A HOME DELIVERY SYSTEM

"DOPE STORE"

MADE BY:

TEAM '404 NOT FOUND'

MEMBERS:

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A HOME DELIVERY SYSTEM A HOME DELIVERY SYSTEM



PROBLEM

- Inclining covid situation and restriction level causing issues in order delivery.
- Question towards both customer and service providers safety.
- > Fall of companies credibility due to unsafe measures of delivery.
- Non optimized delivery pattern increasing time taken to deliver goods.
- Non precise delivery time due to no fact check about the delivery area(whether the area or the surrounding is under any restriction).

OBJECTIVE

- **Ensure safety for both customer and service provider.**
- > Efficient and flexible delivery routes.
- > Providing more details about delivery location to avoid confusion and reduce conversation between customer and service provider.
- > Appealing UI to make customers visit constantly or stay long.

SOLUTION

- Build an appealing UI.
- Construct a Database with API key about Restriction over area.
- With the data obtained about restriction over area guide delivery person with safety measures and ensure he/she is equipped well with safety-kits.
- Making the delivery que manually adjusted by delivery person so its flexible for delivery person.
- Assign orders to delivery person who has the oreder area as preference in his delivery area so the person has more knowledge about the area and it takes less time to deliver order.

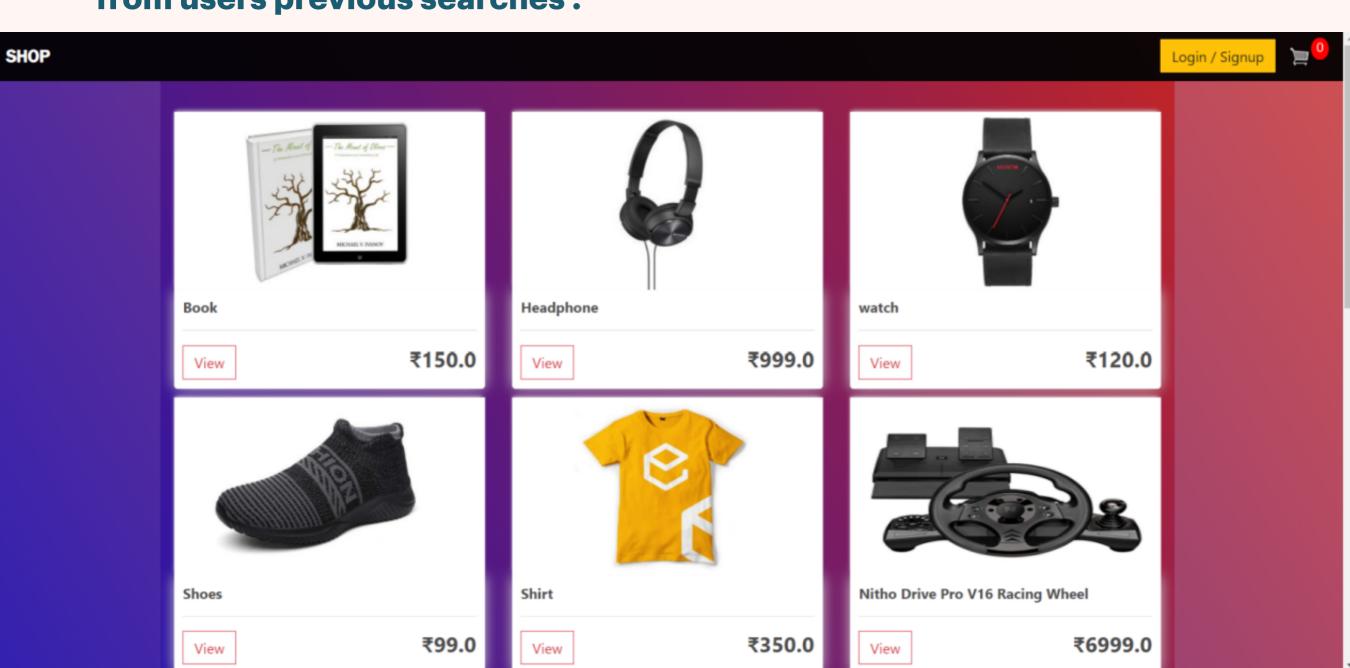
FRAME WORK AND APPLICATIONS USED

- > FRAME WORK : DJANGO .
- **LANGUAGE: PYTHON, HTML, JAVA SCRIPT, CSS, BOOTSTRAP.**
- > API: Google Maps API, Google Auth API.
- **DATA BASE: SQL d3 lite.**
- **HOSTING SERVICES: Heroku.**

