

GO GREEN INDIA WASTE EXCHANGE



**M.P. AZHAGU PANDIA RAJA,
INDIA SMART CITY FELLOW,
MINISTRY OF HOUSING&URBAN AFFAIRS**

AGENDA

- Overview: INDIA Waste Exchange Program
- Project Stakeholders
- Problem Statement
- Solution Approach
- Waste Management Stakeholders
- Existing Journey
- Waste Types
- Borrowers Flow
- Sellers Flow
- Admin Flow
- Feature Enhancements
- Thank you

OVERVIEW: INDIA WASTE EXCHANGE PROGRAM



OVERVIEW: INDIA WASTE EXCHANGE PROGRAM

- India Waste Exchange is an effort to find the key drivers, challenges and opportunities for the solid waste management market and how that can be used to handle waste management issues in India. Understanding how local solutions (Wards, Villages) and Private innovative solutions (Startup's, NGO's) in SWM can be systematically connected to meet the waste management requirements across India
- India Waste exchange is an online platform to sell and buy waste by anyone. It literally act as Flipkart or Amazon for Waste produced in the country.
- India Waste Exchange makes effort to bring all the players in waste management system under single platform and act as aggregator. Waste exchange will try to bridge the gap between demand and supply of the recyclable waste. It will help government entities like corporation to show case the available recyclables with them online to attract the potential buyers.

PROJECT STAKEHOLDERS



PROJECT STAKEHOLDERS

- Ministry of Housing and Urban Affairs, under Smart City Missions Launched India Smart City Fellowship Program.
- Under this Fellowship, The team 'Zero Waste' comprising **M.P.Azhagu Pandia Raja**, Jismi Varghese, Pinky Taneja Piloted "Madras Waste Exchange" in Greater Chennai Corporation.
- This idea of Madras Waste Exchange got Scaled across Nation wide as "India Waste Exchange" .



PROBLEM STATEMENT

PROBLEM STATEMENT

- Waste management is an ongoing challenge due to weak institutions, chronic under-resourcing and rapid urbanization.
- City level comprehensive waste management plan is not available for many cities.
- Urban Local Bodies (ULBs) suffer from various issues like infrastructure and capacity constraints to address the multi-dimensional problems of waste management.
- Not much focus on secondary market and niche segment for strengthening of waste markets.
- Financial constraints of ULBs and lack of incentives to public is acting as barrier for segregation at source, which is a vital component of waste management.
- Business model or plan showcasing the potential of city to attract public and private investments is not available.



