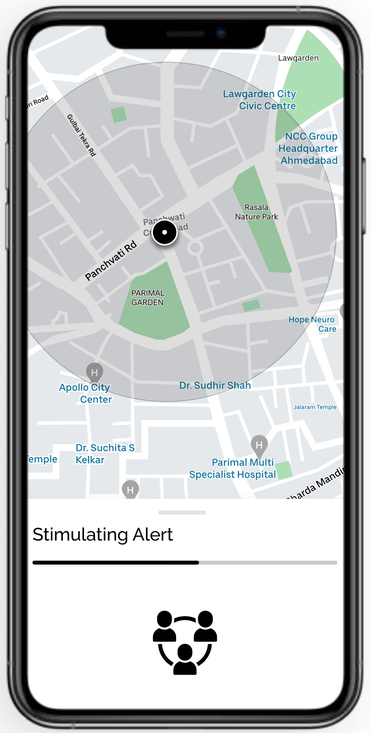


CodeRED service integration.

CodeRED







Incase of no ambulances

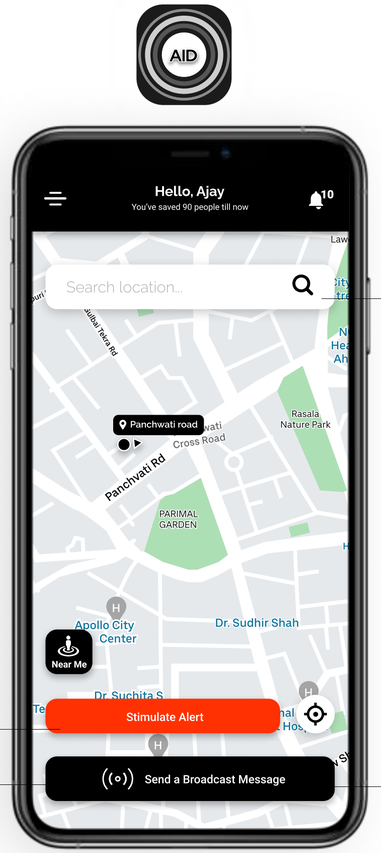
Stimulating an alert to the locals





AID is a concept that will act as a backup for codeRED, and a service that will connect all the good samaritans who are willing to come up and help people in emergencies like accidents and injuries.

A service for sending help alerts and broadcasting rescue messages to all the nearby users who can reach out quickly and help.



Search people by location

Locate AID users near you to check availability

Send an alarming alert, to get a call back

Send a broadcast message or a voice note.

What Problem I Solved?



High Connectivity

Giving high connectivity to the users through the implementation of a service in an existing app. Users can quickly book an ambulance from their mobile phones.



Reducing Time of Action

Reducing the time of action for rescuers, ambulances and victims.



