HYDRO HELPERS

RAIN WATER HARVESTING

GROUP NO-01

OUR TEAM

GROUP NO-01

1 MANASVI TRIPATHI

2 OMKAR SHELAR

3 DHANANJAY SHINDE

4 SUMIT MHALASKAR

5 OM LOHOKANE

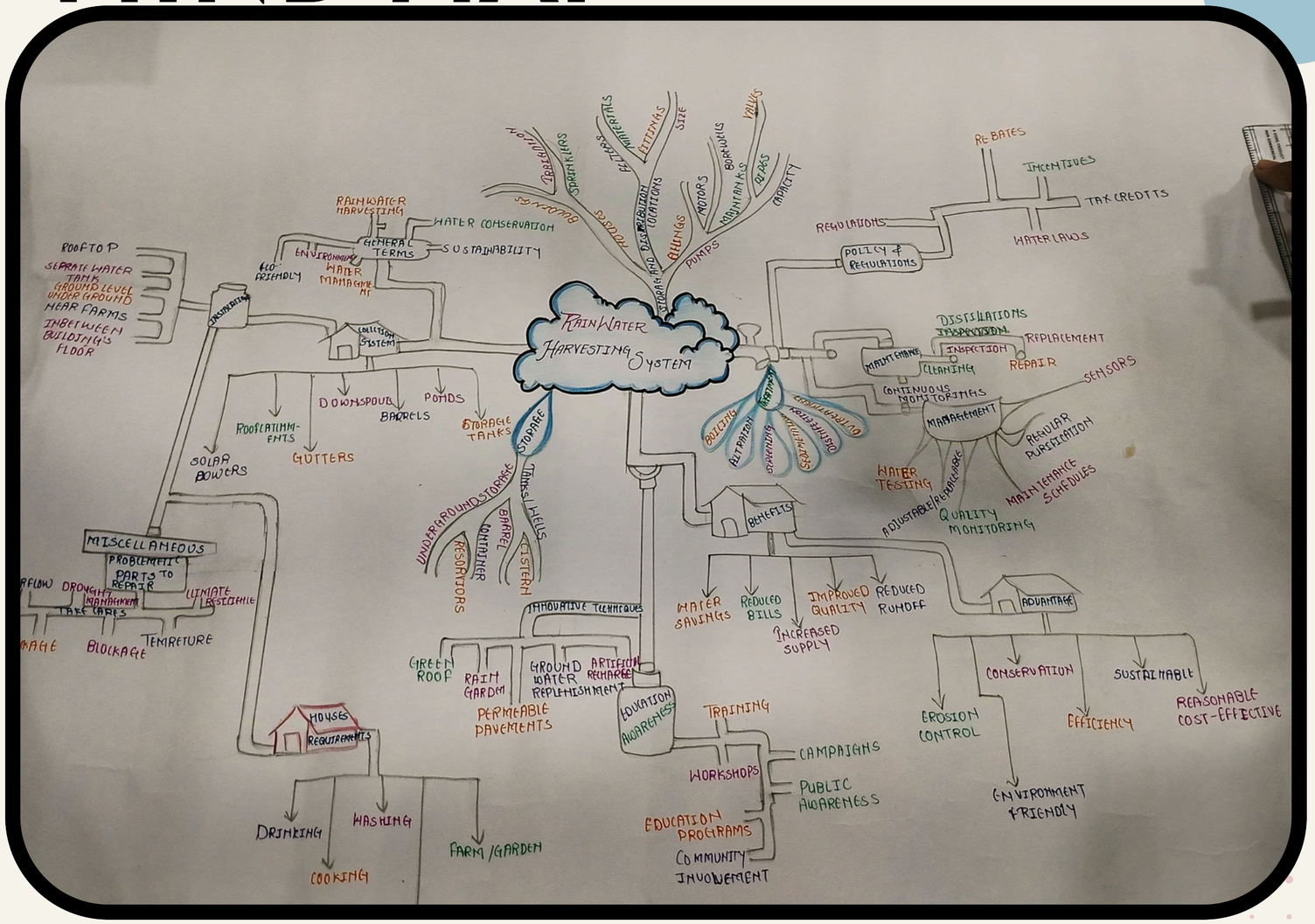
PROBLEM STATEMENT:

- In Maharashtra, water shortages, poor quality, and dried wells persist despite sufficient rainfall. The government faces challenges providing a consistent, clean water supply to rural and urban areas. Many communities lack proper rainwater harvesting systems and efficient management, resulting in unreliable water resources.