SOLUTION APPROACH



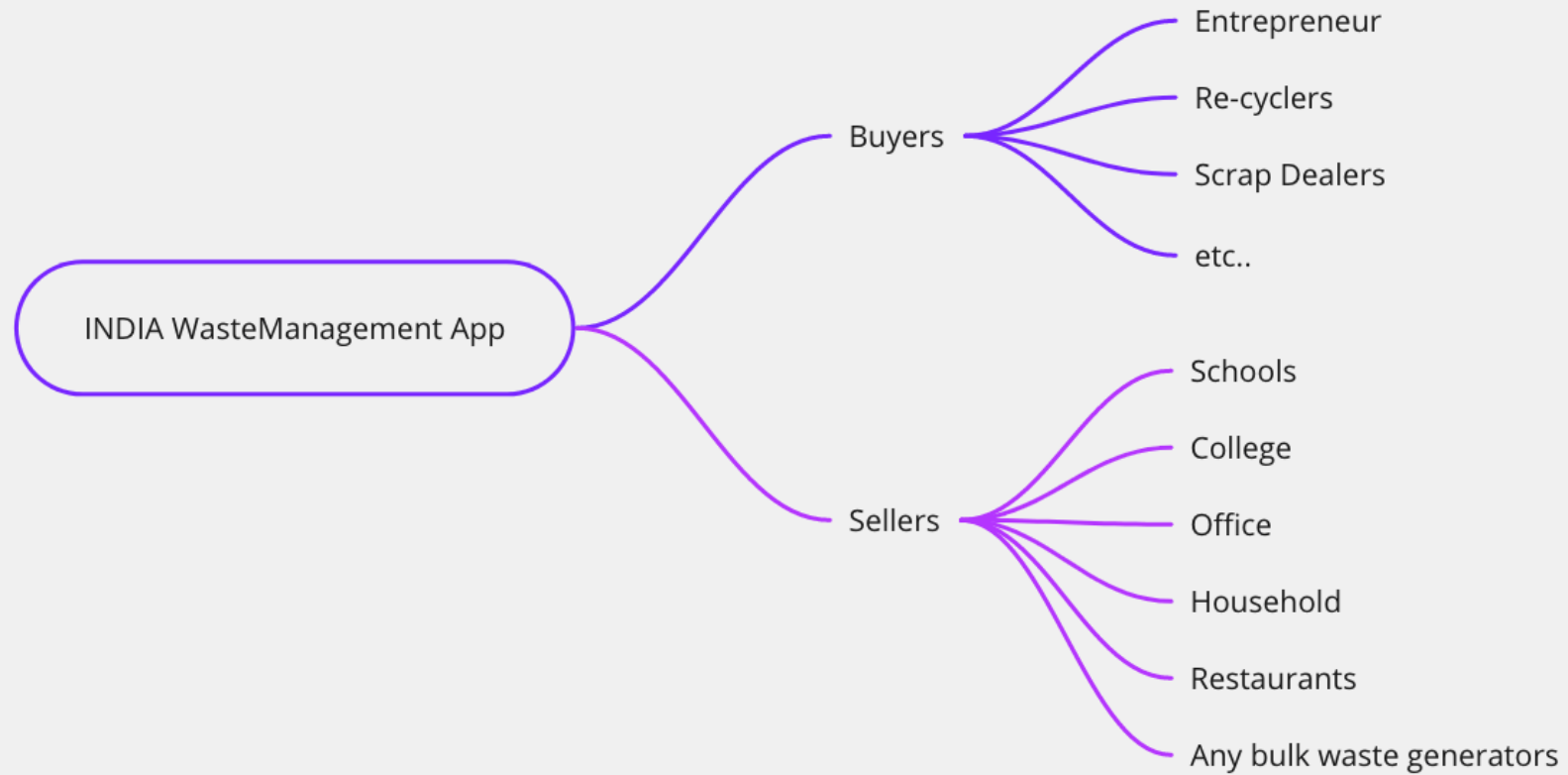
SOLUTION APPROACH

- Built a Waste Exchange in an online platform which works both on PC and Mobile.
- This platform act as a trading portal where buyers can bid from corporation and other players.
- Since it is a trading portal, zero downtime of server has to be maintained and also this platform uses map to identify potential sellers and their details.
- The India Waste Exchange acts as connection between the following people.
 - a. Urban Local Bodies with Buyers of waste, Entrepreneurs.
 - b. Non-government entities like school, college, office and bulk waste generators with buyers.
 - c. Urban local bodies with non-government entities in Waste Management