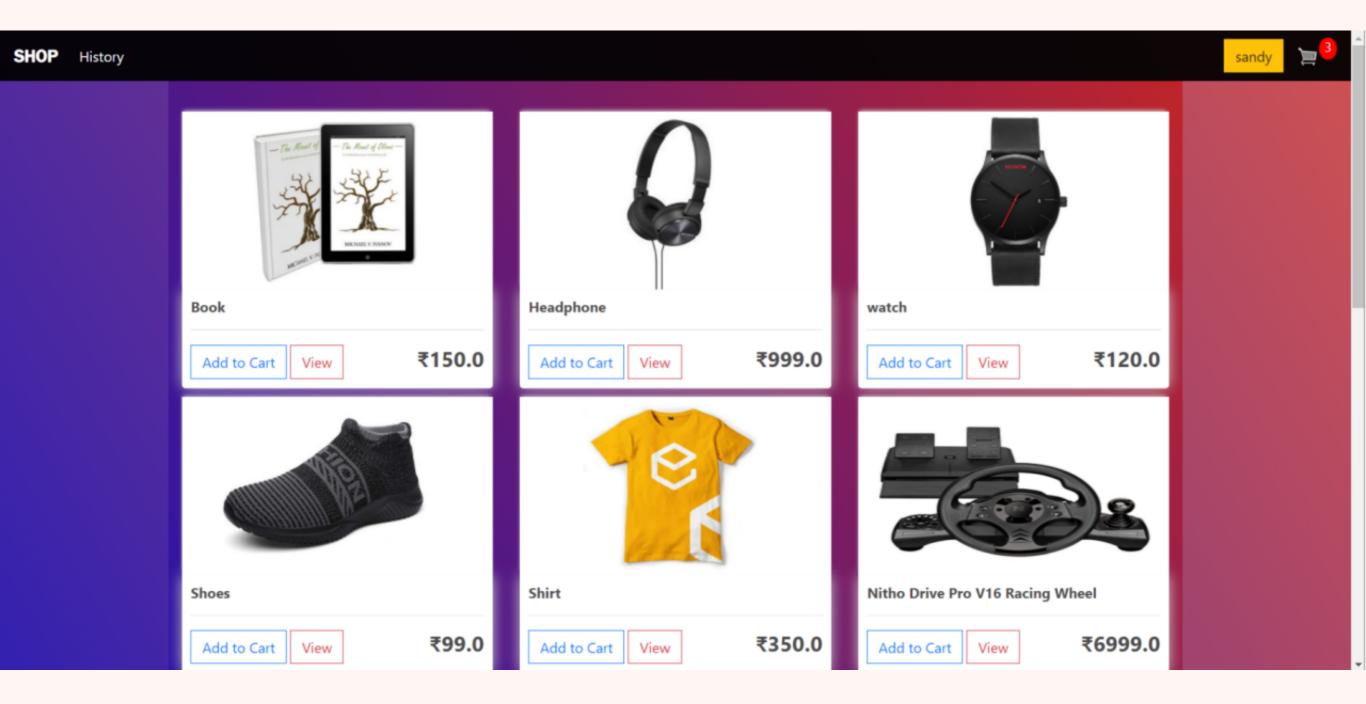
PROTOTYPE

USER INTERFACE [UI]

