Hail Hydra

Water Conservation and
Distribution System

Overview

Rainwater harvesting is collecting and storing the rainwater into storage tanks/reserves instead of letting it run off.

The more the surface area of the roof to collect water, the more can be harvested. Where do we get large roofs? - Housing societies, malls, corporate industry buildings! All of them can be used to harvest rainwater and make it available to meet the water needs of the city!

For that, we need a water conservation and distribution system!

Why do we need the proposed system?

11 of 20 biggest cities in the country are facing extreme risk of scarcity, according to Water Stress Index. In India only 8% of rainfall is being harvested and utilized.
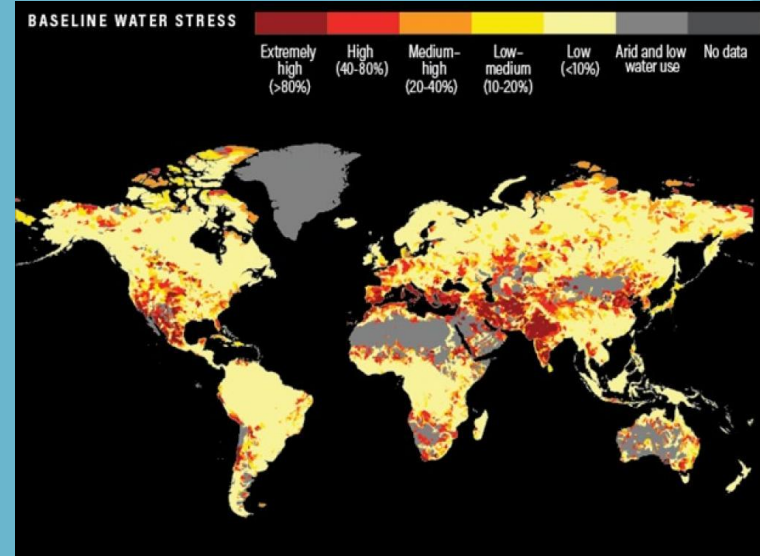
This analysis by the world resources institute shows India at extreme risk of water stress.

The sub-national Water Stress Index, formulated by London-based risk analytics firm Verisk Maplecroft, lists India as the 46th highest risk country in the world
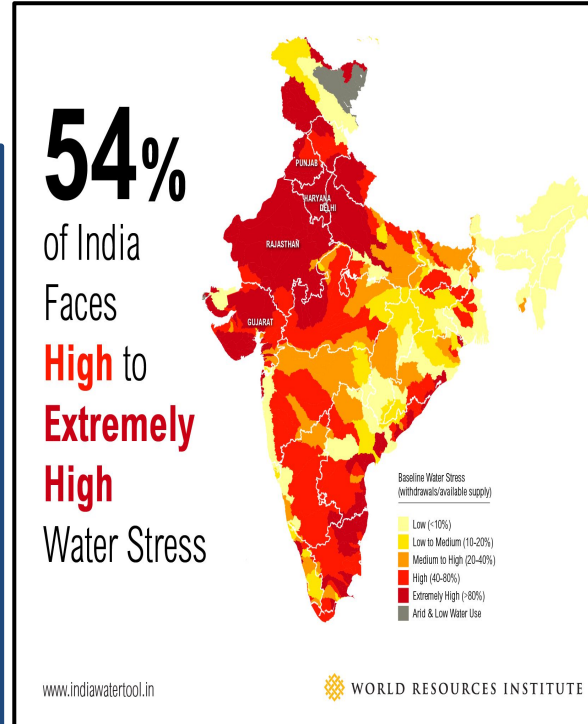
Majority of common people are not benefited from RWH, despite having water scarcity problem. Common people does not have facility to book/order water from their own place.

BASELINE WATER STRESS

Extremely high (>80%) — High (40-80%) — Medium-high (20-40%) — Low-medium (10-20%) — Low (<10%) — Arid and low water use — No data

Some Facts!

According to the index, Delhi, Chennai, Bengaluru, Hyderabad, Nashik, Jaipur, Ahmedabad and Indore are among the cities facing 'extreme risk'.

Over 600 million Indians face high stress over water!