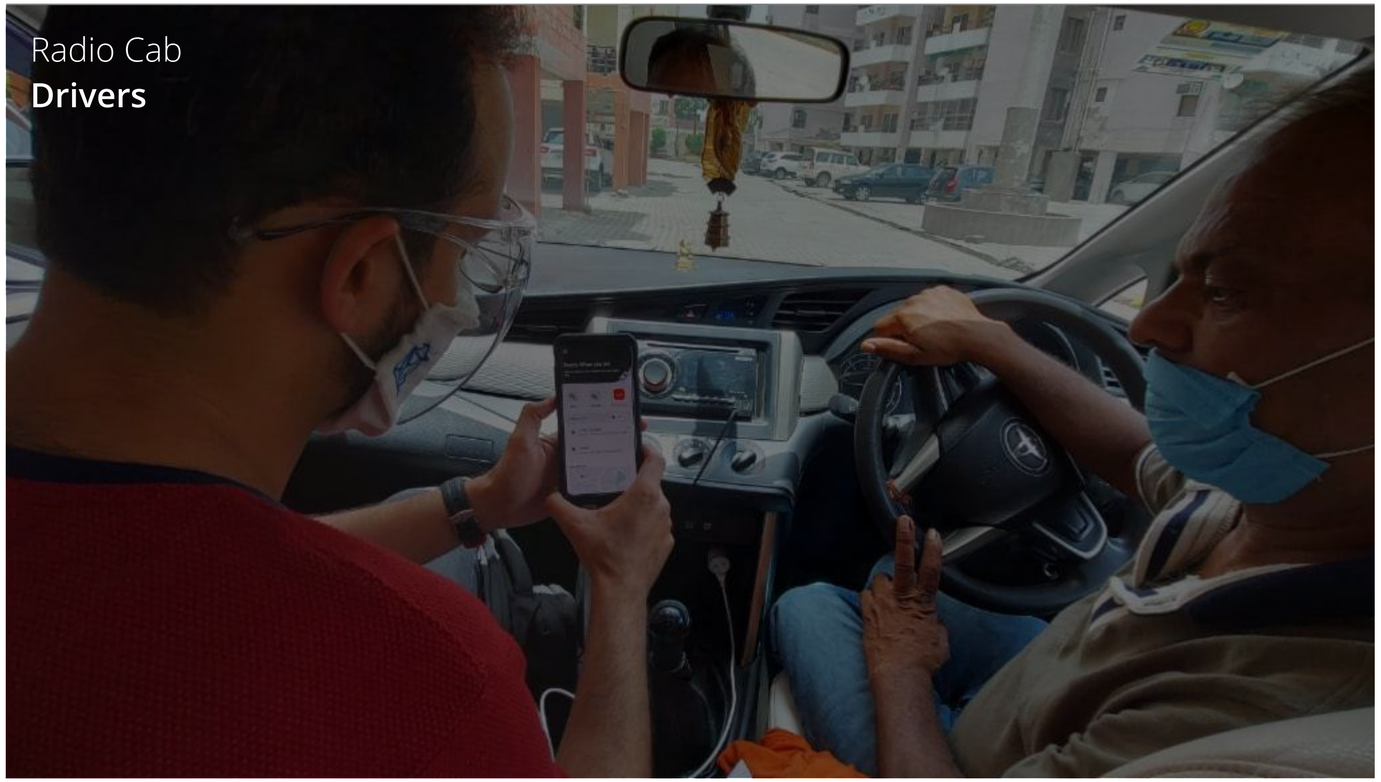
Building a Network

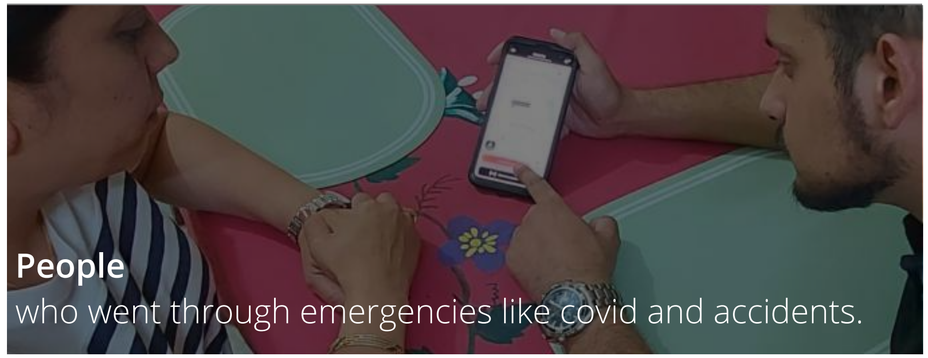
Building a hyperlocal network for all the stakeholder which can initiate action as quickly as possible. Also creating a community of good Samaritans who are whiling to help during an emergency.

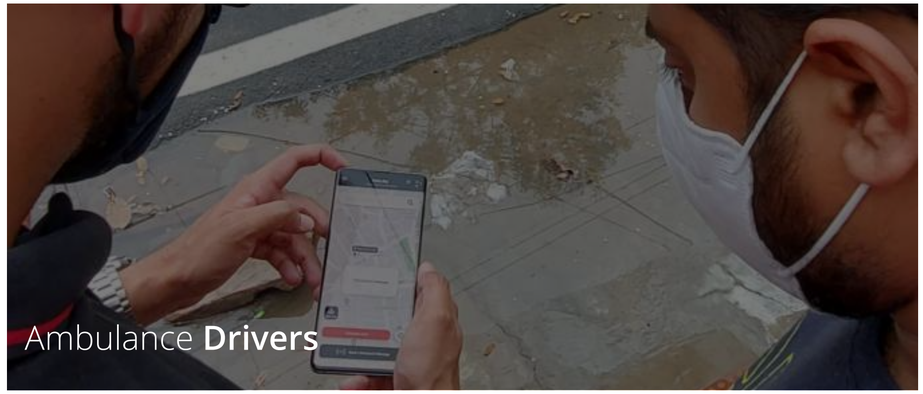
Outcomes of the Solution

- Reducing the time of emergency rescue.
- Giving victims an asurity of getting rescued in less time.
- Building a hyperlocal network of rescuers and connecting them with fastest service.

Partial
Usability Testing

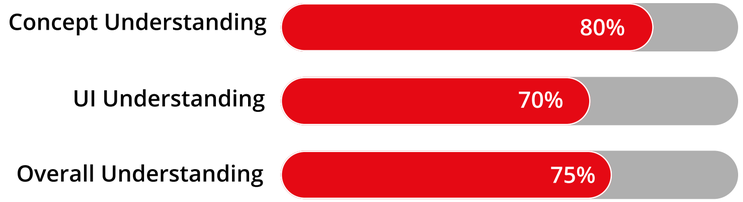




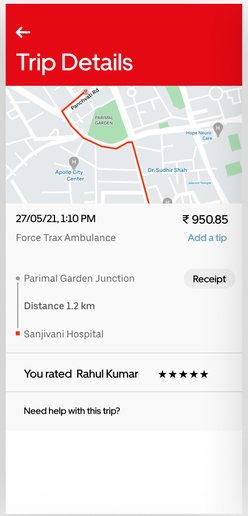


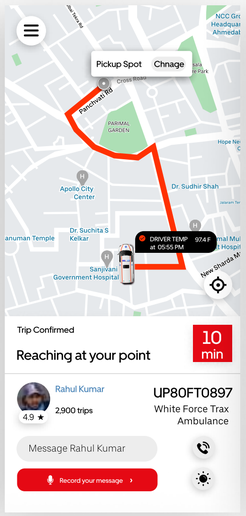
Concept
Understanding

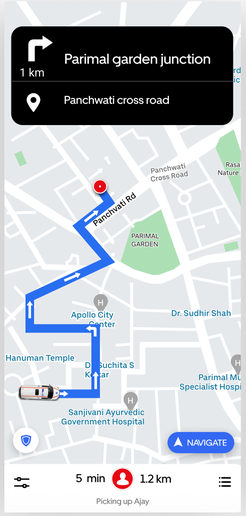
To get an understanding of usability factor and to check whether the users are able to get an idea of the concept, I did an early usability understanding with users where they were asked to recreate an emergency scenario from their real life.