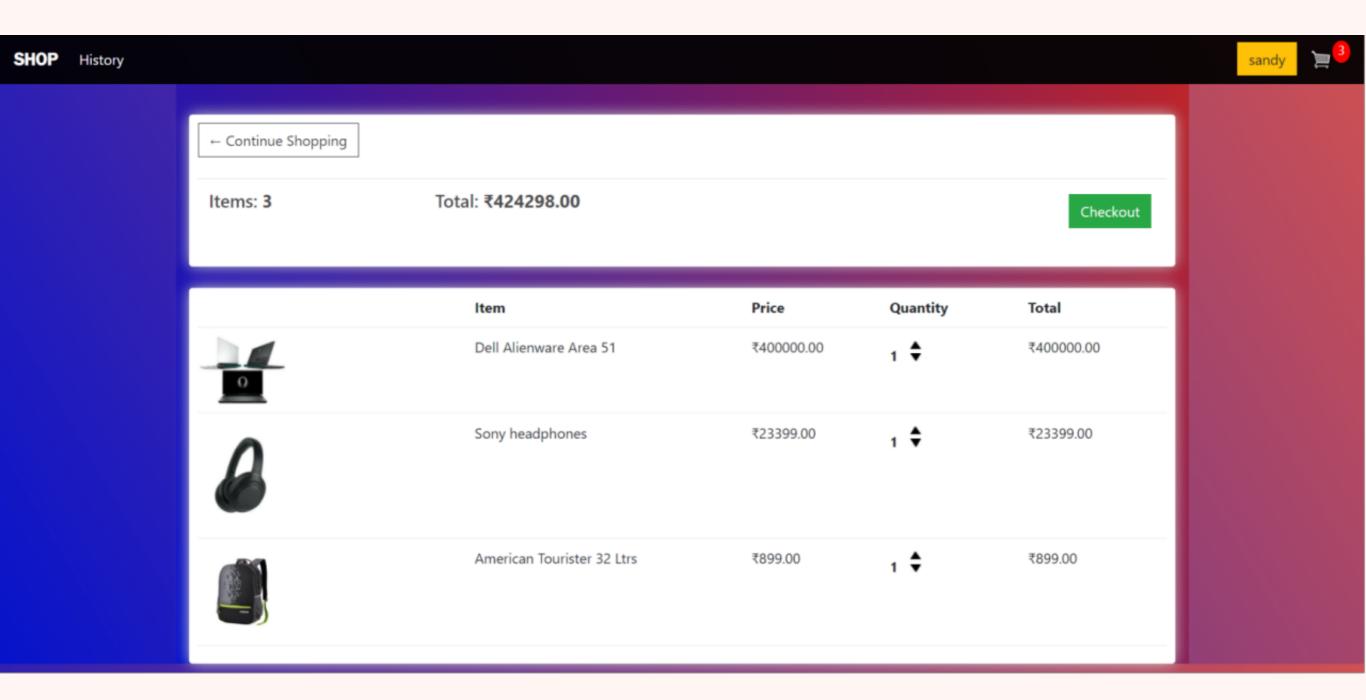
- > Here the users can view the products available in the page but for the user to add items to cart or shop he/she must be signed up.
- > we also use cookies to save history of user cart so he/she doesn't need to add items that they selected in previous session and to suggest products from users previous searches.



