HUNGER HEARTS

Together, We Can End Hunger

OVERVIEW

- Intoduction

- Motivation

- Users

- Models used

- project flow

- Individual Contributions

- Our Future Path

OUR MISSION

- Every day, a significant amount of food goes to waste in restaurants, canteens, institutes and organizations, while many in slums suffer from hunger and malnutrition.
- Our project aims to bridge this gap by connecting food donors (restaurants, canteens, and organizations) with slums in need.
- Through a user-managed system, delivery boys are assigned to collect surplus food from donors and distribute it to slum areas efficiently.
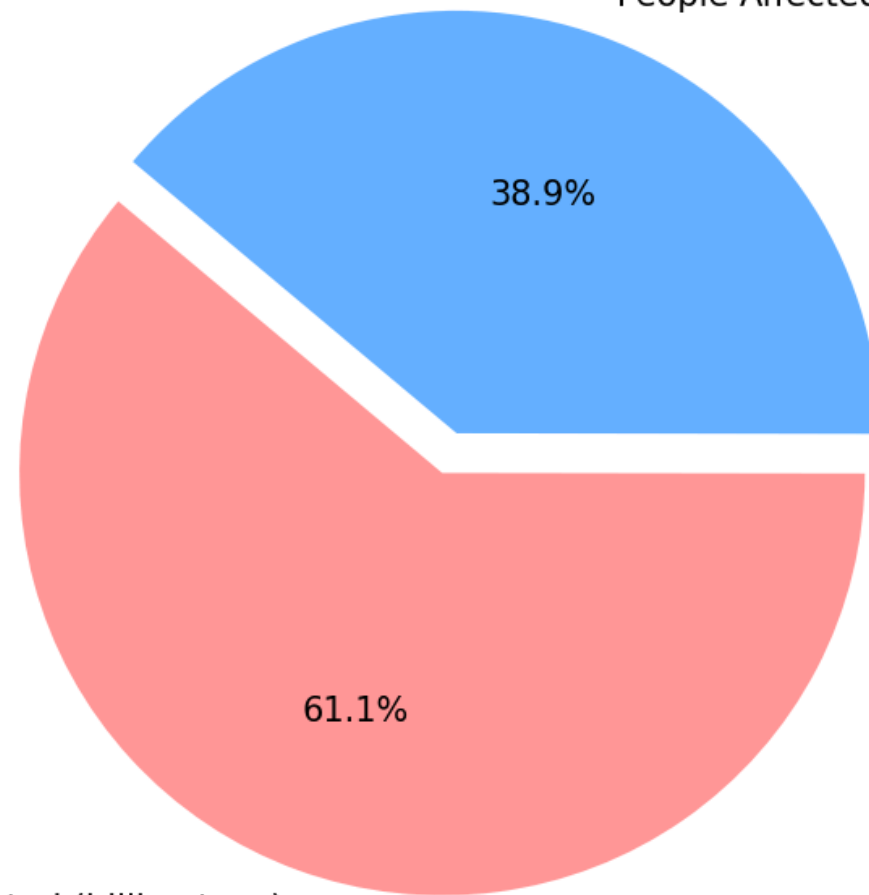
Problem Statement:
Hunger in slum areas coexists with food wastage in urban centers.