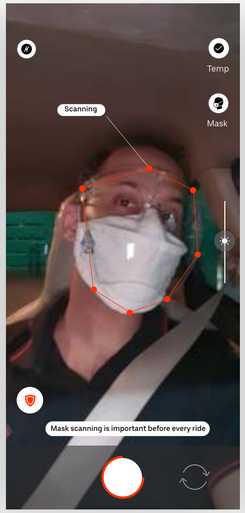


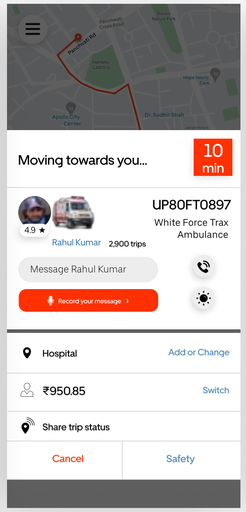


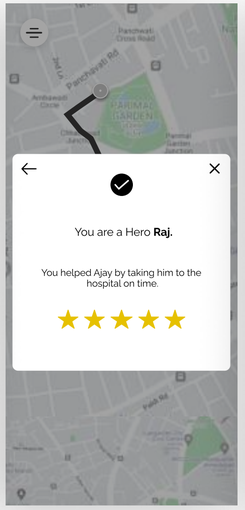


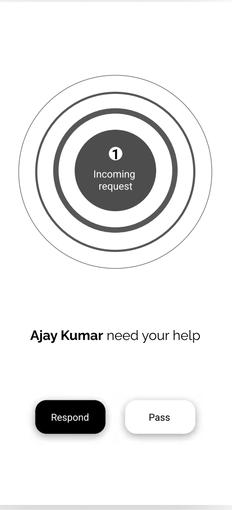




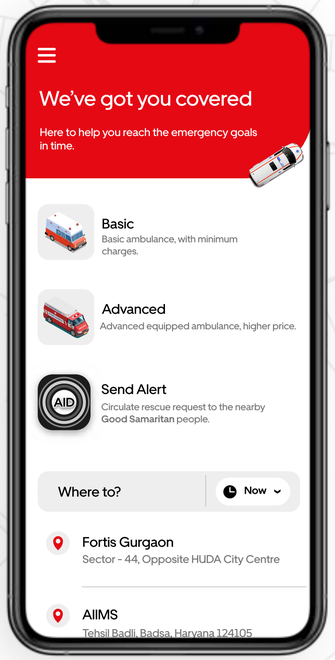








CodeRED





AID
SAVING LIVES

View Full Project

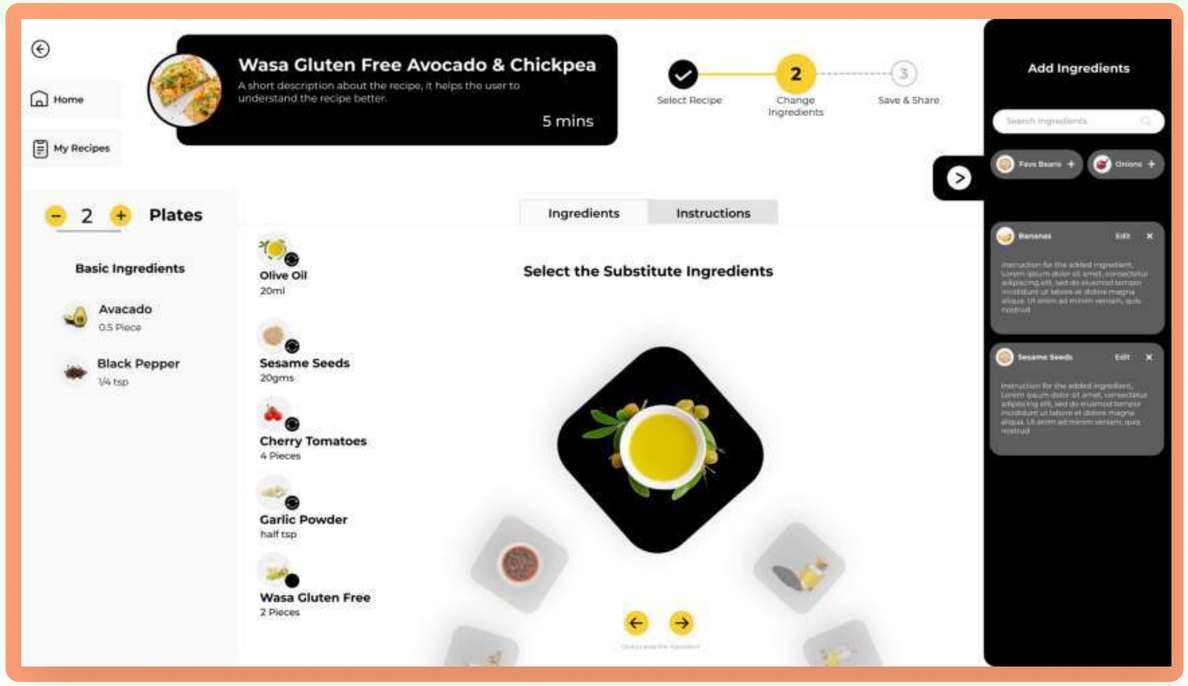
03

Global UX Competition

Plant Jammer

Recipe Ingridient Substituion Experience - UX Design

Plant Jammer uses Artificial Intelligence (AI) to provide dynamic recipes for small brands, retailers, and large food & beverage brands. Because the recipes are dynamic, users can substitute ingredients and get real-time cooking instruction updates. The Plant Jammer team seeks focused inspiration from talented members of the UX Design community.



Design Process



Problem Identification



Define



Ideate



Design



Cherry Tomatoes

Qty : 4 Pieces

CONTEXT

Plant Jammer uses Artificial Intelligence (AI) to provide dynamic recipes for small brands, retailers, and large food & beverage brands. Because the recipes are dynamic, users can substitute ingredients and get real-time cooking instruction updates. The Plant Jammer team seeks focused inspiration from talented members of the UX Design community.

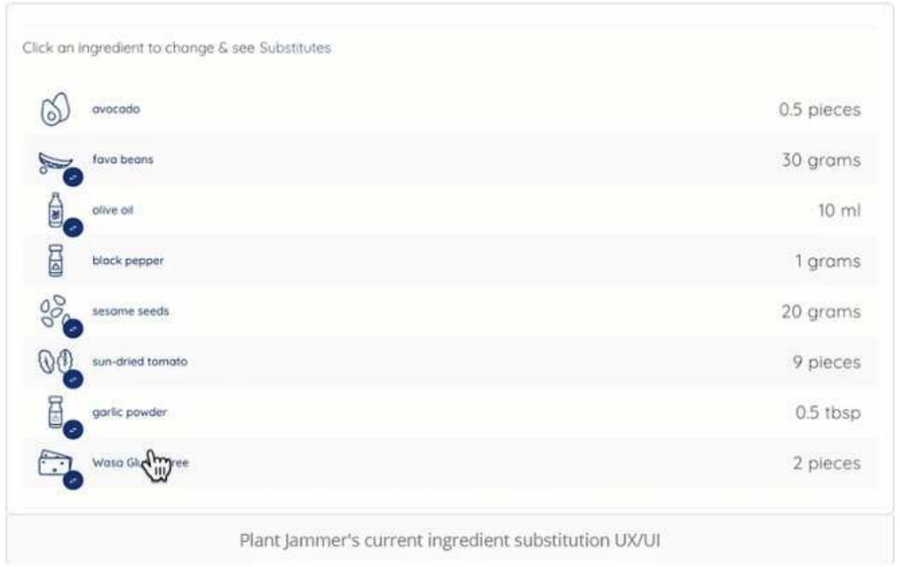
PROBLEM

Early data shows lower-than-expected user-engagement with the current ingredient substitution experience. Increasing user engagement is important, because it can measured and leveraged to help Plant Jammer sell their solution.