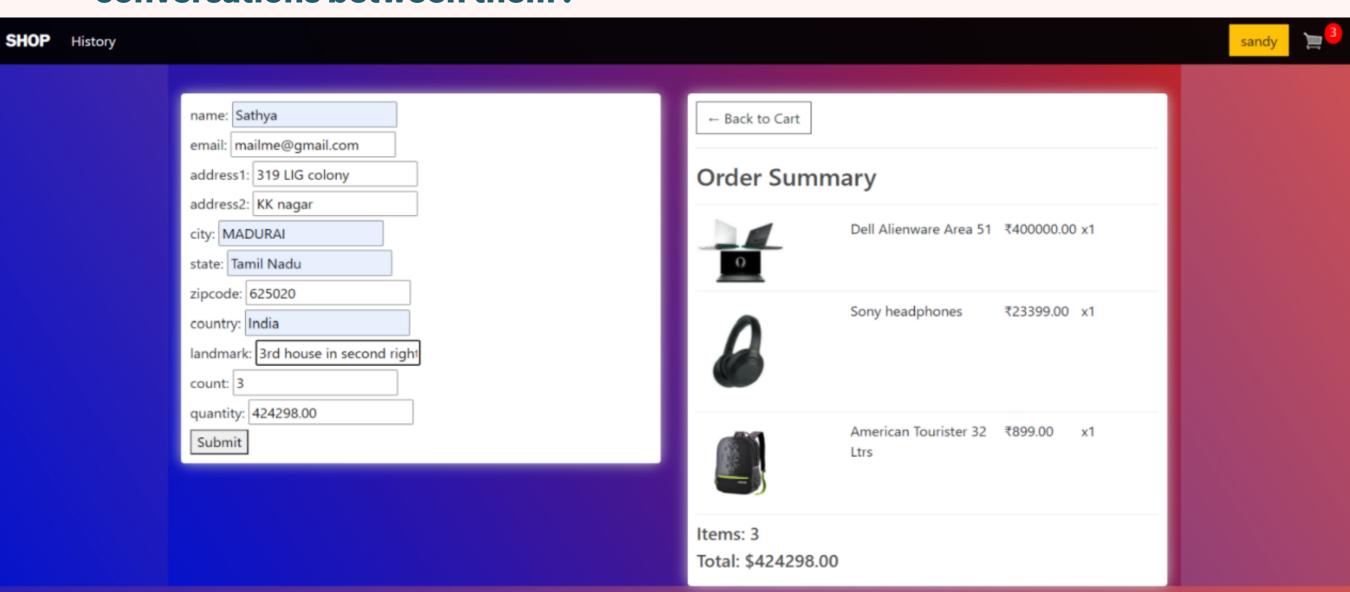
When a normal user is signed in he/she can order products and click the cart button to checkout and can access the "History" tab to view him previous orders and the orders that are yet to be delivered.



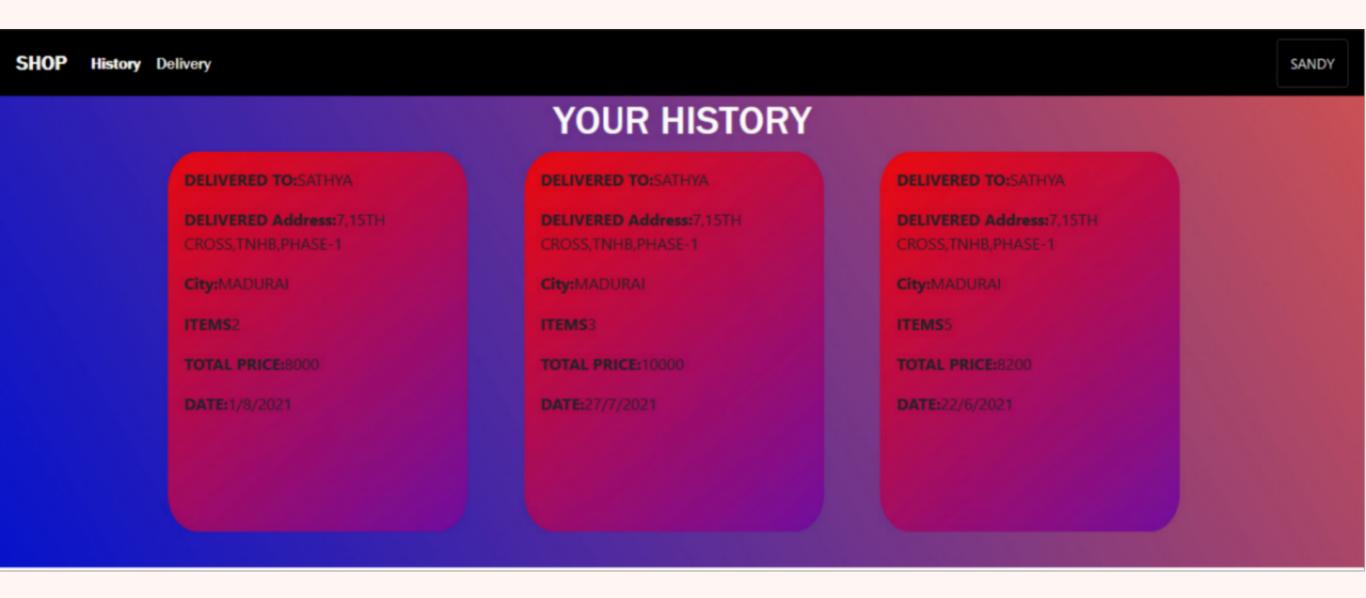
This is a page for user to see what he/she has added to cart and clicking the checkout takes them to the address filling and the payment-gateway page.