Our Solution:
A platform that coordinates surplus food donations and facilitates distribution through a network of delivery personnel.
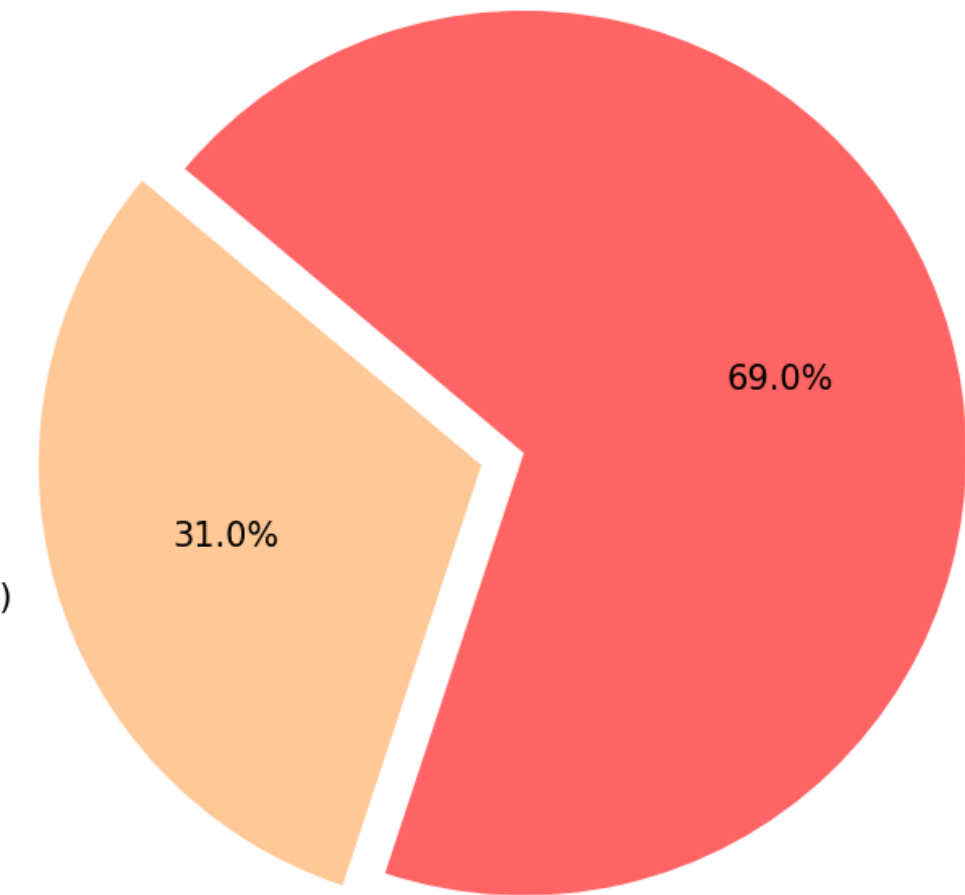
Global Food Waste vs. People Affected by Hunger

- People Affected by Hunger (billion): 38.9%
- Total Food Wasted (billion tons): 61.1%

Annual Deaths: Hunger vs. Other Causes

- Other Causes (example): 69.0%
- Hunger-related Deaths (million): 31.0%

Sources of Food Waste

- Food Service Providers: 13.0%
- Restaurants: 26.0%
- Households: 61.0%
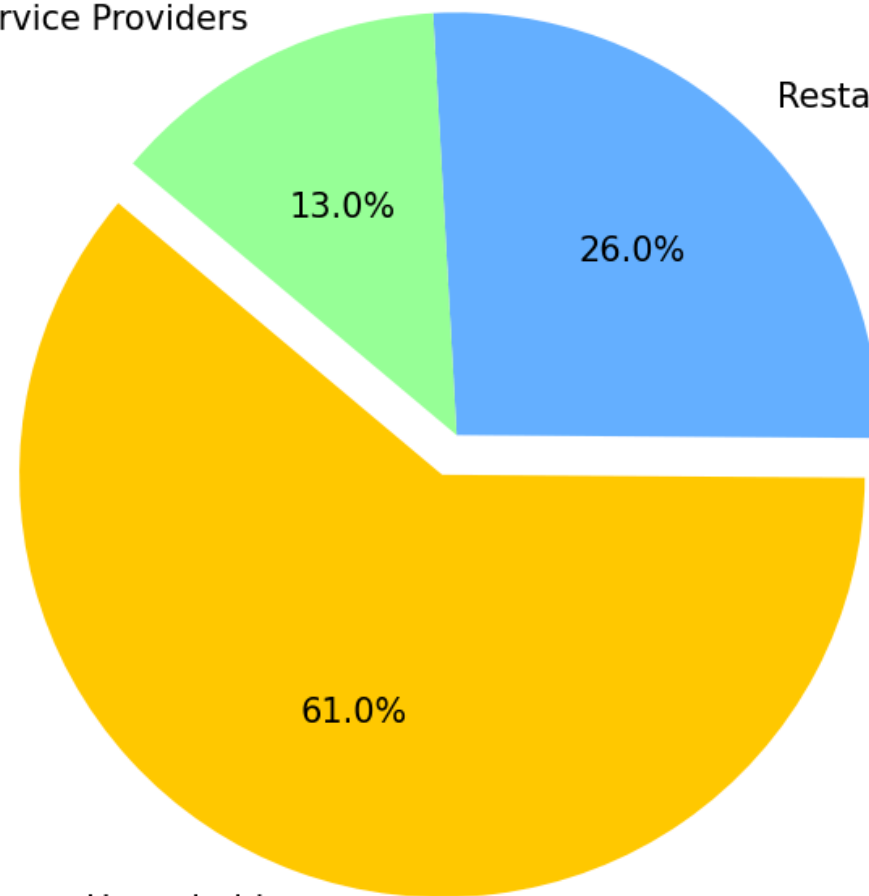
Global Hunger Distribution