STAKEHOLDERS

STAKEHOLDERS



EXISTING JOURNEY

bring
my own
WATER
bottle



**REDUCE
WASTE**
YOUR



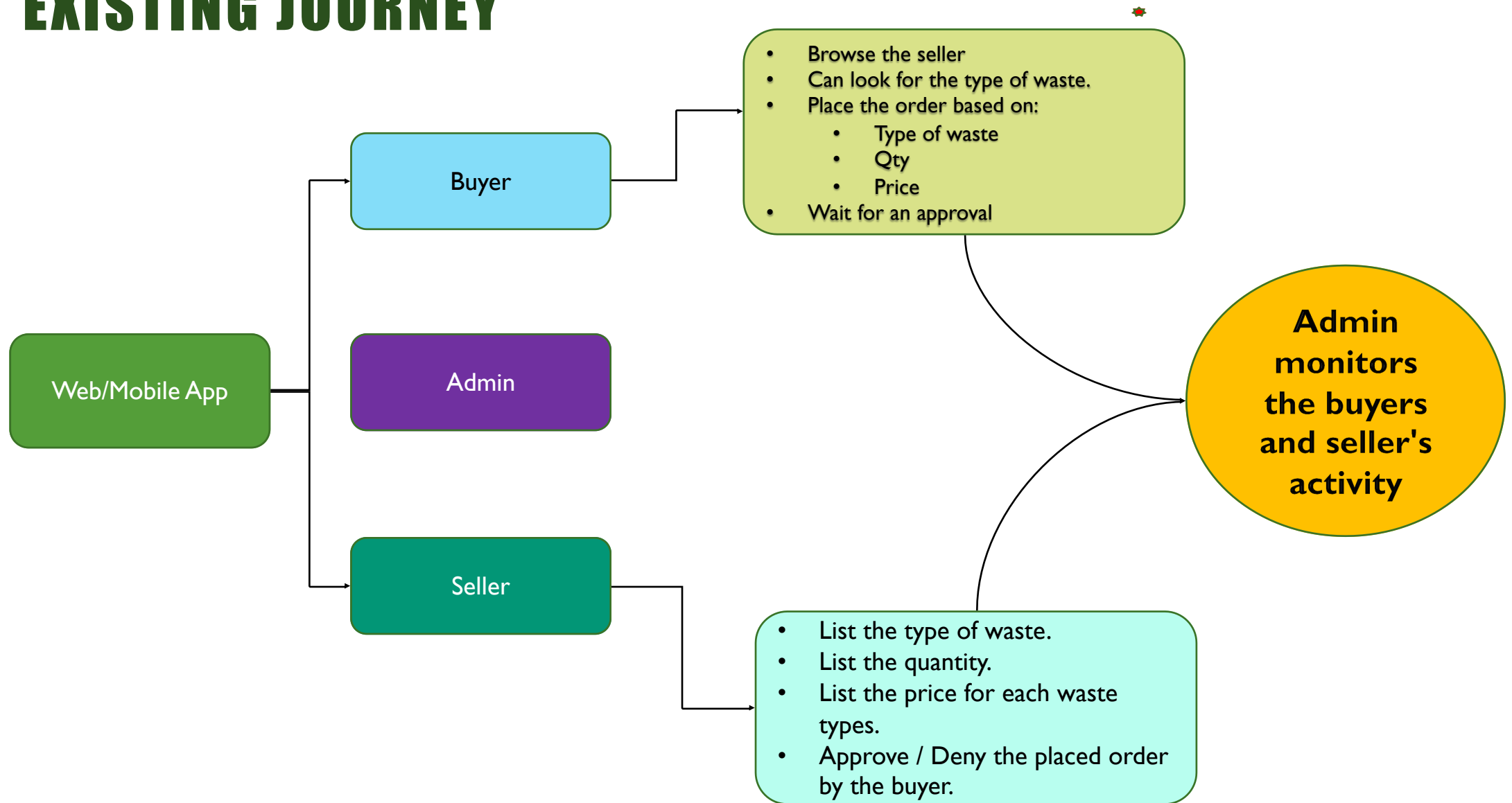
Upcycle
Your clothes

waste



THE
PLA

EXISTING JOURNEY



Note: It's the buyer's responsibility to collect the orders post , physically. The payment happens offline.



WASTE TYPES

WASTE TYPES

Recyclable Waste

“Recyclable Waste” means the waste that is commonly found in the MSW. They are also called as “Dry Waste”. These can be transformed through a process into raw materials for producing new products, which may or may not be similar to the original products.

- Newspapers, paper, books and magazines
- Glass, Plastic
- E-waste
- Metal objects and wire
- Cloth Rags, Leather
- Rexene
- Rubber
- Wood /furniture
- Packaging materials