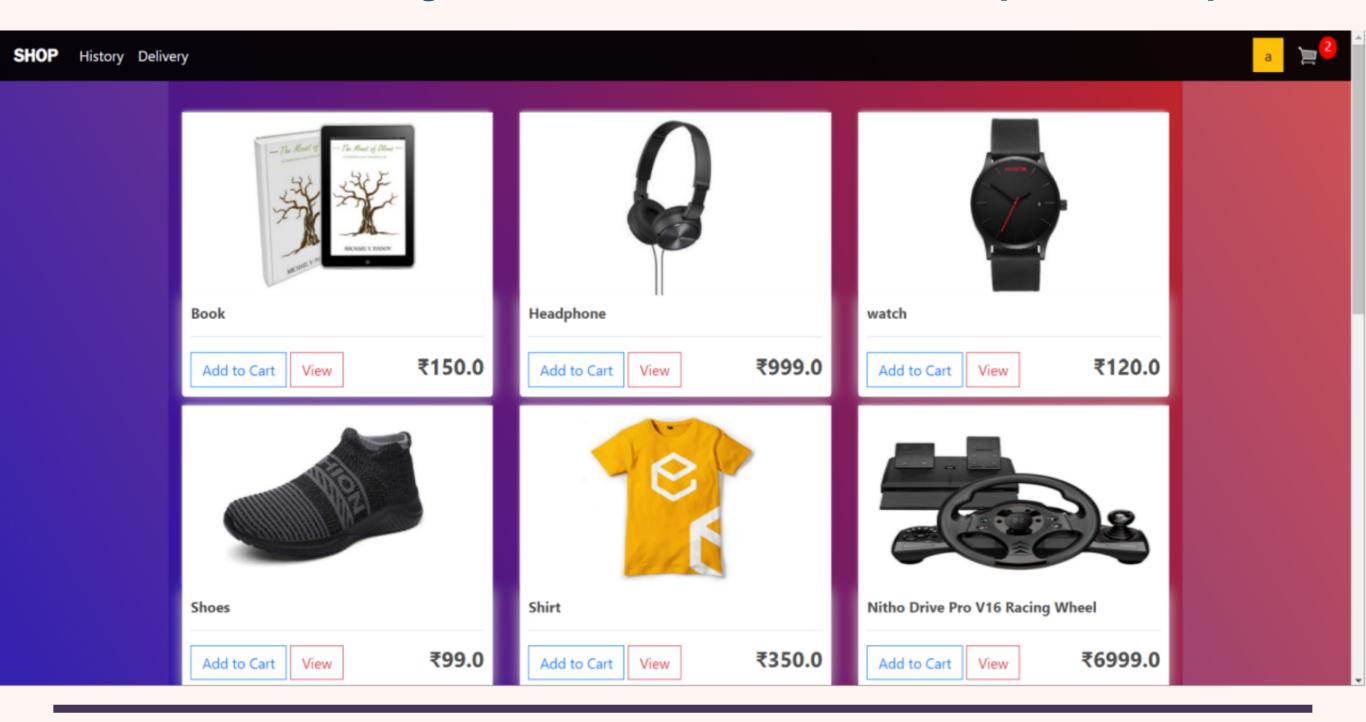
- The customer is directed to a payment tab when the form is submitted also a landmark tab is added.
- Where the user enters any description that he gives from "his house to the nearest landmark" this makes.
- The job easy for delivery person to find the location hence reducing conversations between them.