- No Hunger — 50.0%
- Undernourished — 10.0%
- Moderate Hunger — 25.0%
- Severe Hunger — 15.0%
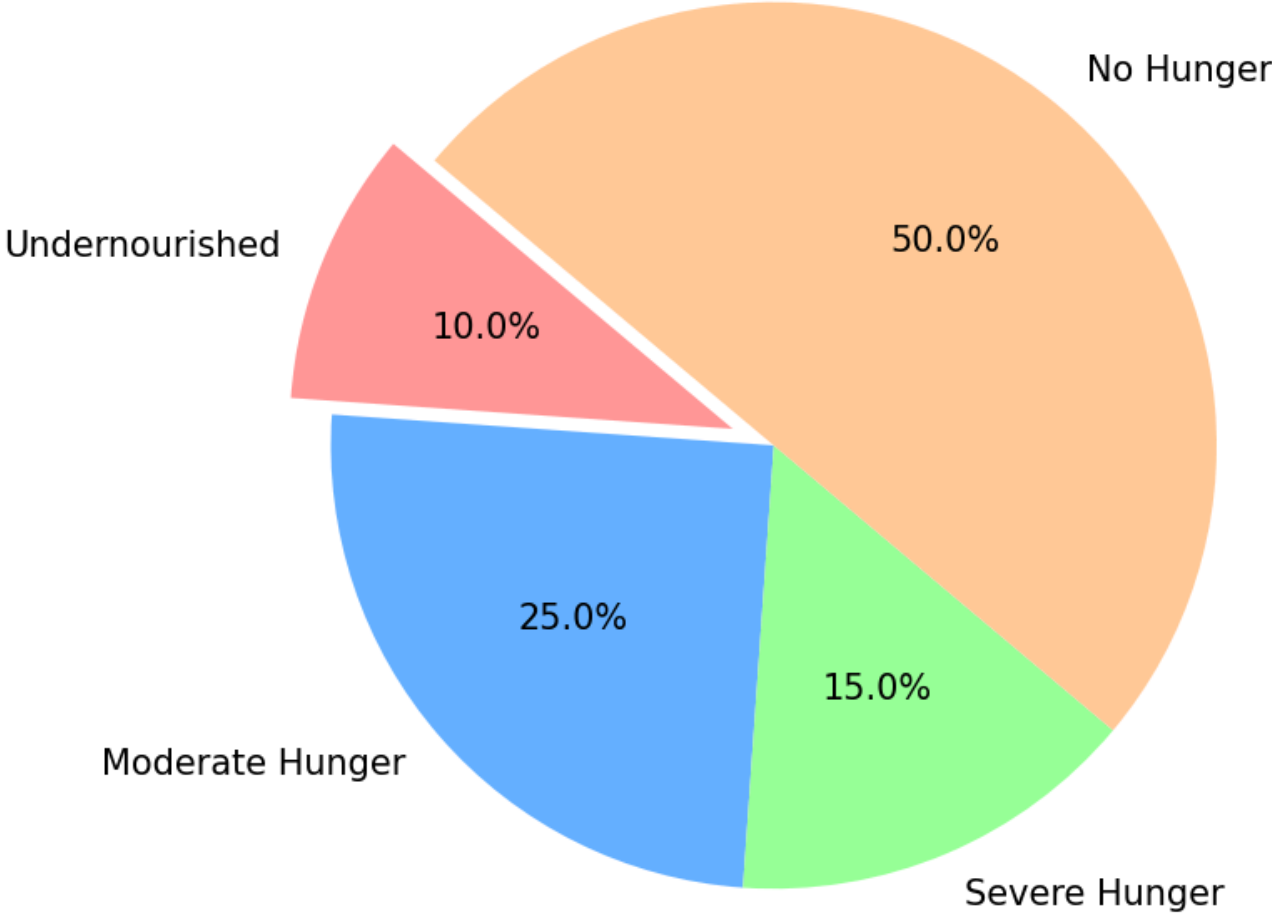
Impact of Food Redistribution