MIND MAP

Objective

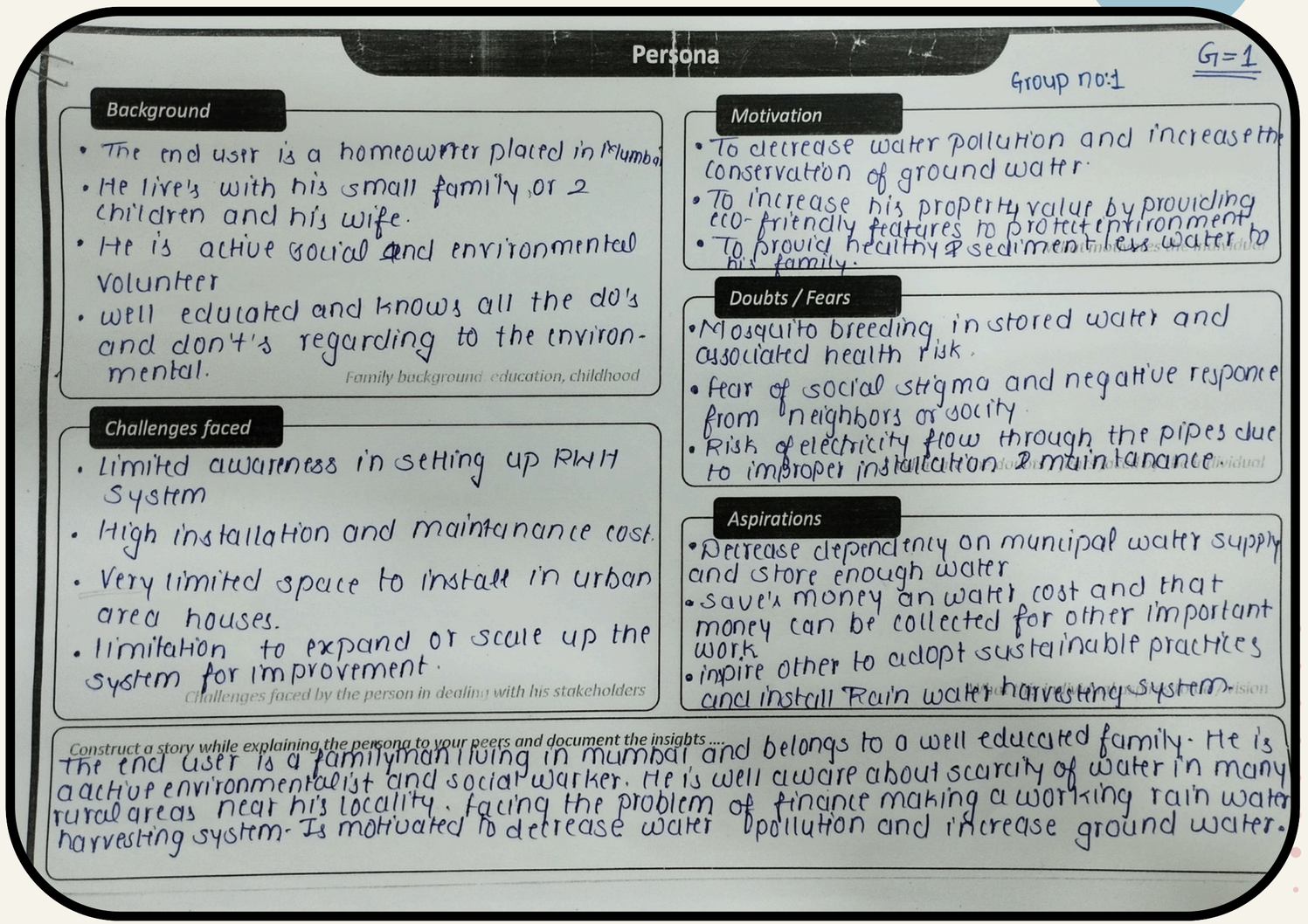
To create a mind map that visually illustrates the key challenges and solutions related to rainwater harvesting, system management, and monitoring.



PERSONA CONSTRUCTION

Objective

To create a persona that represents the end user's needs and challenges in water management.



Persona

G1=1

Group no:1

Background

- The end user is a homeowner placed in Mumbai.
- He lives with his small family, or 2 children and his wife.
- He is active social and environmental volunteer
- well educated and knows all the do's and don't's regarding to the environmental.