CHALLENGE

The portfolio-building challenge is to go from zero to one and rethink the experience of substituting recipe ingredients and share your ideas through 2-3 unqiue design concepts.

Problem Identification



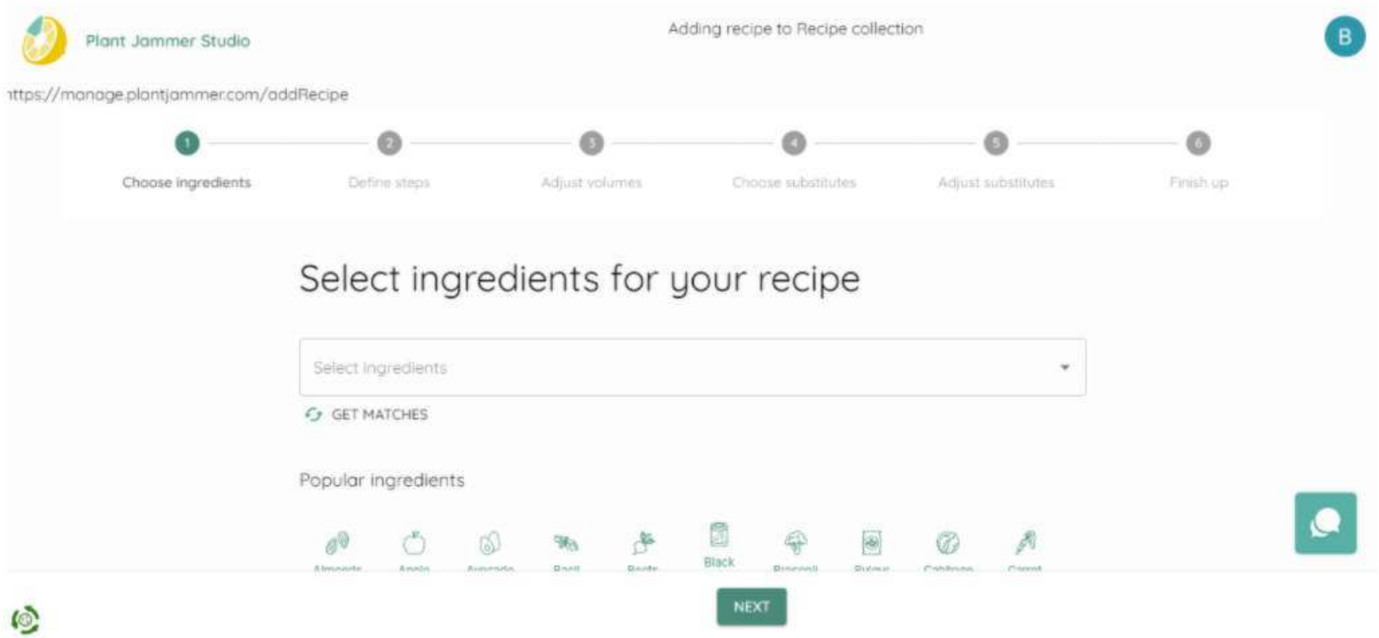
Plant Jammer's current ingredient substitution UX/UI



- The user may not know how some of the ingredients would look in the real world and unable to relate.
- Some of the measuring units are irrelevant and the user could not relate with the quantity of ingredients.
- The user may not know how many people can be served with 1 or 2 proportion.

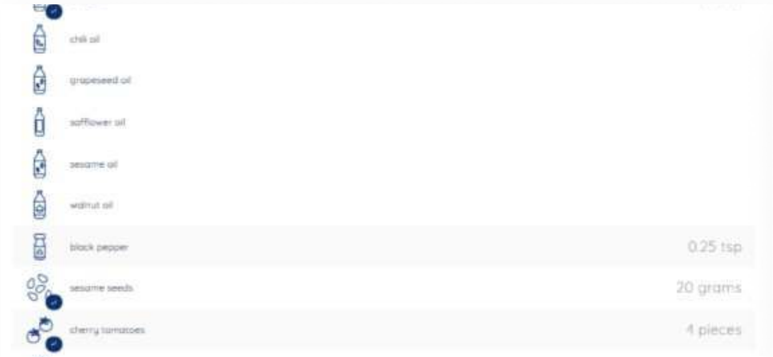


Understanding The Project

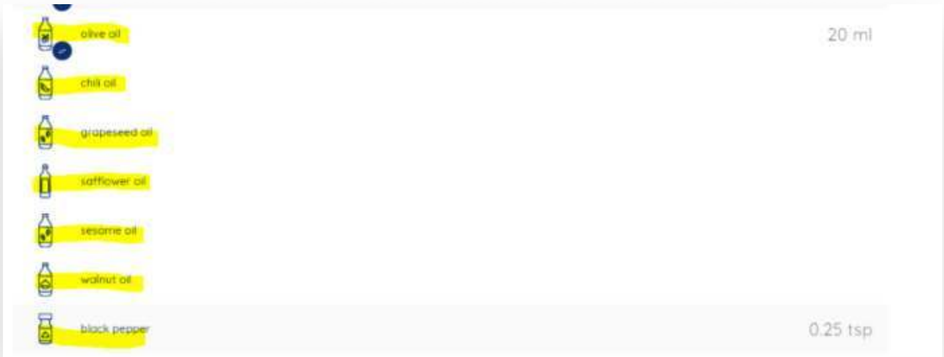


To give the optimal solution, we went through the whole product from how the recipes are written by the recipe owner and how the end-user changes the recipe and make their own by tweaking the ingredients.

Heuristic Evaluation







Aesthetic and minimalist design:

All the ingredients and processes are laid at the same time. So, the users are unable to digest the information provided.