WATER SCARCE CITIES

In the next 3 decades, demand for water in cities is projected to increase by 50-70%

54% of India Faces **High** to **Extremely High** Water Stress

PUNJAB
HARYANA
DELHI
RAJASTHAN
GUJARAT

Baseline Water Stress
(withdrawals/available supply)

- Low (<10%)
- Low to Medium (10-20%)
- Medium to High (20-40%)
- High (40-80%)
- Extremely High (>80%)
- Arid & Low Water Use

www.indiawatertool.in

WORLD RESOURCES INSTITUTE

India's water crisis

600 million Indians face high to extreme stress over water

SOURCE: COMPOSITE WATER MANAGEMENT INDEX - NITI AAYOG | JUNE 17, 2018

Our Services

One Tap Water Booking

User can easily book the water by signing into the website.

Option A

Easily access to all Water Provider Services

A registration can activate an industry to our portal.

Option B

Apply for Subsidy

You can easily apply for the subsidy of rain water harvesting plant.

Option C

**Filling Stations/
Overhead water tanks/
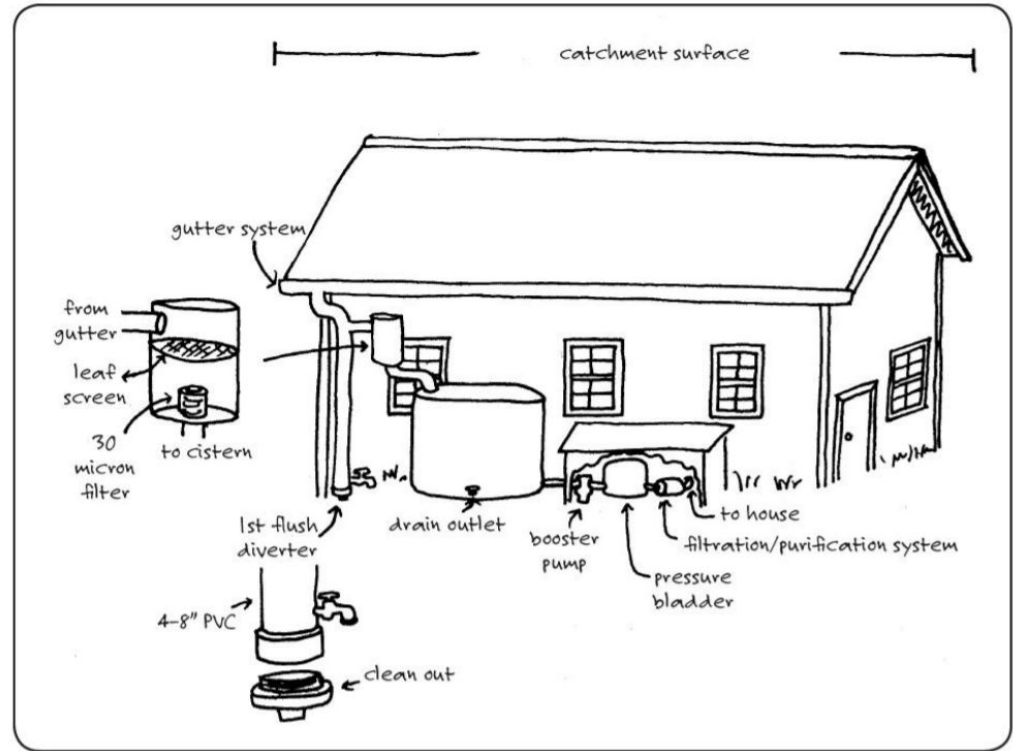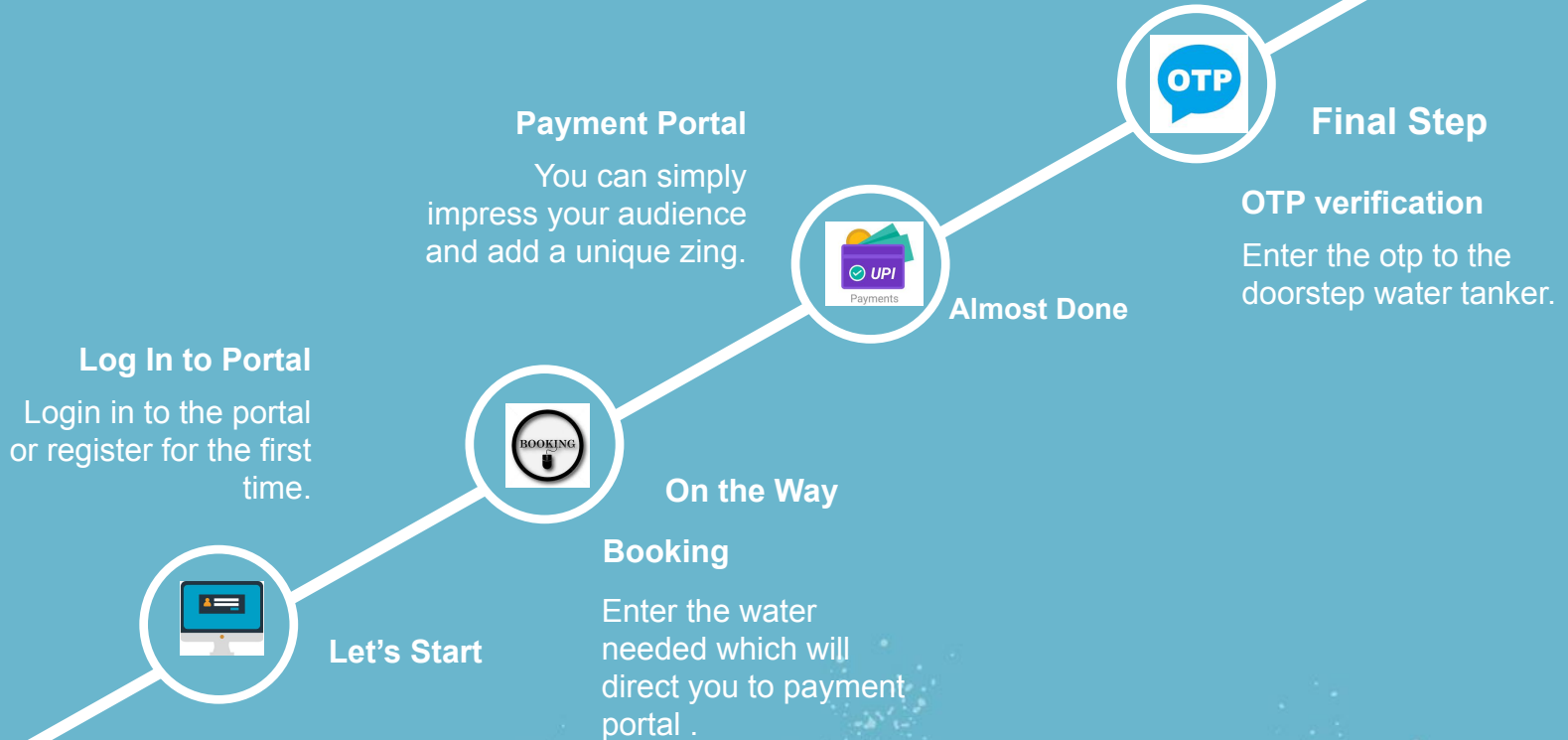ESR(Escalated Storage
Reservoir)**