Family background, education, childhood

Motivation

- To decrease water pollution and increase the conservation of ground water.
- To increase his property value by providing eco-friendly features to protect environment
- To provid healthy & sediment less water to his family.

Challenges faced

- Limited awareness in setting up RWH system
- High installation and maintanance cost.
- Very limited space to install in urban area houses.
- limitation to expand or scale up the system for improvement.

Challenges faced by the person in dealing with his stakeholders

Doubts / Fears

- Mosquito breeding in stored water and associated health risk.
- Fear of social stigma and negative responce from neighbors or socity
- Risk of electricity flow through the pipes due to improper installation & maintanance.

Aspirations

- Decrease dependency on municipal water supply and store enough water
- save's money on water cost and that money can be collected for other important work
- inspire other to adopt sustainable practices and install Rain water harvesting system.

Construct a story while explaining the persona to your peers and document the insights ....

The end user is a familyman living in mumbai and belongs to a well educated family. He is a active environmentalist and social warker. He is well aware about scarcity of water in many rural areas near his locality. facing the problem of finance making a working rain water harvesting system. Is motivated to decrease water pollution and increase ground water.

GROUP NO-01

5WIH

Objective

The 5WIH technique is a questioning method that helps you understand a situation by asking six basic questions: what, who, when, where, why, and how

WHY	WHY USER SHOULD USE THIS RWH SYSTEM
	WHY THERE IS NO FILTRATION IN CURRENT SYSTEM
WHAT	WHAT ARE THE DRAWBACKS
	WHAT WILL HAPPEN IF THERE IS NO RAIN
WHEN	WHEN DOES TANK SHOULD BE CLEANED
WHERE	WHERE DOES WATER GET CONTAMINATED
	WHERE DOES CURRENT SYSTEM FAILS
WHO	WHO IS RESPONSIBLE FOR REGULAR MAINTENANCE
HOW	HOW TO TRACK QUALITY & QUANTITY OF WATER
	HOW TO RESOLVE ANY QUERY ABOUT SYSTEM
	HOW TO INSTALL A PROPER SYSTEM

THEORY OF PRIORITIZATION

Objective

TO FINDOUT THE PROBLEM ON WHICH WE SHOULD FOCUSE & TRY TO FIND ITS SOLUTION

WHY USER SHOULD USE THIS RWH SYSTEM					
100	10	100	10	100	**320**
WHY THERE IS NO FILTRATION IN CURRENT SYSTEM					
1000	1000	1000	100	10	**3110**
WHAT ARE THE DRAWBACKS					
100	100	10	100	10	**320**
WHAT WILL HAPPEN IF THERE IS NO RAIN					
1000	100	10	1000	100	**1310**
WHERE DOES WATER GET CONTAMINATED					
1000	1000	1000	1000	100	**4100**
WHEN DOES TANK SHOULD BE CLEANED					
1000	100	1000	1000	1000	**4100**
WHERE DOES CURRENT SYSTEM FAILS					
1000	1000	100	100	10	**2210**
WHO IS RESPONSIBLE FOR REGULAR MAINTANANCE					
1000	1000	1000	1000	1000	**5000**
HOW TO TRACK QUALITY & QUANTITY OF WATER					
100	1000	1000	100	100	**2300**
HOW TO RESOLVE ANY QUERY ABOUT SYSTEM					
1000	1000	1000	1000	1000	**5000**
HOW TO INSTALL A PROPER SYSTEM					
100	1000	1000	100	1000	**3200**

SCAMPER

Objective

Generate new product ideas or improvements by applying SCAMPER techniques to an existing product or service.

Substitute: Instead of traditional gultur what if we used decorate rain chains that also serve as art piess in garden
Combine: solar-powerer system filtration system for drinking or irrigation.
Adopt: The design of rooftop gardens or green roots to integrate rain water collection directly.
Modify: the system to include sensors and smart technology that monitor water levels and usage like the design
Put-to-another use: The stored rainwater to another use by connecting it to a cooling system for buildings
Eliminate:The news for large under ground tanks by using modicular above ground easily expanded or relocated as needed.
Reverse: Instead of harvesting rainwater tank about how excess water can be used creative like generating power with small hydrocarbons during heavy rainfall.

