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STREET HAWKER

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Abstract
This project's main goal is to assist small businesses and street vendors in growing their customer base through digitization (non-moving vendors). Users can communicate with street vendors through the street hawker app. offering products and services from hawkers. The location of both buyers and sellerswill be tracked using the GPS module.

A ranging system will be included in the application so that users can filter or search for items within a range of km.

In situations like country lockdowns, where small shops (street vendors) struggle for daily income, street hawker applications would solve problems.

This application will be used in a simple and uncomplicated way. Additionally, the user requires a constant internet connection.

Keywords
Street vendors, GPS module tracking, Internet connection, Filter

1.Introduction
It is an online web application where local small businesses or street vendors are invited to register and submit valid information about their goods.The process will also involve interacting with the application in later steps.

All users, whether they are customers or sellers, will be asked to enable real-time GPS location so that the application can keep track of their whereabouts. The vendor now only needsto respond to customer requests for money and items after finishing the registration and data entry.

The consumer searches or filters for the product he needs, and the app responds by showing vendors nearby who have the filtered items.

The customer will have a conversation with the vendor before paying and receiving the goods as usual.

2.Objective
This article aims to understand the struggles of local street vendors in situations such as a country shutdown or any other crisis, as well as the best solutions for overcoming and resolving this issue.

3.Proposed System:
It will be a web application, and to implement it, React-js, Bootstrap, and other npm modules will be used for front-end development, while Nodejs and its dependencies will be used for the back-end.

Figma will be used for UX design to improve development planning.

3.1. Application Workflow
The street hawker application will help in the digitization of street vendors and small shops (non-moving vendors). Helping them in their growing market.

The application will give a platform for vendors to sell their items to users more efficiently, making it easier for both sellers to sell and customers to buy the goods that they require.

This app, like OLA and UBER, will give real-time GPS tracking, making it easier for users to identify nearby vendors who have filtered things that they searched for.

With the help of the npm module, we will be able to display the actual location on the map by having access to all geolocation parameters.

4. Approach Used For GPS Tracking

We have an NPM module dependency for tracking user and street vendor locations.Google's geolocation API will be used to calculate the user's real-time location.

Geographical coordinates can be calculated using longitude,latitude, and speed, among other factors.

The API works by using a device's GPS or IP address to determine its location. The API then provides this information to the application in a standardized format, such as latitude and longitude coordinates or a street address.

(The user will have restricted access to the application's capabilities unless the GPS location is enabled. Once enabled, the application will request permission to access the user's location. If the user agrees, the programme will save their location in the database)

3.2 Advantage

.Essay access to street vendors
3.Customer demand
4.Time Saver For Customer
5.Wide Range of Related Services

3.3. Disadvantages

1. Smartphones and good internet connectivity requirementsare a must.
2 . Data should be updated every time every day.3 . Application will not work in offline mode..

5. Methodology

Our website application, called Street Hawkers, will address problems that the country's street vendors had to deal with when it was isolated.

Giving them a platform to effectively sell their goods Application should be kept as user- and seller-friendly as possible.

We have determined that the majority of neighborhood stores were shut down during the lockdown for a variety of reasons, including low sales or low earnings.