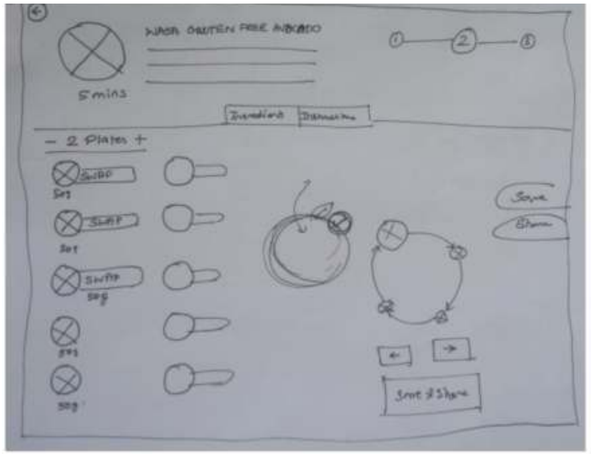
Match between system and the real world:

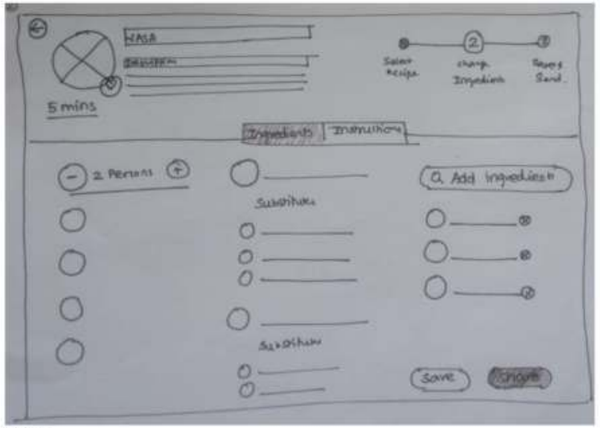
Unable to recognize the swapping icon

Consistency and standards:

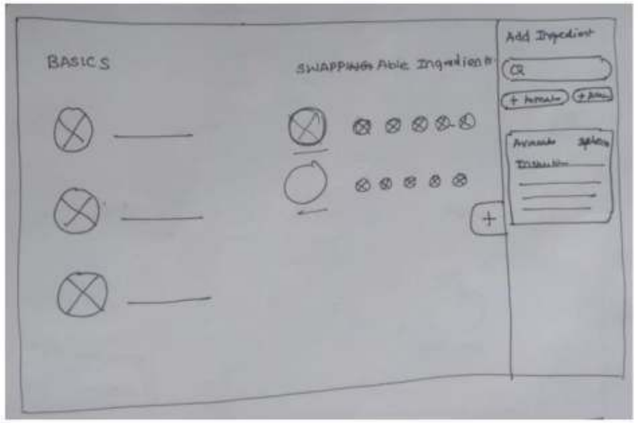
After clicking on the replaceable ingredient, the user is unable to differentiate between the substitute ingredients and other basic ingredients.