- Food Wasted — 70.0%
- Food Rescued — 30.0%

Causes of Malnutrition

- Lack of Access to Food — 20.0%
- Other Factors — 10.0%
- Lack of Food Availability — 40.0%
- Poor Dietary Quality — 30.0%
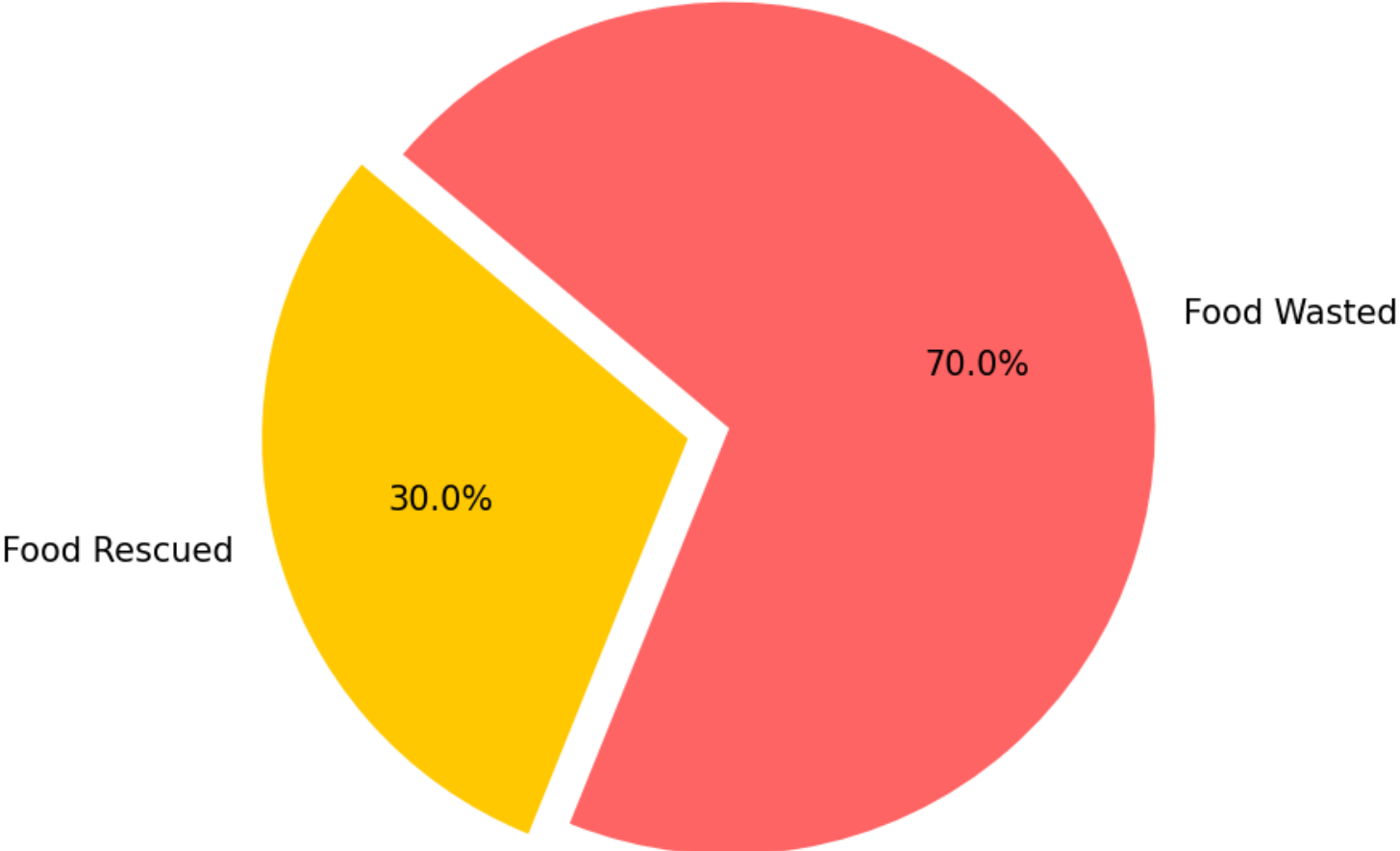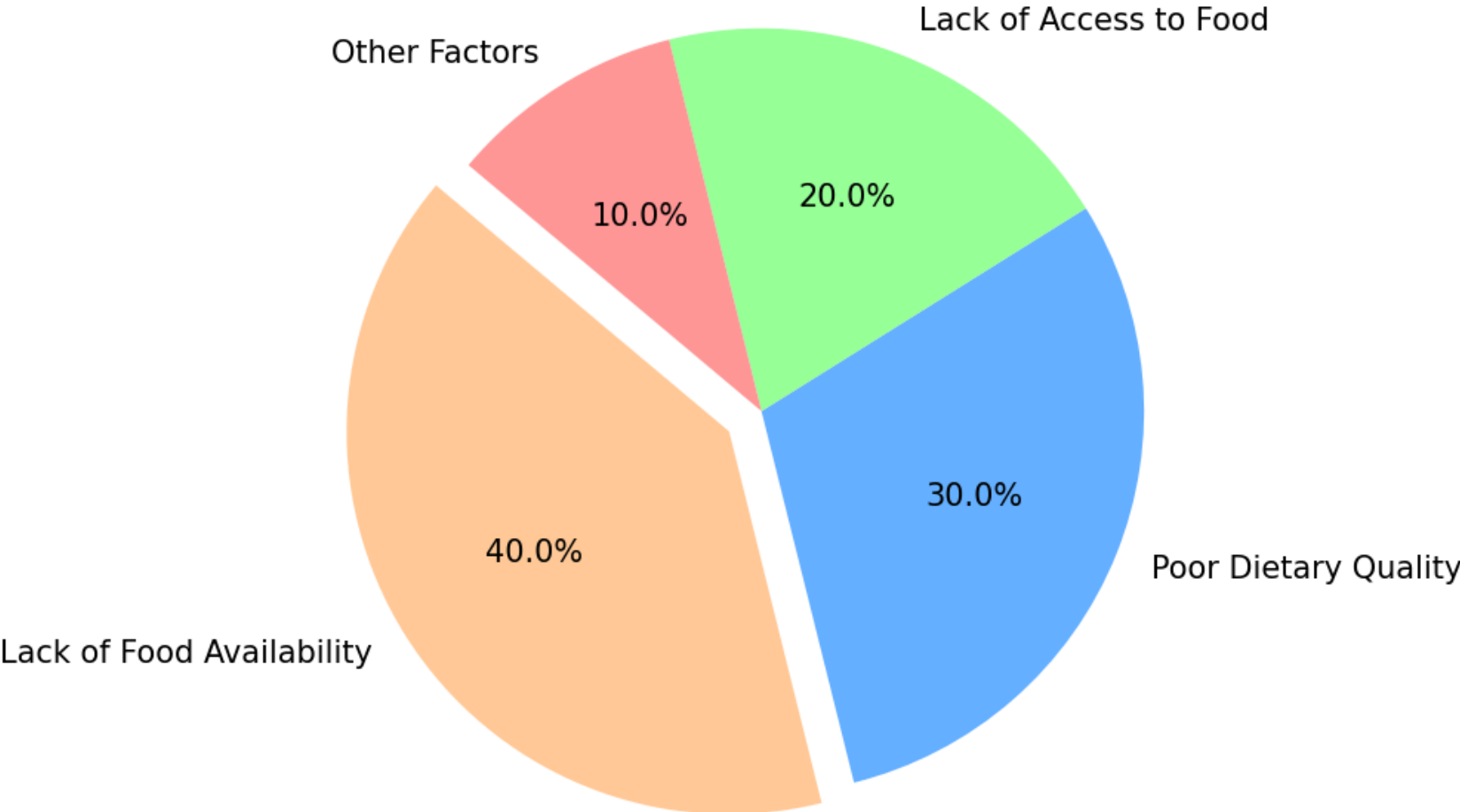
USERS

Food Donor

Description:
Donors are restaurants, canteens, or organizations that have surplus food they wish to donate rather than discard.