FIG. 8.2. **Typical components of a whole-house rainwater harvesting system.**

**Rain Water Harvesting
(RWH) plant**

Flow of Control for User

Payment Portal

You can simply impress your audience and add a unique zing.

Final Step

OTP verification

Enter the otp to the doorstep water tanker.

Almost Done

Log In to Portal

Login in to the portal or register for the first time.

On the Way

Booking

Enter the water needed which will direct you to payment portal .

Let's Start

Institute Flow

Institute means School, College, Government Offices, Corporate Sectors, Industries, Private Sectors and all the different structures which can store water

Registration
Enter the details needed for the registration of the industry.

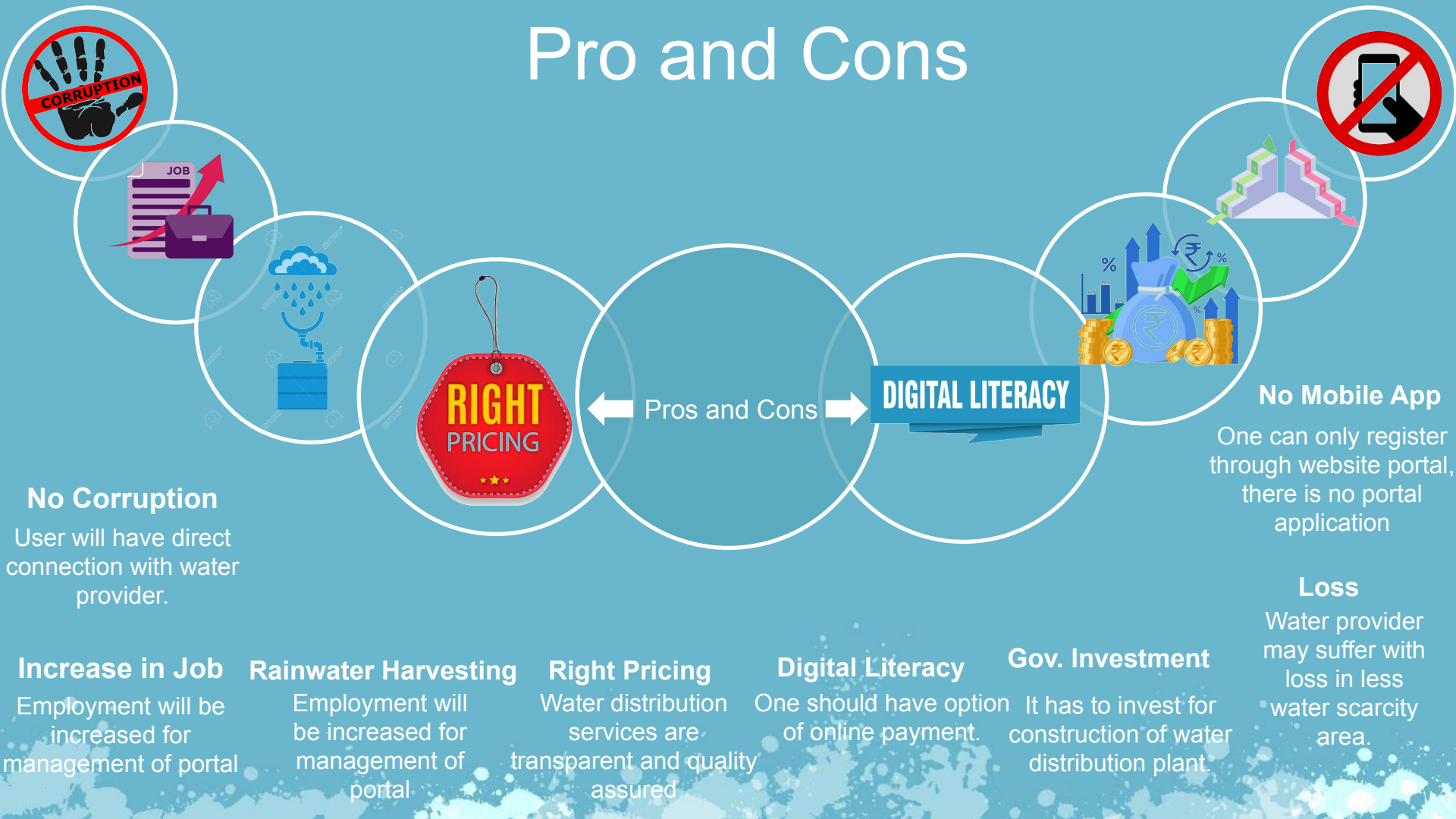### Verification
Physical verification by the water department.