Wireframing

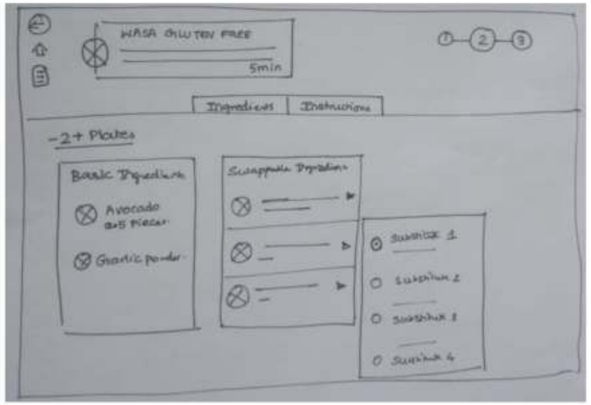




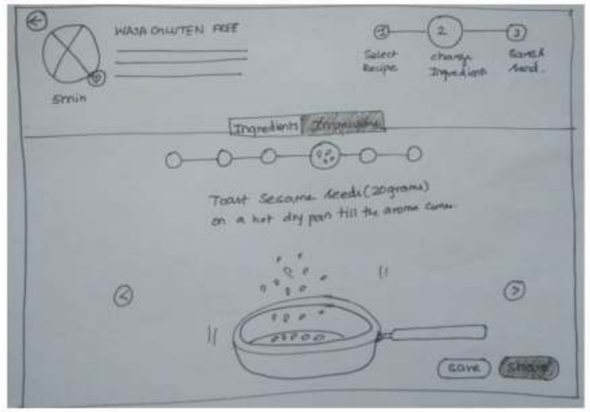
Concept 2



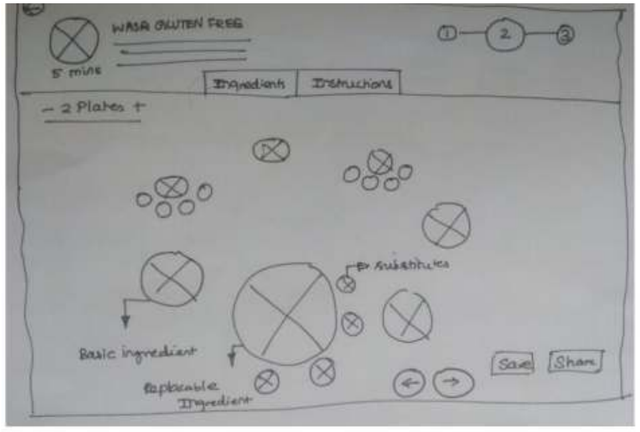
Concept 3



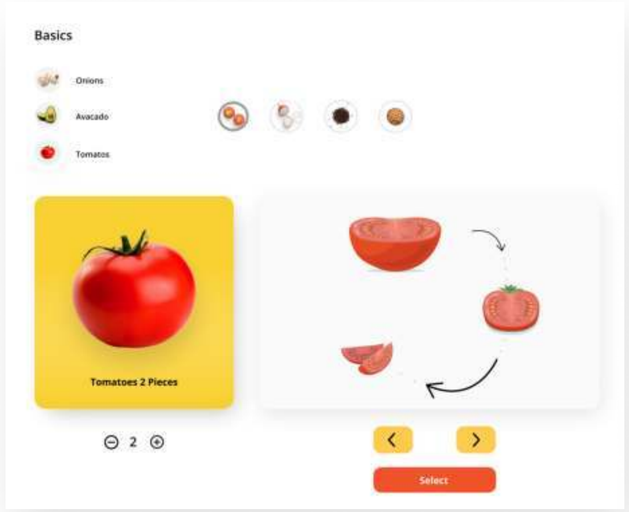
Concept 4



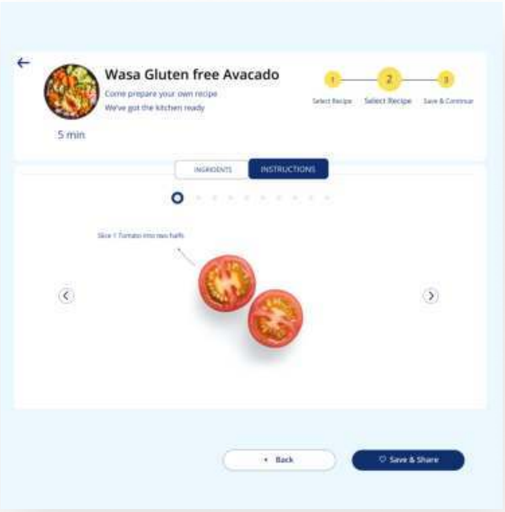
Concept for Instruction

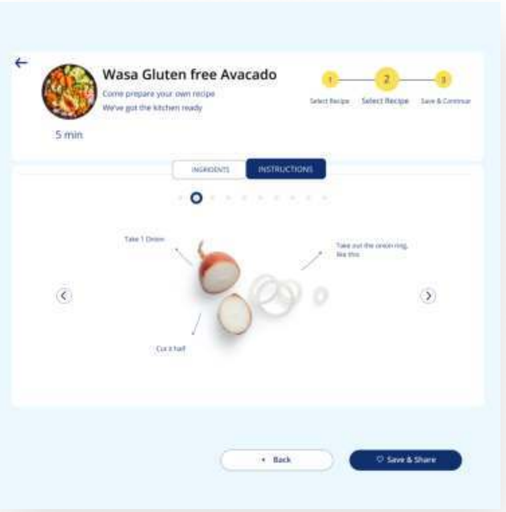


High Fedielety Wireframes

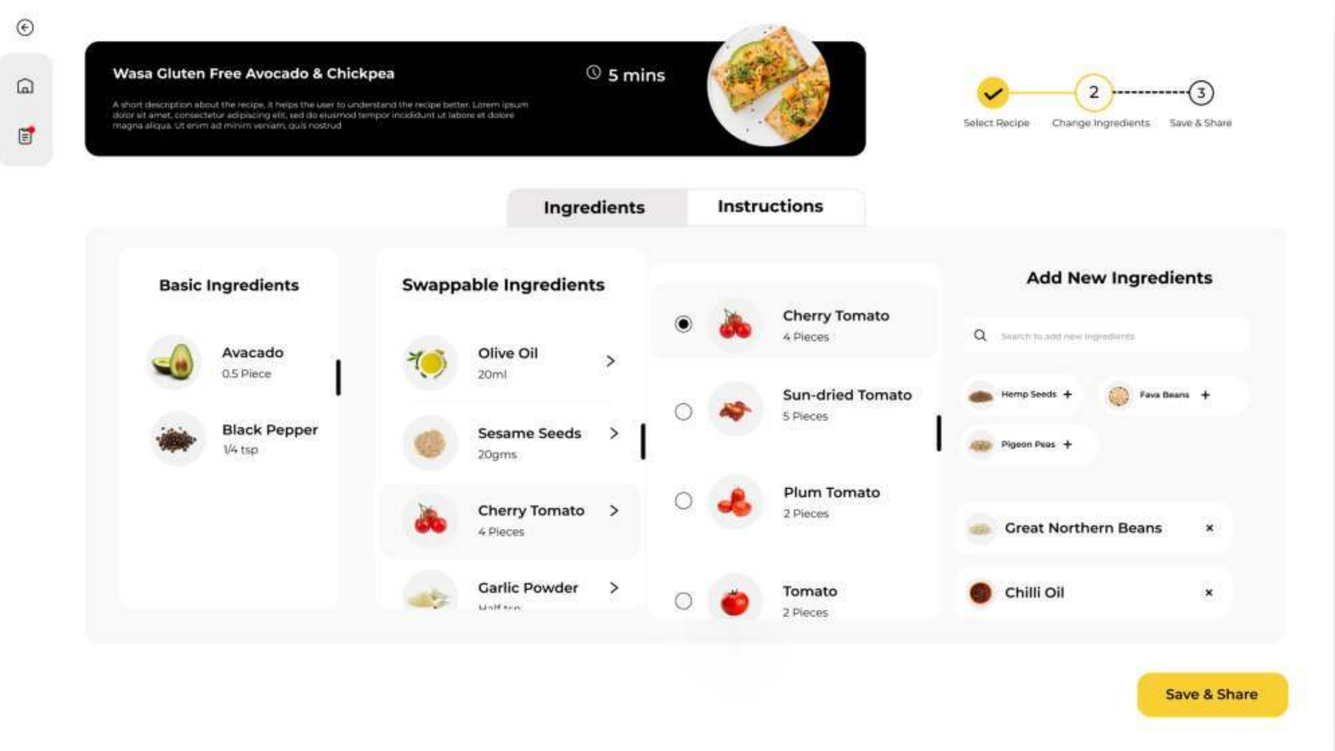