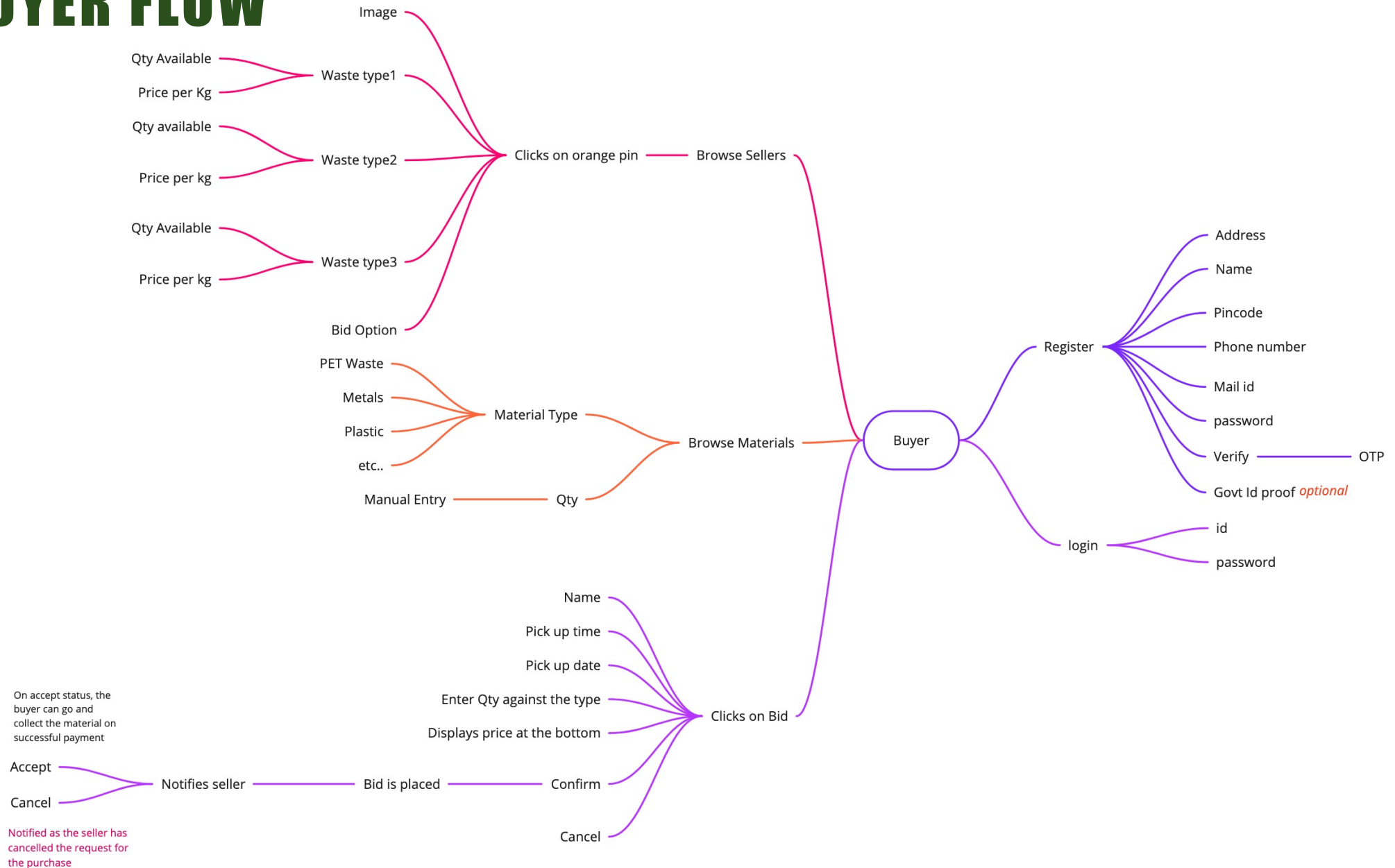
Note: The types of waste will be further expanded. Also added based on seller's request (on admin team's approval)