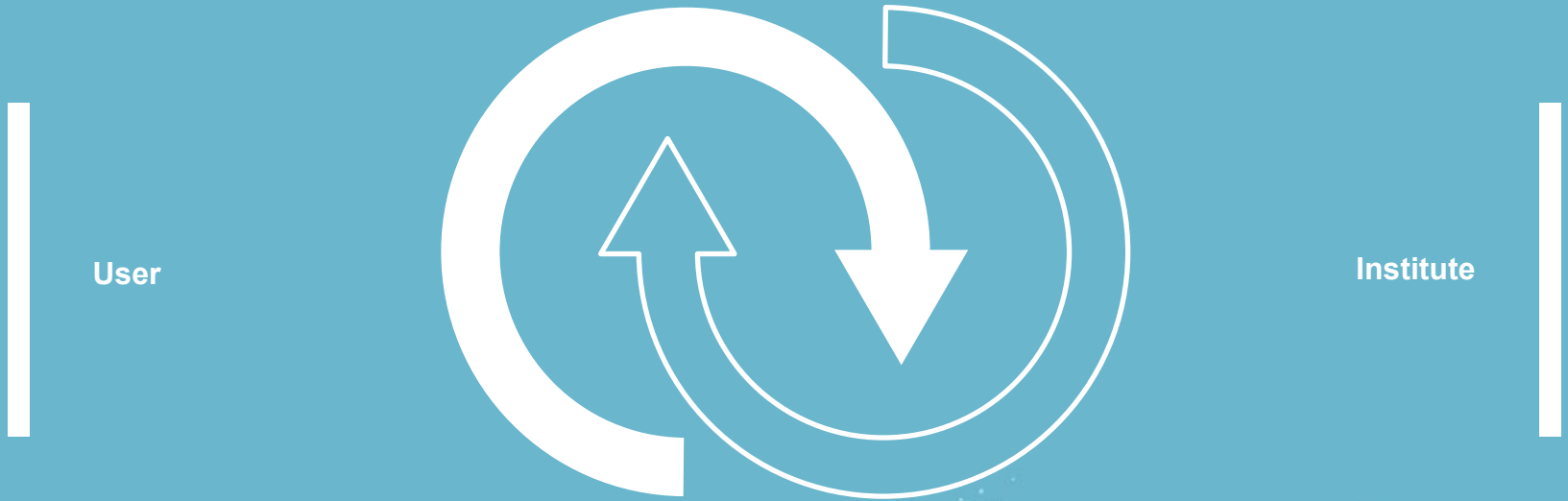### Updates
Receive Daily updates from the zonal office.

Collection of Water
Tanker will collect water as and when required,

Pro and Cons

Pros and Cons ← → DIGITAL LITERACY

No Corruption

User will have direct connection with water provider.

Increase in Job

Employment will be increased for management of portal

Rainwater Harvesting

Employment will be increased for management of portal

Right Pricing

Water distribution services are transparent and quality assured

Digital Literacy

One should have option of online payment.

Gov. Investment

It has to invest for construction of water distribution plant.

No Mobile App

One can only register through website portal, there is no portal application

Loss

Water provider may suffer with loss in less water scarcity area.

Background Work

User

Institute

Technology Stack

Water Conservation and Distribution System

We tried to make our portal transparent and feasible for all type of users. Following the tools and technologies we had used in our web portal.