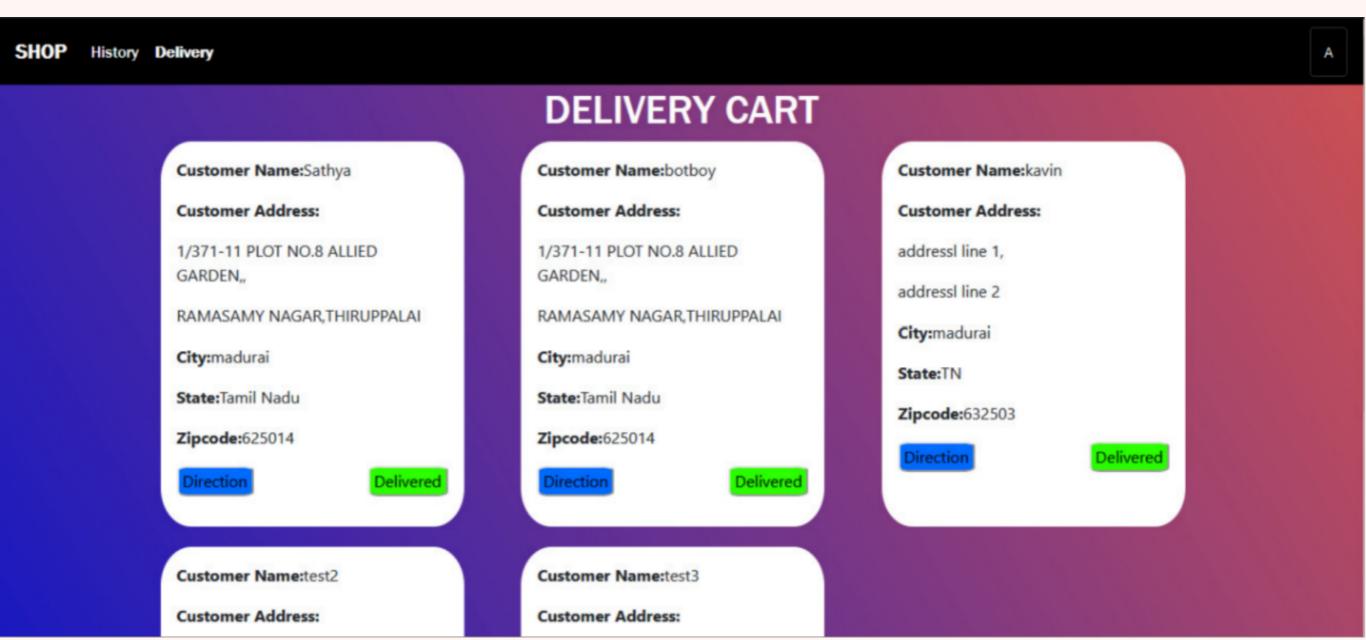
> User can see the previously delivered orders in the "History" section and if user has ordered any products then a oncoming deliveries section is created dynamically and the order made is listed.



When the delivery person signs in, he/she can also view products or order them but also has a special access to a tab called "Delivery" where they can view the orders assigned to them to be delivered on that particular day.



- The when the delivery boy is signed in he can see all the orders that are been listed for them, this list is sorted in a way that the location that is closest to them is sorted first and the farthest delivery location is sorted to the last with restriction level also being a field is sorting process.
- The delivery person can also pick which delivery he/she wants to do first making it flexible from them and also to sort it as per their wish.



HOW ORDERS ARE BEING SORTED?

