**Project Requirement and Specification**

**On**

**HOUSING PRICE PREDICTION ML PROJECT**

**(CSE****III SEMESTER MINI PROJECT)**

**2020-2021**



**Submitted to: Submitted by:**

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* 1. **About Project**

Real estate is the least transparent industry in our ecosystem. Housing prices keep changing day in and day out and sometimes are hyped rather than being based on valuation. A house value is simply more than location and square footage. Like the features that make up a person, an educated party would want to know all aspects that give a house its value.

Predicting housing prices with real factors is the main crux of our project.

**METHODOLOGY:**

Here we aim to make our evaluations based on every basic parameter that is considered while determining the price. Here we are going to use Linear Regression as it is the simplest algorithm in machine learning, it can be trained in different ways., and our results are not sole determination of one technique rather it is the weighted mean of various techniques to give most accurate results. The results proved that this approach yields minimum error and maximum accuracy than individual algorithms applied.

We are going to use the USA\_ Housing dataset. Since house price is a continues variable, this is a regression problem.

We are going to take advantage of all of the feature variables available to use and use it to analyse and predict house prices.

We are going to break everything into logical steps that allow us to ensure the cleanest, most realistic data for our model to make accurate predictions from.

* 1. **Requirement of Project**
     1. **Hardware Requirement**
* Processor: min 1 GHz ,recommended 1.60 GHz or more
* Ethernet connection or a wi-fi
* Hard Drive: min 32GB ,recommended 64 GB or more
* Memory(RAM):8 GB recommended
* OS:WINDOWS 10
* System type: 64 bit recommended.
  + 1. **Software Requirement**
* Python 3s version
* Jupyter Notebook
* Microsoft Excel
  1. **Modules of Project**
     1. **Load Data And Packages**
* Check out the data
  + 1. **Exploratory Data Analysis(EDA)**
    2. **Training a Linear Regression Model**
* Train test split
  + 1. **Preparing data for Linear Regression**
    2. **Feature Transformation/Engineering**
    3. **Modelling and predictions**
  1. **BRIEF MOTIVATION:**

I want to thank Computer Science Engineering Department who provided me this opportunity to do the mini project .I also want to thank my teachers who provided the lecture to understand all important topics related to project and taught us to write and run the program, they also took doubt sessions to clear our doubts. Completing this project has build a confidence in me and now i am able to perform more projects like these.

**REFERENCE**

1. Github.com for datasets download
2. W3schools.com for coding functionalities explanation in python
3. Google.com for some explanations
4. Moodle.com for basics

**THANK YOU!**