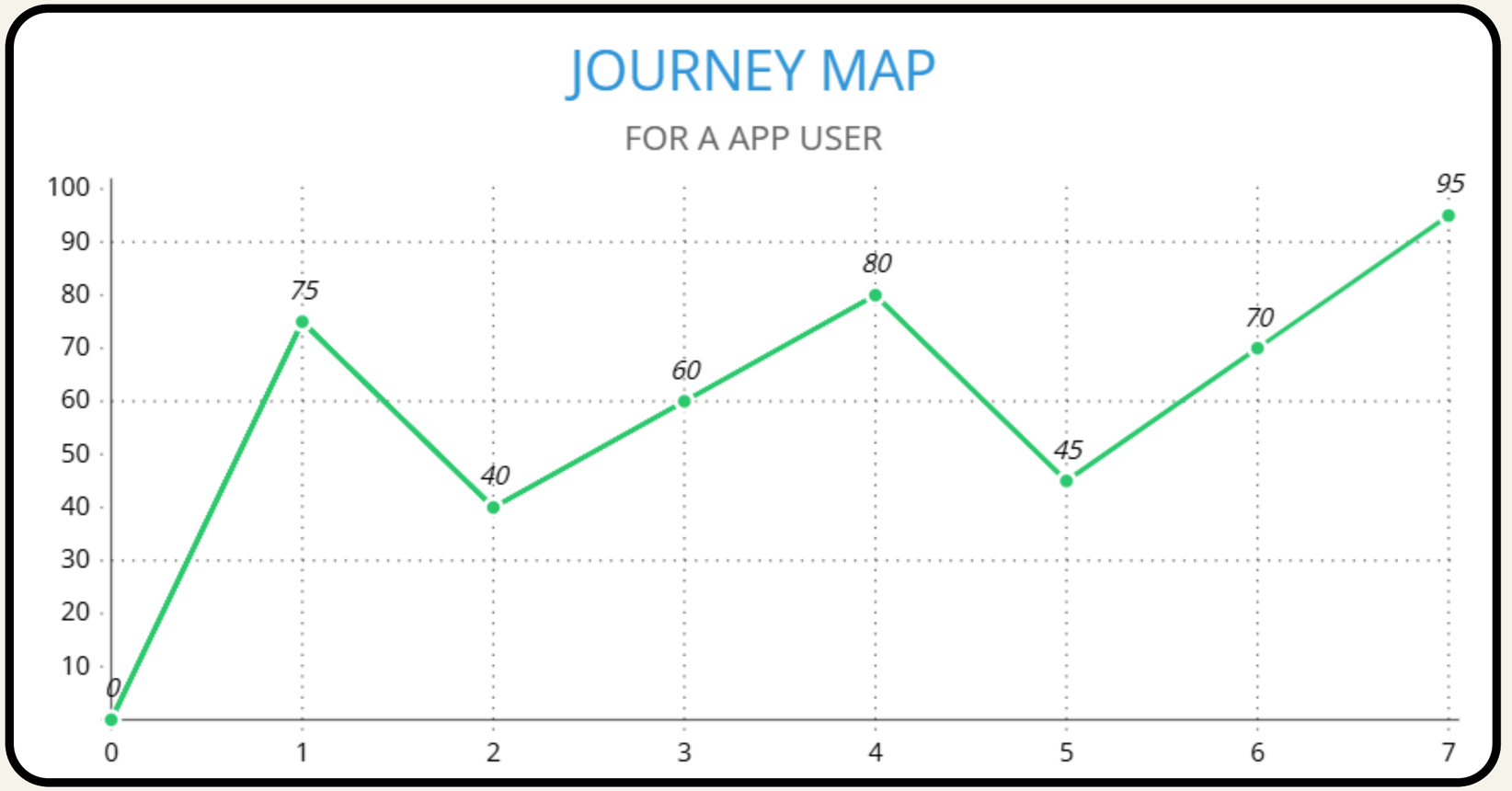
JOURNEY MAP FOR COMMAN PERSON

Objective

to visualize and understand the user's experience & emotions

EVENT 1	The user explores the app to learn about the rainwater harvesting system and places an order.
EVENT 2	The user receives an order confirmation, including delivery details and estimated installation date.
EVENT 3	The user tracks the status of delivery and schedules the installation through the app.
EVENT 4	The system is installed, and the app provides a walkthrough to set up monitoring features.
EVENT 5	The user configures the app to monitor water levels, usage patterns, and system performance.
EVENT 6	The app sends alerts for maintenance needs and provides system performance updates.
EVENT 7	The app generates monthly reports on water savings and environmental impact, along with personalized tips for improvement.

JOURNEY MAP FOR COMMAN PERSON



THANK YOU