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IMPROVING MARKETING STRATEGY BY USING MACHINE LEARNING AND GPS TRACKING

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Abstract - "Hawkar and Vendor is a remarkable software program that utilizes Global Positioning System (GPS) or radio frequency identification (RFID) to define geographical boundaries. Essentially, Hawkar and vendor create a virtual barrier known as geofencing, which is an innovative technology enabling an online marketplace for proactive contextual services. This technology allows users to easily discover and subscribe to interesting services, while enabling providers to offer their services for a variety of applications such as electronic toll collection, contextual advertising, or tourist information systems, without the need for additional infrastructure. The primary objective of this research was to explore how the use of spatial data can enhance advertising performance for customers. Tracking systems and monitoring, based on global navigation services by satellite and including geofencing functionality, could also contribute to pinpointing the exact location of an institution or company, thereby enhancing sales and business prospects efficiently. This shift allows for advertising on smartphones as an economically and accurately tested alternative to large billboards."

Key Words*: *Hawkars &Vendors, Special offer ,Machine learning, Blind people

1.INTRODUCTION

Vendors generally refer to street food or small food vendors operating in open markets or public spaces. Some countries or regions may have specific apps or platforms designed to help sellers manage their business, conn-ect with customers, or increase productivity. KNN stands for nearest neighbor and is a machine learning algorithm for classification and propagation. In absence of further details, it is unclear how KNN affects Hawkers activities. If you are talking about a specific app or service that has become available since my last update, I recommend visiting the online store, official website or forum to get the most accurate and up-to-date information.

You may also need to share details or provide additional information to get to the correct answer. Location-based Services (LBS) have recently experienced a major shift in location. Although the first generation LBS has not received much attention recent years, there will be more demand in the market for second generation LBS applications such as travel information, navigation, search tools, mobile games and mobile marketing. The LBS user takes control of the user's mobile phone. Therefore, most of these principles of LBS cannot meet the needs of users, that is, they are limited to simple tasks and have little creativity.

So this is an online platform, what about stores near you? There is no platform near you that can give you the latest facts and information and tell you how to save a lot of money. At the same time, people who want to buy a particular product usually search for it on the internet but the e-commerce sites but unfortunately there is no option to buy the product offline from nearby stores. One of the best ways to do this is to send helpful messages to your customers quickly. Wi-Fi and GPS are used to notify marketers when decisions are recorded on their phones. In summary, we explored an effective alternative to the use of SUAS planning algorithms with built-in detection and avoidance capabilities. We believe that this initiative will gain even more importance as package delivery drones become more common in cities.

2. Literature Survey

Akira Suyyam[1] The Central Disaster Prevention Council's "Professional Investigation Meeting about Refuge at the Time of an Accident" (4th meeting, January 2011) provides a comprehensive analysis of evacuation strategies during emergencies. The literature

highlights the importance of timely and accurate communication to the public, emphasizing the need for well-coordinated information dissemination systems. It explores various evacuation models and their effectiveness, considering factors such as population density, urban infrastructure, and transportation logistics. The study also examines the psychological aspects of evacuation, stressing the importance of public education and drills to ensure readiness. Additionally, the report reviews technological advancements in early warning systems and their integration into existing disaster management frameworks. Case studies from past incidents are analyzed to extract best practices and lessons learned, contributing to the development of more robust evacuation protocols. The meeting underscores the necessity of a multidisciplinary approach, involving government agencies, emergency services, and community stakeholders, to enhance overall disaster preparedness and response

Faiza Renaldi[2], In this day and age, many technologies are used to easily track the whereabouts of others, as in this study, Geofencing technology is used to track or monitor the existence of geriatric patients. This is done because geriatric patients who have dementia and Alzheimer's have impaired brain memory that can potentially get lost somewhere and cannot go home. Therefore, with the Geofencing technology, the movement of patients can be virtually restricted without disturbing real activities by creating boundaries in the patient's area

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Christoph Bosch[3], Geofencing is a location-based service that triggers an action when a device enters or exits a virtual boundary set up around a geographical location, known as a geofence. Thus, geofencing is a useful tool to allow tracking of vehicles or vehicle fleets. Since the tracking can be used to create detailed movement profiles of drivers, there are some precautions to be considered with geofencing

Jawed Bhavin[4], Most applications use external services and APIs to implement geofencing. This has a major drawback that the user location data is accessible to the external service provider. Another important drawback is the continuous requirement of network connection for geofencing. Typical implementation of geofencing cannot be done within the mobile device as they require high computation for repetitive searching. In this research paper we propose new geofencing architecture based on arranging geofences in a tree like structure (geo-tree)

Giuseppe Cardone[3], The widespread availability of smartphones today equipped with several physical and virtual sensors allows to directly collect various information about surrounding physical and logical context for different purposes that range from detecting user's current physical activity and also user presence in a designated area, often referred to as geofencing, to determining current social pulse of individuals and entire communities. Mobile crowdsensing seems a promising solution for enabling the design/development and deployment of a wide range of advanced applications in various fields.

PROPOSED SYSTEM:

Android Studio-

Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.[8] It is avail- able for download on Windows, macOS and Linux based operating systems or as a subscription-based service in 2020.[9][10] It is a replacement for the Eclipse An- droid Development Tools (E-ADT) as the primary IDE for native Android application development. Android Studio was announced on May 16, 2013 at the Google I/O conference It was in early access preview stage starting from version 0.1 in May 2013, then entered beta stage starting from version 0.8 which was released in June 2014. The first stable build was released in December 2014, starting from version 1.0

Google Firebase -

Firebase Realtime Database is a cloud-hosted database in which data is stored as JSON. The data is synchronized in real-time to every connected client. All of our clients share one Realtime Database instances and automatically receive updates with the newest data, when we build cross-platform applications with our iOS, and JavaScript SDKs.