Front End
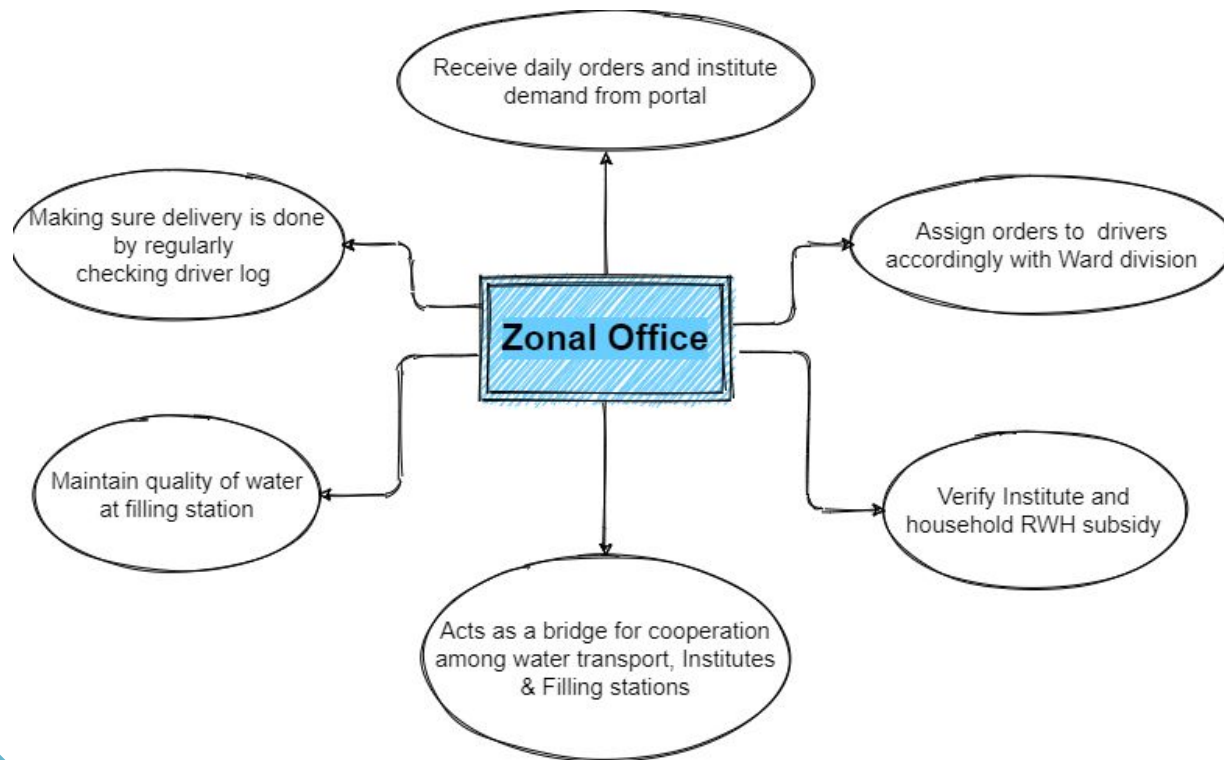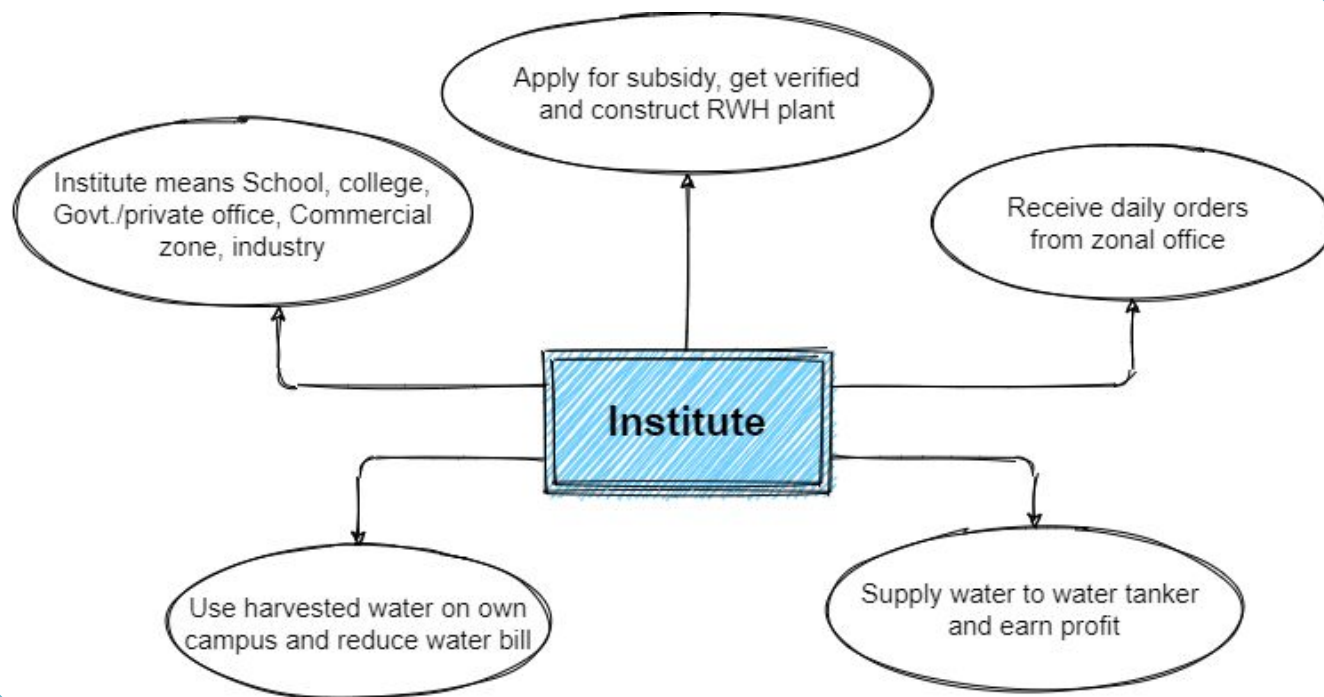HTML
CSS
JavaScript
Bootstrap