Responsibilities:
Post available food requests on the website, indicating the quantity, type of food, and preferred pickup time. Ensure the food is safely packed and ready for collection by the assigned delivery personnel.

Process:
Once a food batch is ready for donation, the donor submits the request on the platform, waiting for the user to assign delivery personnel.

Food distributer(user)

Description:
The user is responsible for managing the overall process of food distribution, from accepting donor requests to coordinating deliveries.

Responsibilities:
Accept or reject food donation requests based on availability of delivery boys and the suitability of the food.
Assign delivery boys to pick up food from donors and ensure its distribution to the right slum areas.

Process:
After reviewing the food request, the user assigns available delivery boys to collect and distribute the food.
The user monitors the completion of the task to ensure food reaches the intended destination in a timely manner.

Delivery Boy

Description:
Delivery boys work under the supervision of users and are tasked with collecting food from donors and delivering it to the designated slums.

Responsibilities:
Collect food from the donor as per the instructions provided by the user. Deliver the food to the assigned slum areas, ensuring it is done safely and hygienically.

Process:
The delivery boy picks up the food from the donor's location, follows the assigned route, and distributes it to the targeted recipients in the slums. After completing the delivery, they report back to the user.

USERS
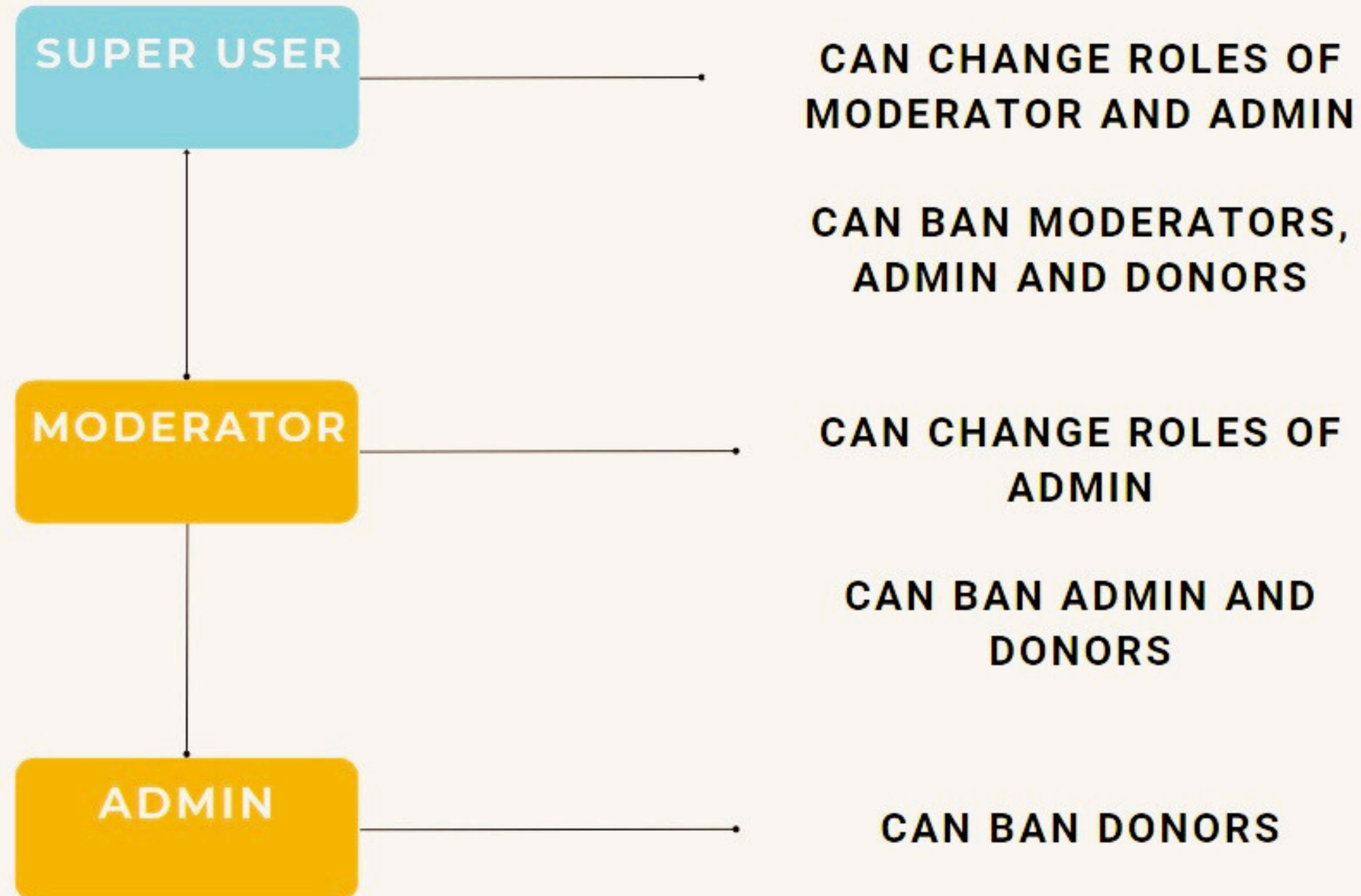
MODELS

Donor Model (donor.js)