The Firebase Realtime Database is a NoSQL database from which we can store and sync the data between our users in real-time. It is a big JSON object which the developers can manage in real-time. By using a single API, the Firebase database

Algorithm Used

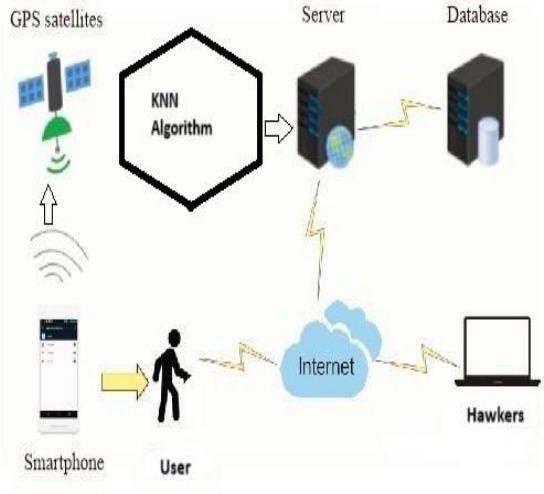
The k-Nearest Neighbour (k-NN) algorithm is a popular machine learning algorithm used for classification and regression tasks. It is a simple yet effective method for making predictions based on the similarity between data points. To find k-Nearest Neighbour we have the element who have very less distance from the given point. For that we have used Euclidean-Distance formula for calculating Euclidean distance between two points (P = (p_1, p_2, ..., p n)) and (Q = (q_1, q_2, ..., q n)) in an n-dimensional space is:{Euclidean Distance} =sqrt {(p_1 - q_1) ^2 + (p_2 - q_2) ^2 + ... + (p n – q n) ^2}

Geofencing Algorithm:-

Geofencing is a location-based service that triggers an

action when a device enters or exits a virtual boundary set up around a geographical location, known as a geofence.Thus, geofencing is a useful tool to allow tracking of vehicles or vehicle fleets. Since the tracking can be used to create detailed movement profiles of drivers, there are some precautions to be considered with geofencing,

SYSTEM ARCHITECTURE:

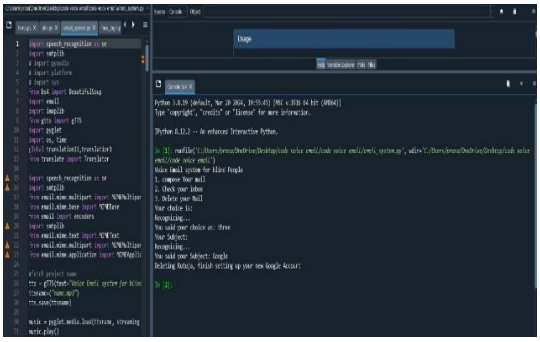


RESULT SET:

Login Page

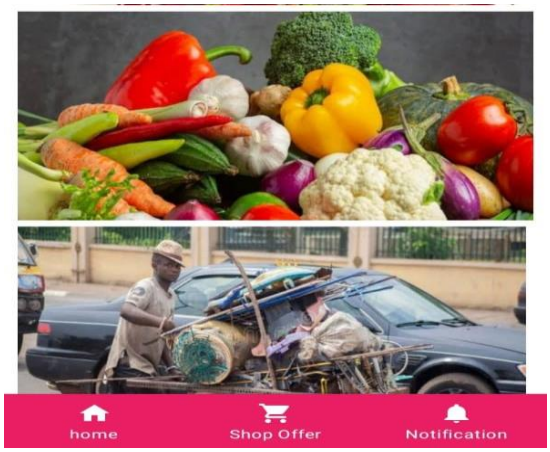
Login Page of our application is consist of entering the authenticated user id and password. The user id will be your mobile number or email id.

Backend



Dashboard

Dashboard is consists of two choices for shops and customers by selecting appropriate options then user can able to add the information according to him. When user selects shop then he have to add all the details regarding to the job and product available on the shop. By selecting the customer user will able to search a particular product and shop.



CONCLUSION AND FUTURE SCOPE:

This project introduces the concept of time series analysis and forecasting in the perspective of Indian economy. The major downfall of the Indian rupee in the recent times has led to the critical need for stock market prediction so as to safe guards the interest of the investors. This research tries to analyze the time series data of the Indian stock market and build a statistical model that could efficiently predict the future stocks.This is mainly due to the reason that based on the forecasts the future strategies are developed. Short-term forecasting problems include predicting future events only up to a small time period.Helps in knowing the future cash needs and whether any additional borrowing is needed the shortcomings of the application. Clear voice recognition and the ability to attach images or documents are the two main challenges of the application. So we can add photos or information links to suppliers as a future development.

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2] Renaldi, Faiza. "Geofencing technology is used to monitor geriatric patients with dementia and Alzheimer's, allowing their movements to be virtually restricted by creating boundaries in their area without disturbing real activities."

3] Bosch, Christoph. "Geofencing is a location-based service that triggers an action when a device enters or exits a virtual boundary set up around a geographical location, known as a geofence. It is a useful tool for tracking vehicles or fleets, but precautions are needed due to the detailed movement profiles it can create."

4] Jawed, Bhavin. "Most applications use external services and APIs to implement geofencing, which poses privacy issues and requires a continuous network connection. This research proposes a new geofencing architecture using a tree-like structure (geo-tree) to addressthese drawbacks.

5] Cardone, Giuseppe. "Smartphones equipped with physical and virtual sensors can collect information for purposes like detecting user activity and geofencing. Mobile crowdsensing enables the development of advanced applications in various fields."