BackEnd
PHP
Mysql

Tools
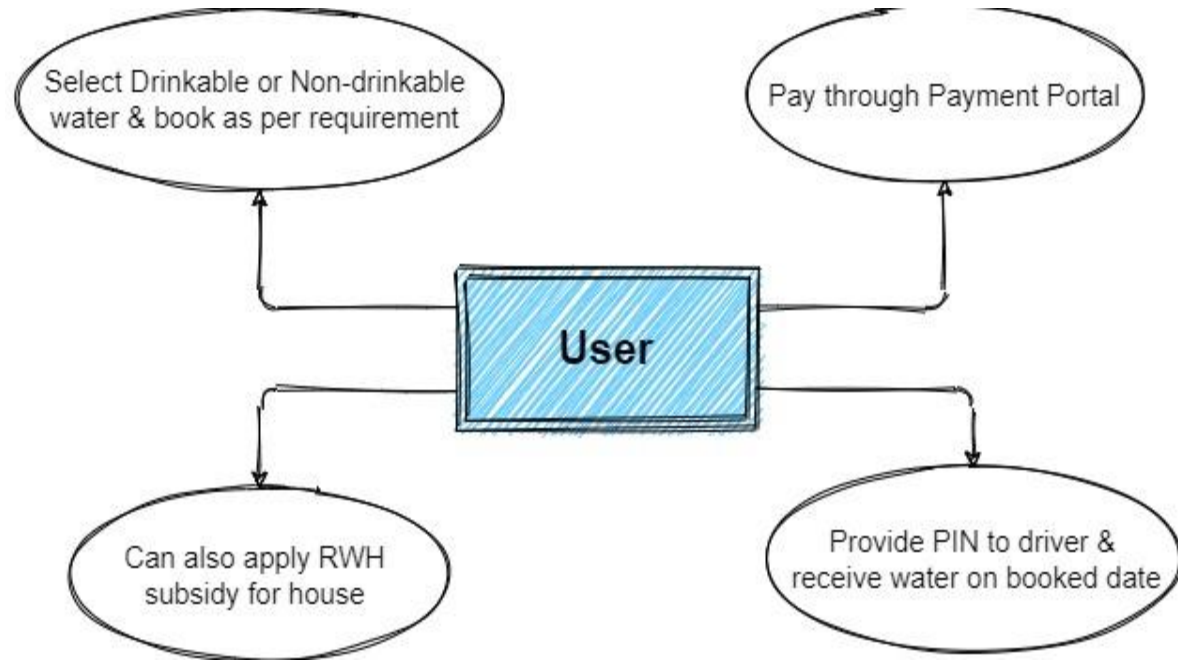Visual Studio Code
PhpMyAdmin
Github
Sb Admin 2
Razor Pay Api