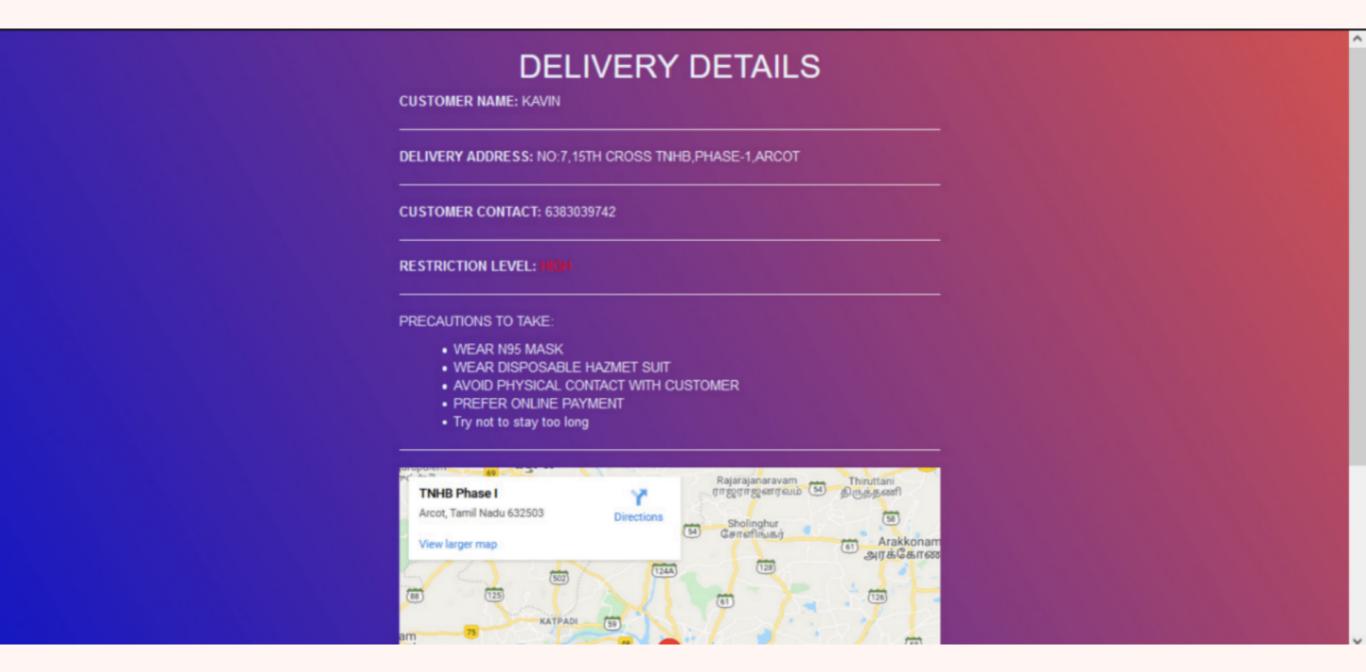
- > We have data's of cities with all areas in the city along with the restriction level of each cities, areas like the model contains
- > 1 > Name of the area
- 2 > Restriction level
- **Ex: Madurai contains a list like**
- Name: kk nagar
- Restriction level : 2
- Name: Anna nagar
- Restriction level: 1
- > So on and so forth containing all areas and all cities of the state.

Now coming to the sorting algorithm what we have done is first the address are been sorted by distance(ascending order) and a list is generated and the generated list is been sorted again by arranging the location with minimum restriction level at first.

Example:

- If A is 10km away, B is 15 km away and C is 25 km away the first list produced is [A,B,C] but now the list produced is sorted again with restriction level over each address location.
- If A has restriction level 3, B has restriction level 2 and C has restriction level 1 Now the location with minimum restriction level is been sorted first leaving the list modified as [C,B,A].
- ➤ The Calculated distance to be travelled is the optimal distance to be traveled which can be calculated with any sorting algorithms, also the reason to select minimum restriction level area first is because the probability that the customer infected is low in minimum restricted area than the highly restricted areas. So this avoids the delivery person from getting infected, becoming a carrier.

- > When the delivery person picks an order he/she finds complete details of that order, with the route map using which they can add multiple stopping.
- There is also safety tips provided to the delivery person depending on the restriction level of that area in which delivery is to be done.



APPLICATION & USP

- This model can be made to be used in all ecommerce site from food delivery to any goods or product delivery.
- > Focuses on both safety of user and the service provider.
- > Tracks the number of cases and restriction of each city and gives tips for the delivery person helping in delivering efficiency.
- Not only flexible for user but also for service providers(delivery person).
- This Website can be easily integrated as an mobile application using Host-API.

CODE UPLOADED ON GITHUB FOR REFERENCE:

HTTPS://GITHUB.COM/ SATHYAPRAKASHRAIS/DELIVERY-SYSTEM

THANK YOU