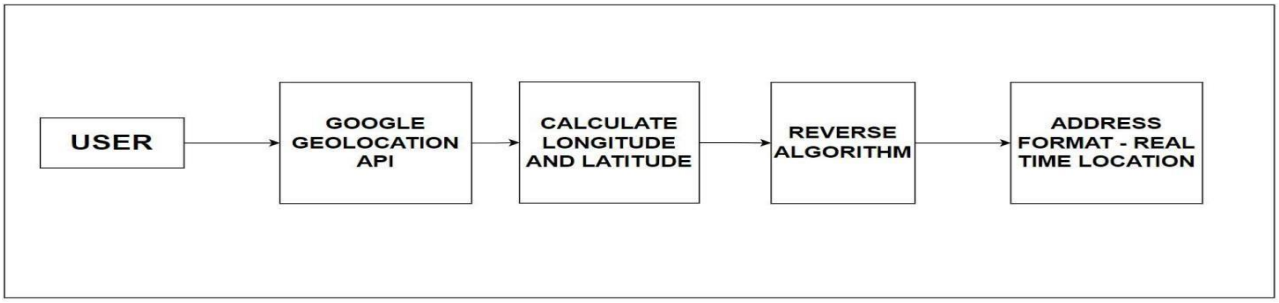


Fig.1: Google Geolocation API

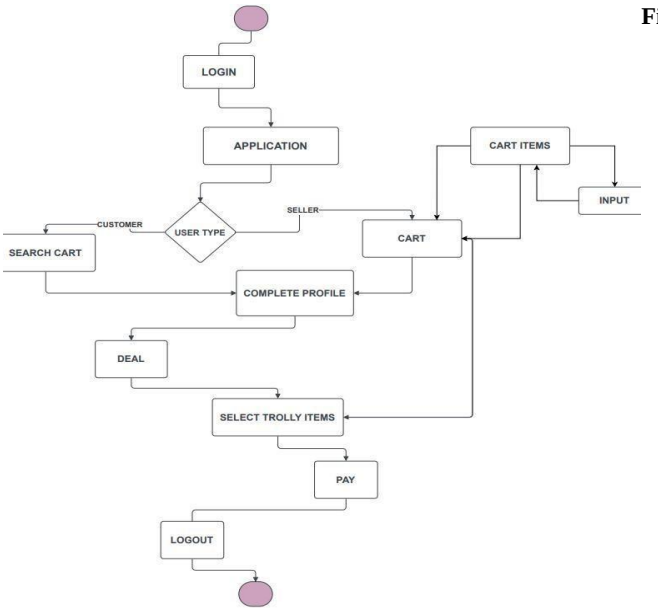


Fig.2 Flow Diagram

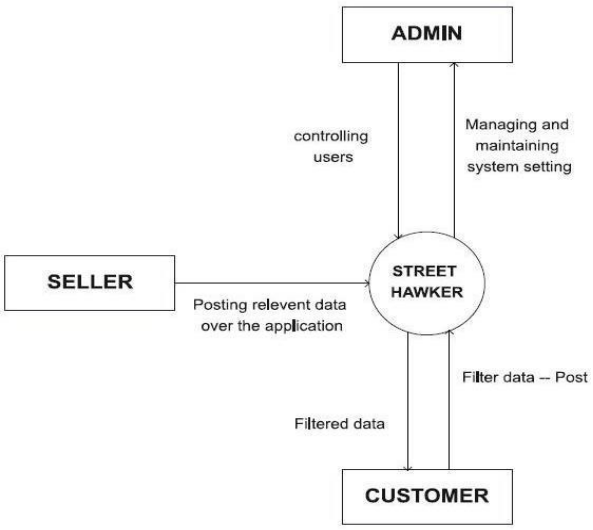
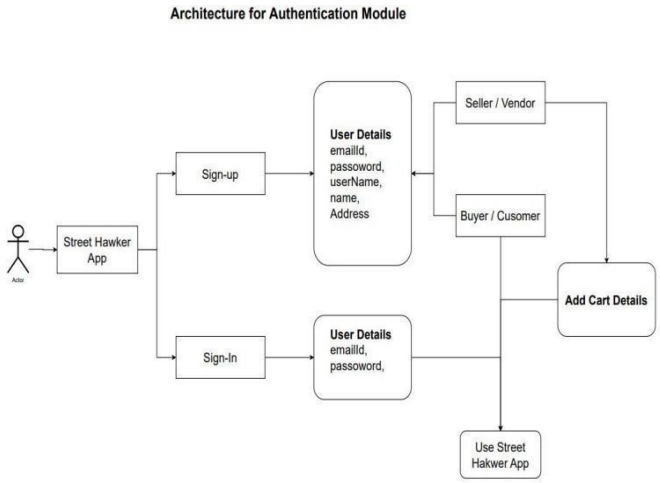


Fig.3 level 0- DFD

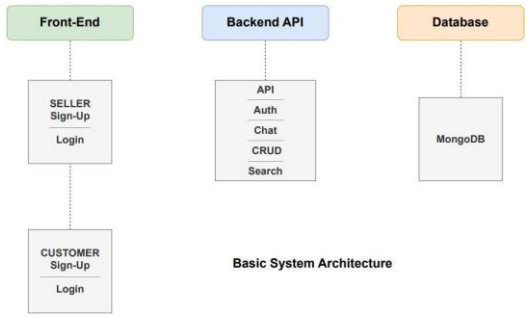
Diagram : **Fig.2 Flow Diagra**



Architecture for Authentication Module

The street-hawker-app's security and authentication module allows users to register depending on their userType. If a user chooses the selling option, they will be required to enter cart information, but choosing the buyer option will take them directly to the application.

Basic System Archetecture



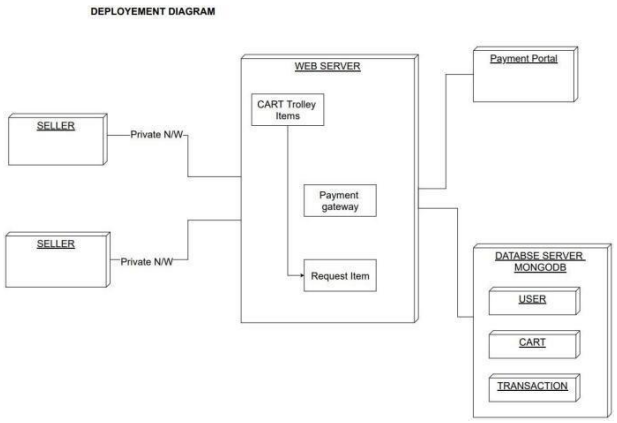
Frontend: Renders UI and enables user interaction. Communicates with backend via HTTP. Backend API: Handles business logic, authentication, CRUD operations, search, and chat. Database: Stores product, vendor, and chat data.

6. CONCLUSION

This paper introduces a web application for local products online buying. This hypothetical website treats nearby vendors as both buyers and sellers. The purpose of this paper is to assist vendors in purchasing or selling locally produced goods and products to consumers, delivering these commodities directly to consumers without the need for a third-party platform. All companies were hit by the COVID- 19 outbreaks, but local and small enterprises suffered the most.

This proposal is intended to provide an accessible online marketplace where local businesses may sell their items. The suppliers will benefit from this system's assistance in pricing comparison and market-based selling.

This is a deployment diagram that shows the architecture of a clustered MongoDB database that is used to store data on the server." The figure depicts how data will be disseminated and retrieved after the system is launched.



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