BUYERS FLOW



BUYER FLOW



BUYER FLOW

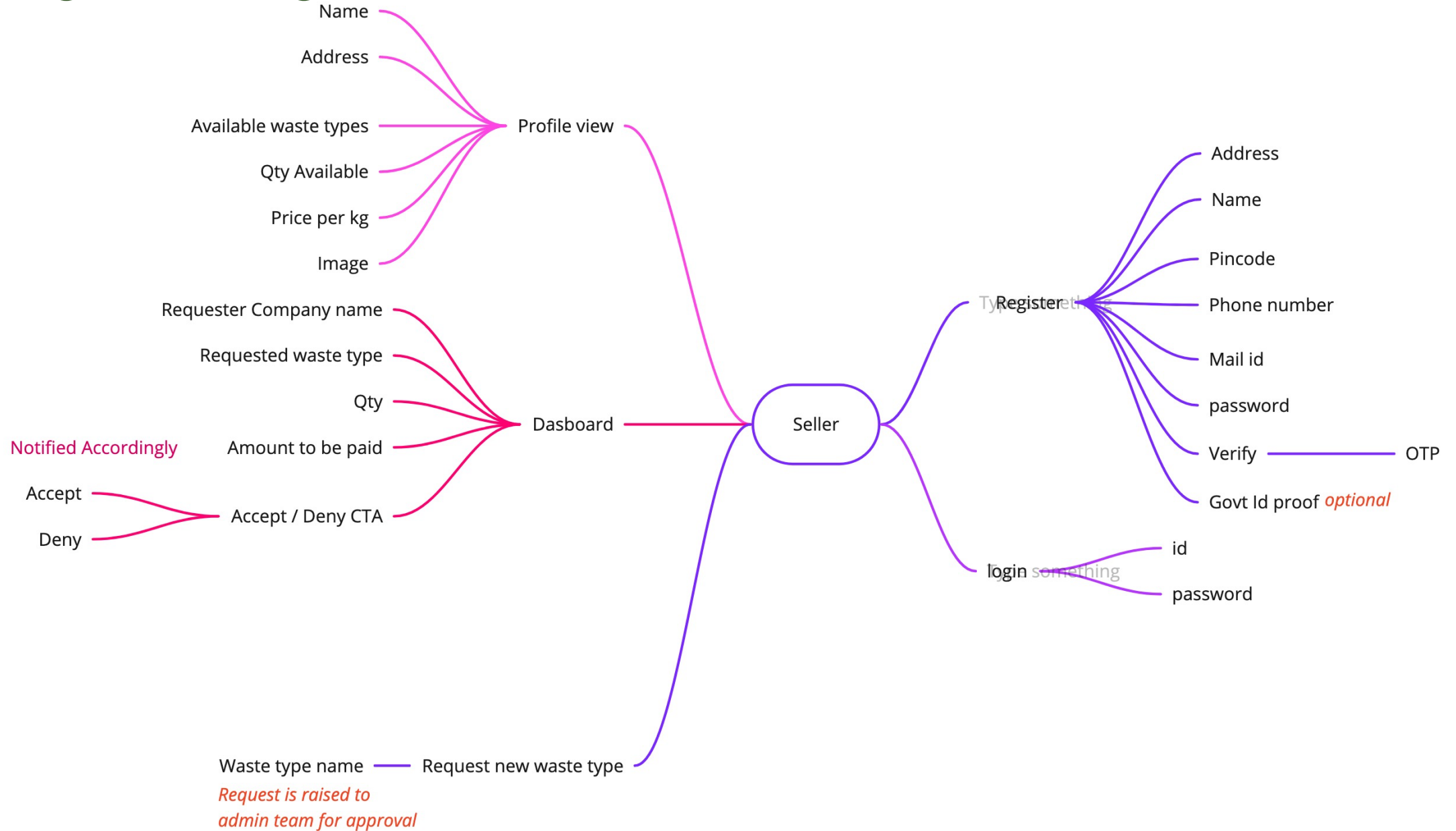
- Can place multiple bids.
- Dashboard view: Order placed/Accept/Deny Status
 - Type of waste
 - Qty
 - Amount
- Status update once approved or cancelled on login.