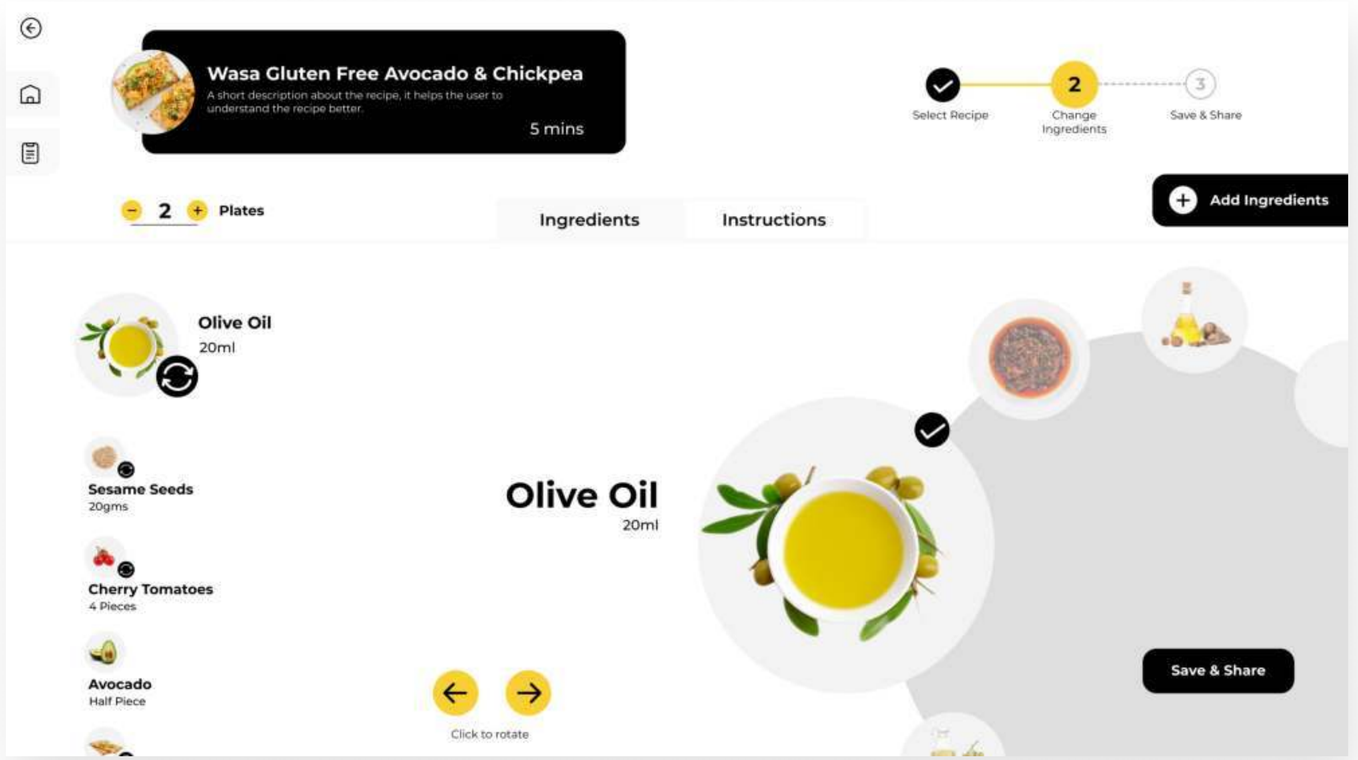


Concept 1



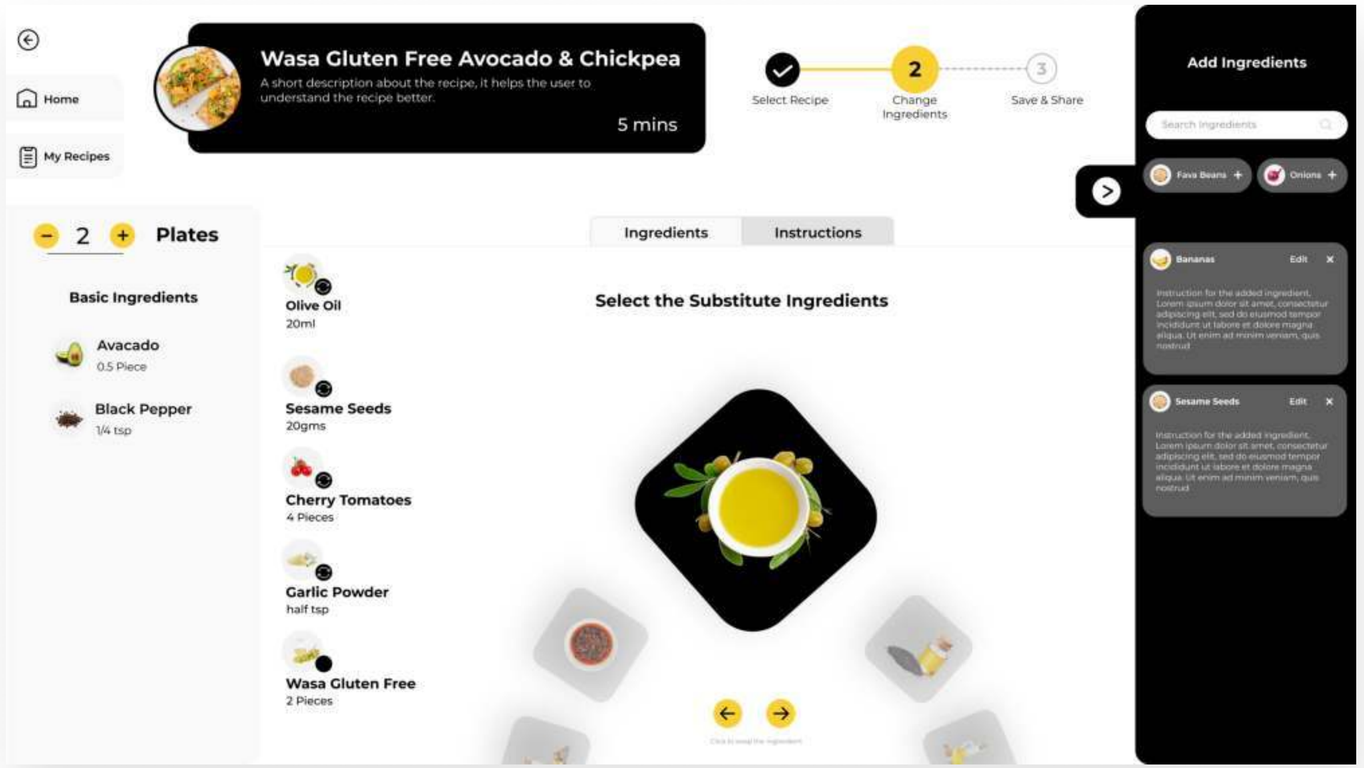
In this concept, we have tried a structured approach for replacing ingredients experience. We have replaced the icons with real images to make the users connect with the ingredients more. Separate tabs for ingredients and instructions are provided, this make the experience look easier and reduce the cognitive effort of the user.