Role of
Zonal
Office

Receive daily orders and institute demand from portal

Making sure delivery is done by regularly checking driver log

Assign orders to drivers accordingly with Ward division

Zonal Office

Maintain quality of water at filling station

Verify Institute and household RWH subsidy

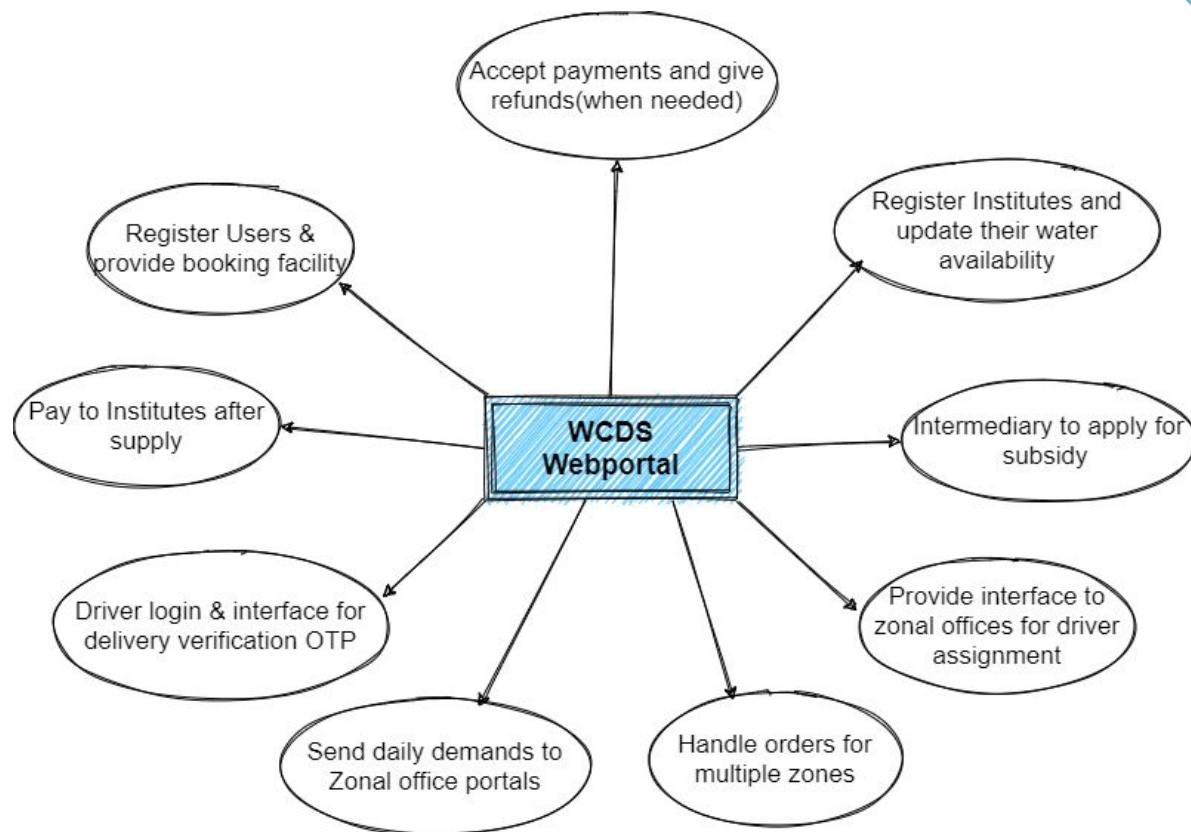Acts as a bridge for cooperation among water transport, Institutes & Filling stations
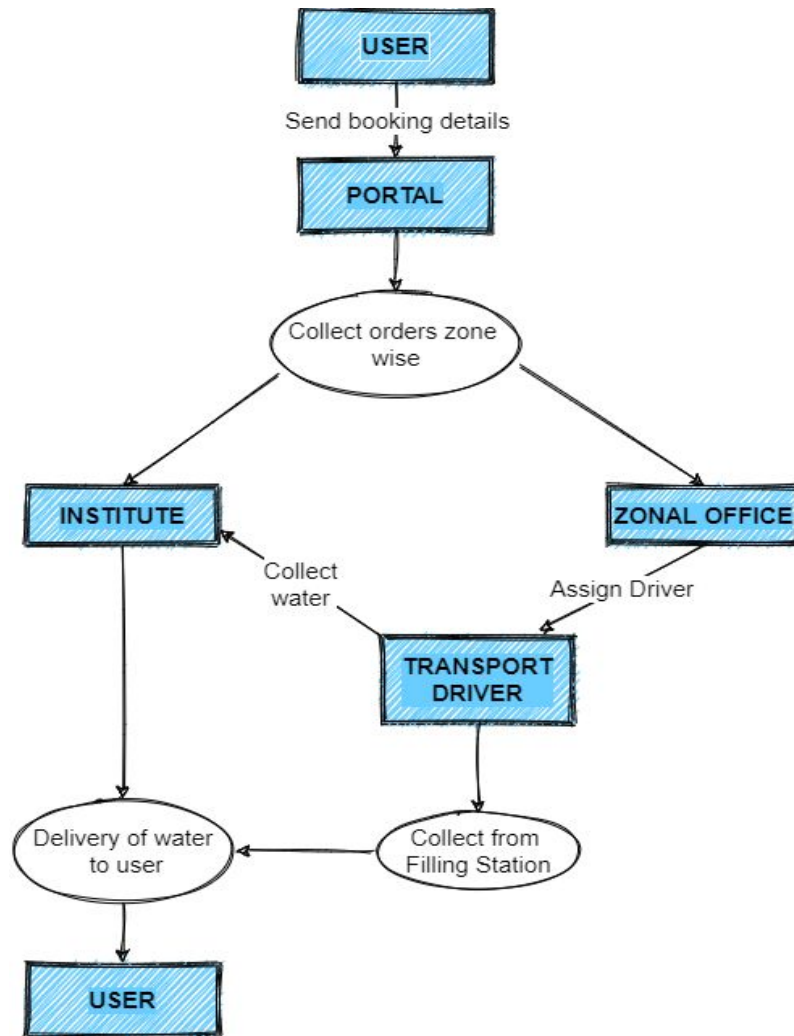
Role of Institute

Role of User

WCDS Portal

Project
Workflow

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Thank you