

# A Flowchart on Designing a Web Application House Detection

Prof. Sonali Guhe

Asst. Prof Dept of Information Technology

G.H.Raisoni College of Engineering, Nagpur

Purvi Vinod Dhumne, Riddhi Sudhir Hadge, Manish Ahuja

Department of IT

GHRCE

Nagpur

**Abstract** – As we all know nowadays, internet in the web world everything is available. Detecting shelter in new place is not the easy task, till we see the property and satisfy the needs we cannot believe in any online tool. However, utility data, field data and sensing data these all are not supposed to find the correct solutions in such a wide range of area dependent features and cost approach.

In this virtual meets we came across a problem of searching houses in the area of our choice and the features are not satisfactory everywhere. Our project is basically designed for the people who are looking for the rental property with their eco-friendly budget and satisfactory facilities. We are building a project for those people with the help of machine learning, how is it going to help people in their daily lives.

**Keywords:** *house, features, technology, property, facility*

## Introduction

House is very essential for everyone, now-a-days many school students, college students, office employees, families, and many other people are migrating in another cities, countries for their work, studies. Finding a house or rooms is intimidating task.

So, it is essential to help people from this arising problem. There are many rental

properties available people can find it by maps but it is very chaotic we can help them by providing better features of their requirements. Major problem is of high pricing, no safety measures and lack of

amenities, infestation. Also one more major feature is desirable neighborhoods and knowledge of all this things is limited everywhere.

Many humans without proper knowledge and research, guidance one may also be vulnerable to scams and unfair landlord practices. Therefore, it is crucial to take to understand everything in proper manner and ensure a smooth transition into a new home.

Our application specifies the basic need of people to find them new home. This isn't uncommon for us that everyone is using smartphones and new technology by taking benefit of it we have worked on the application which can detect you home in the specific area and according to your requirements.

According to requirement houses can be detected, there are many types of houses like single room, apartment, town house, single family home, duplex-triplex, co-living spaces, studio, accessory dwelling unit(ADI) all these are including in database.

Technology has made it possible for the communication with many people from anywhere in the world today.

## I.LITERATURE SURVEY

House detection system: "Experience peace of mind with our house detection system, created to simplify the process of purchasing, renting, and buying your dream home."

Nowadays finding a shelter is not easy, during the pandemic it was very hard to go outside and our

government declares lockdown and it was badly affected to brokers and customers to buy houses.

To overcome their problems by designing an application i.e. house detection system, with the help of this application, customers can easily search houses based on their requirements. Our application is basically the search platform that provides the user best experience containing maps images and street areas.

According to current updated data, it shows that urban housing is facing currently a situation of 18.78 million houses across 2012-2017, 95 percent of the gap was for low-income households.

In 2016, Foundations Strategy Group estimated that there are between 26-37 million households living in informal housing such as slums and unauthorized housing. As per the 2011 Census, there are approximately 108,000 such slums in the country, home to 13 million households of which 3.6 million are renters. Slum households constitute 17 percent of the total urban population. At the same time, there are 11 million vacant homes across urban India.

Location is always a prime factor of deciding the market value of a property.

Location is the main part of the housing. Factors such as how developed the city or area is, safe and peaceful the neighborhood is or not, and major landmark(s). due to covid the price of house are increased.

During the detection of house it's necessary to take condition report of house, this is the most important component to provide high level description of plot or flat and area also. The report of the owner of house is also important. Exploratory, descriptive, and causal these are the three main type of survey research.

There are many existing platforms which provide house detection facilities:

### 1. Aspose:

It is online website to detect the image of an object. It allows to find the object or image. Detects objects on an image using Single shot object detection (SSD) method. Detected objects are highlights with bounds rectangles and could be annotated when identified. But customers not get satisfied from this website.

Real estate property: Real Estate Property Portal Buy Sell Rent Land Apartments Villa House Plots Search Real Estate Property at Your Location: Looking to Sell Rent Buy Land, House, Apartments, Villa, Offices,

Shops, Plots, Commercial. But in these app data is limited not prepared lines with user requirements and Properties of app is not clear.

99LAND exclusive real estate property listing app for selling, buying, and renting property, 99land real estate property app for owners, builders, promoters, agents, agency, realtors and brokers, Exclusive real estate property app for best searching, filtering and finalizing property at your location, this app has listings from qualified property agents, top builders and realtor.

### 2. Housing:

Explore tons of real estate listings for sale & rent on the property search app. Fulfill requirements of the customer in a quicker & faster way. These are the Properties of the app.

### 3. No Brokerage Properties:

Find exclusive no broker property options & without any brokerage homes listed by the owners. This is the best no broker property app to find 1000's of zero brokerage owner listed flats & houses for rent, sale.

Landmark Search: Explore properties near landmarks like bus stops, schools, malls, restaurants. Property search on app has never been easier. A clean design & innovative features make apartment search easy on the Housing app. Whether you are looking for owner or broker properties for rent or sale, all you need to do is fire up this property finder app.