SELLERS FLOW



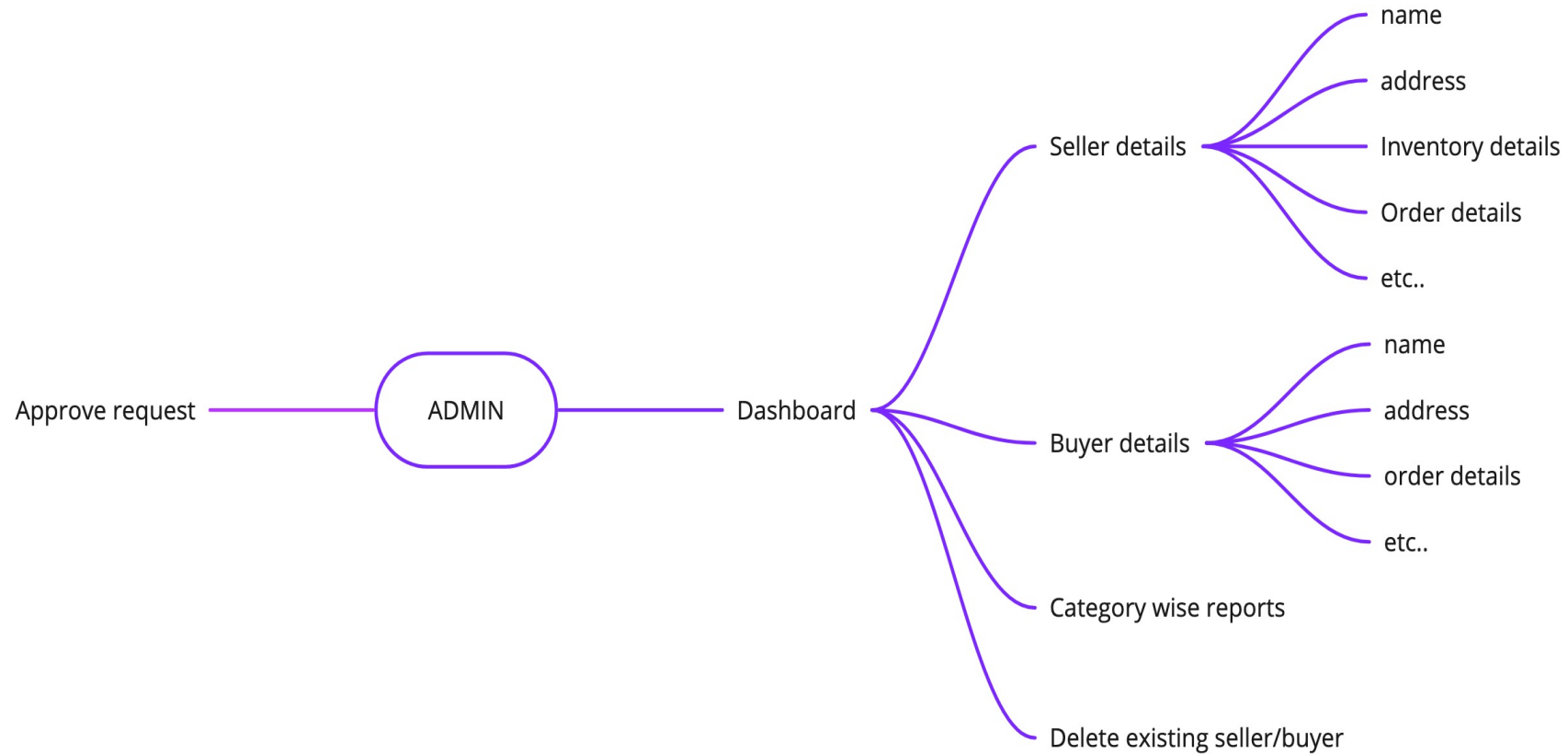
SELLER FLOW



ADMIN



ADMIN FLOW



KEY HIGHLIGHTS

The Platform attracted more than thousand buyers and four hundred sellers in three months. Further, GCC sold more than 700 tons of waste in three months.

The Madras Waste Exchange helped Greater Chennai Corporation (GCC) in the following ways.

- a. It reduced the amount of garbage going to landfill.
- b. It acted as a portal to showcase and market the amount of segregated waste available with corporation, which can bring more buyers to approach corporation.
- c. Chennai become the first city in India to have waste exchange for municipal solid waste.
- d. E-Waste could be handled in better way since there is no clear mechanism as of now to collect and handle it.
- e. Repository of data on waste creation and processing will help in policy preparation process in future.

FEATURE ENHANCEMENTS



FEATURE ENHANCEMENTS

- Route optimization
- Ratings
- Marketing campaign
- Push Notifications
- Report Generations
- Payment Gateway

A central graphic of a globe with a lush green tree growing out of the top. The globe is semi-transparent, showing the continents and oceans. The tree has a thick trunk and a full, rounded canopy of leaves. The background is a dark, textured green, suggesting a forest or natural environment. The overall tone is environmental and appreciative.

THANK YOU