The Donor Model represents entities that contribute surplus food, such as restaurants or canteens. This model contains information about donors, address, facilitating easy communication and logistics for food donations.

- username: Unique username
- address: Donor's address
- mobileNumber: Contact number
- email: Unique email address
- password: Authentication password

User Model (user.js)

The User Model represents individuals who gets food donation info. It stores user details, including contact information and delivery preferences, and allows users to request food from donors. The model links to delivery boys responsible for transporting the food.

- username: Unique username
- address: User's address
- mobileNumber: Contact number
- email: Unique email address
- password: Authentication password
- deliveryBoys: References to assigned delivery boys

MODELS

Delivery Boy Model (deliveryBoy.js)

The Delivery Boy Model represents individuals assigned to transport food from donors to those in slum areas. This model contains essential information contact details, vehicle information, and current location, enabling efficient tracking and assignment of delivery tasks.

- deliveryBoyName: Unique name
- mobileNumber: Contact number
- password: Authentication password
- vehicleNo: Vehicle registration number
- drivingLicenseNo: License number
- currentLocation: Geographic coordinates

Moderator Model (mod.js)

The Moderator Model is designed for those who manage the platform, such as admins or superusers or moderators. This model is enabled to get effective oversight of the system.

- username: Unique username
- mobileNumber: Contact number
- email: Unique email address
- password: Authentication password

MODELS

Request Model (request.js)