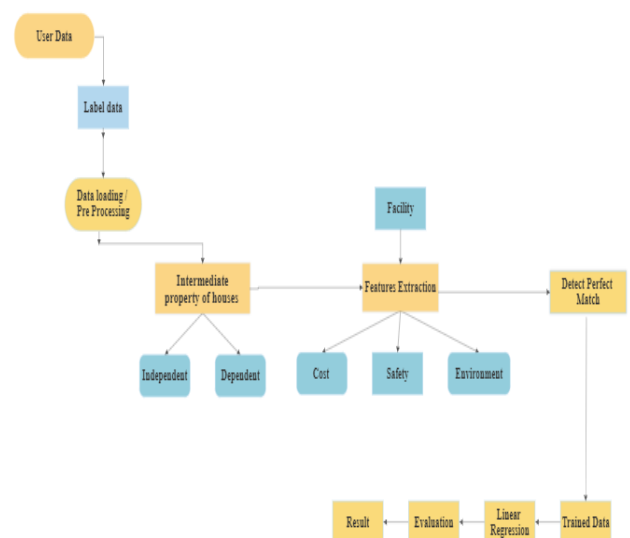


Fig. small view of algorithm of application

## II. PROPOSED METHODOLOGY

The quantitative technique is the most suitable strategy for this research since it helps to cover the most important elements that affect an outcome for the people and also evaluate the elements and find the perfect match to the output.

The constructs performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC)-should be looked in this study to appreciate how this can help the customers.

Based on the customer's perceptions, this probing study has focused on the customer's need and their actual satisfaction of the aforementioned constructs.

Let's understand the working of the application now. As this research paper named flowchart design, basically it helps us to find out the home with eco-friendly budget and environment.

Firstly, for making this application we have done the research on our level by reading types of research paper, ground level prices check, environment, people facing problem in different areas by this situation we come across that we have to be intermediate between them and help people.

First of all, it will take an information from the user like their basic details, type of house they want, no. of people is going to live, area, locality, no. of rooms, bathroom, bedroom, price of house, etc.

Then the process will load and pre-process in the dataset.

It will ask for if they want independent or dependent house.

Then it will go for the features extraction (cost, safety, facility, environment).

After all the parameters it will fetch the data.

Now, all the data will be trained by using linear regression.

Finally, the result is evaluated and shown the output.

As we are supposed to run our application in smooth manner then, the expenses of our operation and customer's requirements should be identical. The main achievement is customer satisfaction.

Housing detection is the other example of time series analysis in that they have to deal with the time-series data. This is a valuable tool to conclude a perfect home, in the current region.

We have implemented the linear regression project with the HOUSING DETECTION DATASET, which comprises four years' worth of data from a global level.

Here the dependent and independent houses are taken as the variables to understand the machine learning and to train the data, whereas the feature extraction elements are also taken as the variables.

The vital role playing in this flowchart is features extraction: there it is containing mainly all types of the features elements like safety measures (many areas doesn't provide the safety to the houses), environment (if family is looking for the house then it requires the happy and healthy environment), facility is to be provided like how many bathrooms, bedrooms, balcony if required, floor, ground level houses, water supply, electricity supply, neighborhoods, parking all these facilities are provided. The main feature is cost of the property, many people are looking for the minimum budget houses.

As the result comes across from the trained data is that by using the linear regression can train the machine and by the dataset the output is extracted.

## III. SYSTEM FRAMEWORK

➤ Database framework: database framework is most important part for our house detection system. All the data, requirements, facilities, cost of house and location of house is stored in database with the help of MYSQL.

➤ Software tester: after completion of the project, it is mandatory to test the system for their performance, how it works and it is safe or not for customers.

We used the following tools for testing

- Test management tool
- Bug tracking tool
- Automated testing tool
- Performance testing tool
- Security testing tool

➤ Automated techniques: using some sensors for home automations system can be able to generate or find the location based upon customer's requirements. i.e., IOT based sensors.

➤ IKONOS satellite sensor: We introduce a novel system to detect street location networks using this sensor with multispectral image.

➤ Software Specification: Jupyter notebooks,

google colab and programming languages are python, java, SQL server, CSS, HTML, and JavaScript.

India in 2019: An Unrelenting National Crisis", a Chaudhary Crisis", Housing and Land Rights Network (2020).

7] Jain et al., "Informal Housing Inadequate Property Rights. Understanding the Needs of India's Informal Housing dwellers.

## IV. CONCLUSION

Thus, our application provides the best usage of finding the houses as the ground level- with the help of the machine learning. With the requirements of the customers, it successfully detected the houses. This helps saving time and inconvenience.

With the great technology rapidly increasing we come across to the point is by machine learning we can predict the large data.

## V. REFERENCES

- 1] Residential House Occupancy Detection: Trust-Based Scheme Using Economic and Privacy-Aware Sensors Jun Jiang, Chenli Wang, Thomas Roth, Cuong Nguyen, Member, IEEE, Patrick Kamongi, Hohyun Lee, and Yuhong Liu, Senior Member, IEEE INTERNET OF THINGS JOURNAL, VOL. 9, NO. 3, FEBRUARY 1, 2022
- 2] C. Wang, J. Jiang, T. Roth, C. Nguyen, Y. Liu, and H. Lee, "Integrated sensor data processing for occupancy detection in residential buildings," *Energy Build.*, vol. 237, Apr. 2021, Art. no. 110810.
- 3] A. Szczurek, M. Maciejewska, A. Wyłomanska, R. Zimroz, G. Zak, and A. Dolega, "Detection of occupancy profile based on carbon dioxide concentration pattern matching," *Measurement*, vol. 93, pp. 265–271, Nov. 2016.
- 4] F. Zhang *et al.*  
Social sensing from street-level imagery. A case in learning spatio-temporal urban mobility patterns *ISPRS J. Photogramm., Remote Sens.* (2019)
- 5] Zou, S., & Wang, L. (2021). Detecting individual abandoned houses from google street view: A hierarchical deep learning approach. *ISPRS Journal of Photogrammetry and Remote Sensing*, 175, 298-310.  
<https://doi.org/10.1016/j.isprsjprs.2021.03.020>
- 6] Shivani Chaudhary et al., "Forced Evictions in