Concept 2



Second concept is heavily inspired by gamified experiences. This makes the user engage more. The replaceable ingredients are clearly differentiated. The instructions are made self-explanatory, GIFs are used to explain each step in detail. This also lets the user jump to all the step in the process.

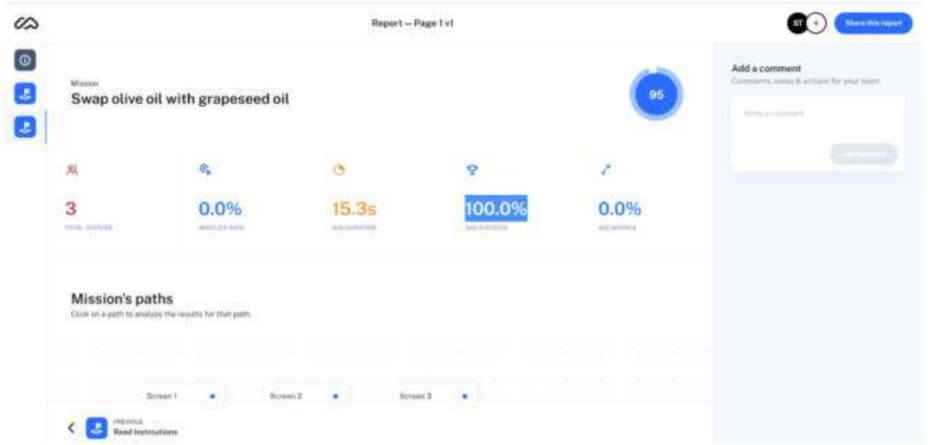
Concept 3



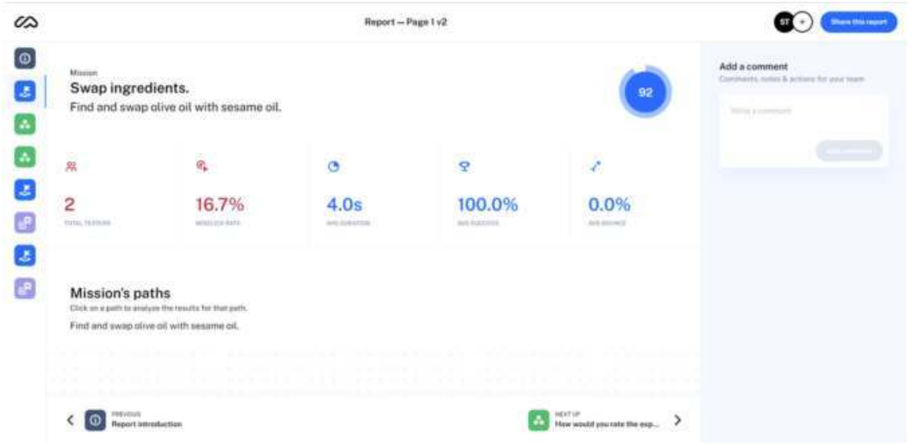
In concept 3, the basic ingredients and replaceable ingredients are separated. This also let the users add new ingredients and write instruction for newly added ingredient.

Usability Testing

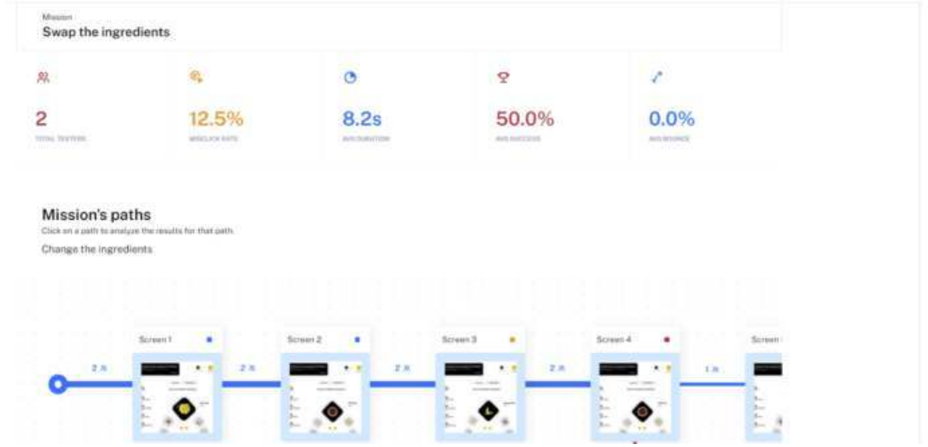
Concept 1



Concept 2



Concept 3



While observing the users interacting with the prototype, the users loved playing with swapping options in concept 2 and 3. And they kept on coming back to the replaced ingredient and replaced the same ingredient again. ✨

Concept 1 is more structured and the user found it easy to use. but concept 2 and 3 made them to stick to the product for more time.

🤓 Recommendations:

- To let the user share their recipes via all social media and not restricting them to email.

- To let the users to add a new ingredient to list.

- To have a separate page for ingredients and instructions.

Learnings:

- To collaborate and manage the time with the team.

- To convey our ideas to others and accept constructive feedback positively.

- We have learnt to make better decisions with real data.

- Planning user testing 2 or 3 days before the deadline would help to get more accurate and clear results.

The Team



Nakul



Sabitha



Suchit

We won the competition

View Full Project

🏆 Congratulations to Contest #16 winners! 👏🏾👏🏾👏🏾👏🏾👏🏾

🥇 1st Prize

- Sabitha Shree
- Nakul Sharma
- Suchit Thakkar

🥈 2nd Prize

- Lixian Zeng

🥉 3rd Prize

- Anna Malaeva & Mattias Di Masso

Screen Capture

Thank you for looking

Visit: www.nakulsharmadesigns.com