The Request Model represents requests made by users for food posted by donors. It captures details of the requester, the food requested, and the status of the request (accepted or rejected), enabling effective management of food distribution.
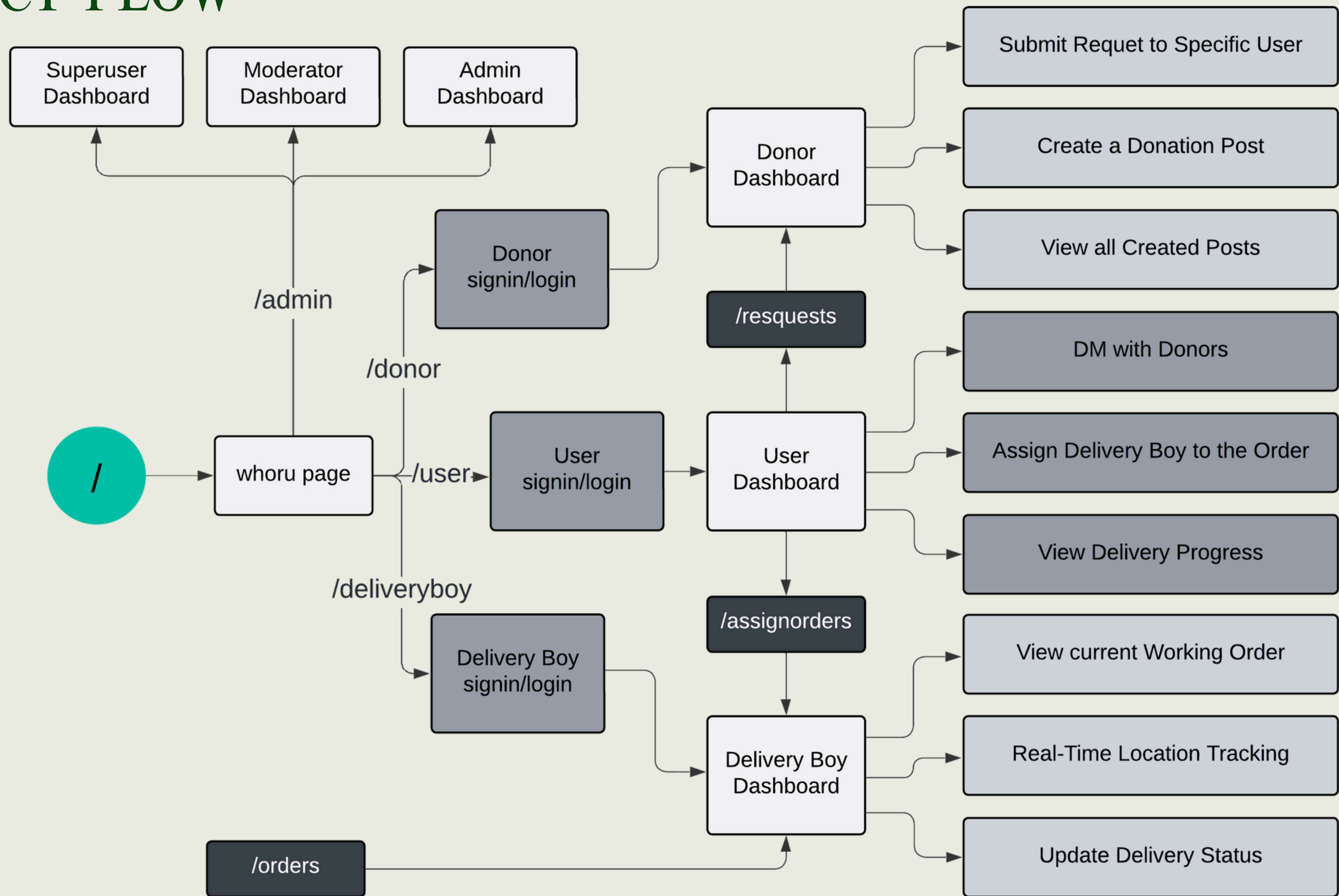
- donorUsername: Reference to the donor
- userUsername: Reference to the user
- location: User's location
- availableFood: List of requested food items
- post_id: Reference to the related post
- timestamp: Date and time of the request
- isAccepted: Status of the request
- isRejected: Status of the request

Post Model (post.js)

The Post Model allows donors to create offers for food donations. It includes details about the type of food available, the location for pickup, and the status of the offer. This model is crucial for connecting donors with users requesting food.

- donorUsername: Reference to the donor
- location: Food pickup location
- availableFood: List of food items
- timestamp: Date and time of the post
- isDealClosed: Status of the offer
- currentLocation: Geographic coordinates

PROJECT FLOW

Superuser Dashboard

Moderator Dashboard

Admin Dashboard

/admin

/donor

Donor signin/login

Donor Dashboard

Submit Requet to Specific User

Create a Donation Post

View all Created Posts

/resquests

/

whoru page

/user

User signin/login

User Dashboard

DM with Donors

Assign Delivery Boy to the Order

View Delivery Progress

/deliveryboy

Delivery Boy signin/login

/assignorders

Delivery Boy Dashboard

View current Working Order

Real-Time Location Tracking

Update Delivery Status

/orders

INDIVIDUAL CONTRIBUTIONS

user   (abhiram + satya)
chat with donor
dashboard
all posts
delivery assign

donor   (satya + Kaushal)
create post
send a request
all posts

admin panel   (abhiram + Kaushal)
superuser
moderator
admin

whoru + login and sigup (Jayanth + abhishek + Kaushal)
authentication
authcontrollers
whoru page

deliveryboys   (abhishek + abhiram)
show orders
delivery completed check

FUTURE PATH

- Converting whole project's frontend into ReactJS
- intregrating maps API for delivery boy purpose
- Infrastructure Development:
- integrating notifications section
- Enhance the chat feature for donors, including calls or group chats.

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