PROJECT REPORT

ON

HOUSE PRICE PREDICTION USING MACHINE LEARNING

Submitted in partial fulfilment of requirement for the IV semester

B . Tech

BY

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

GRAPHIC ERA DEEEMED TO BE UNIVERSITY

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DECLARATION

## I, **ISHIKA BATRA** student of **B-tech, Semester 3,** Department of Computer Science and Engineering, Graphic Era Deemed University Dehradun declare that the technical project work entitled “HOUSE PRICE PREDICITON USING MACHINE LEARNING” has been carried out by me and submitted in partial fulfillment of the course requirements for the award of degree in B- tech of **Graphic Era Deemed University** during the academic year **2021-2024**. The matter embodied in this synopsis has not been submitted to any other university or institution for the award of any other degree or diploma.

Date: 16/1/22

CERTIFICATE

This is to certify that the project report entitled “HOUSE PRICE PREDICTION USING MACHINE LEARNING” is a Bonafede project work carried out by Ishika Batra, roll no- 2016783. in partial fulfilment of award of degree of B- tech of Graphic Era Deemed University, Dehradun during the academic year 2021-2024. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated. The project has been approved as it satisfies the academic requirements

associated with the degree mentioned.

ACKNOWLEDGEMENT

Here by I am submitting the project report on **“HOUSE**

**PRICE PREDICTION USING MACHINE LEARNING”** as per

the scheme of Graphic Era Deemed University, Dehradun.

I would like to express our sincere gratitude to **MR. Vikas Tomer** , for providing a congenial environment to work in and carry out our project.

Finally, I am very much thankful to all the faculty members of the Department of Computer Science and Technology, friends and our parents for their constant encouragement, support and help throughout the period of project conduction.

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INTRODUCTION

 We will create a Machine Learning Linear Regression Model using phython we will be analyzing a house price predication dataset for finding out the price of a house on different parameters. we will do Exploratory Data Analysis, split the training and testing data, Model Evaluation and Predictions..

In this task on House Price Prediction using machine learning, our task is to use data from to create a machine learning model to predict house prices in the State.

Predicting house prices can help to determine the selling price of a house of a particular region and can help people to find the right time to buy a home. In this article, I will introduce you to a machine learning project on house price prediction with Python.

SOFTWARES AND PROGRAMMING LANGUAGES USED

* In order to accomplish given task jupyter notebook environment is used .
* Programming language used: Python
* Libraries used:
* Scikit learn —--> For machine learning
* Numpy —> For linear algebra and mathematics
* Pandas —>for handling structured data
* Seaborn —> for data visualization
* matplotlib→> plotting library

## Dataset used: <http://localhost:8888/edit/USA_Housing.csv>

* The dataset contains 7 columns and 5000 rows with CSV extension. The data contains the following columns:**.** ‘Avg. Area Income’ – Avg. The income of the householder of the city house is located.
* ‘Avg. Area House Age’ – Avg. Age of Houses in the same city.
* ‘Avg. Area Number of Rooms’ – Avg. Number of Rooms for Houses in the same city.
* ‘Avg. Area Number of Bedrooms’ – Avg. Number of Bedrooms for Houses in the same city.
* ‘Area Population’ – Population of the city.
* ‘Price’ – Price that the house sold at.
* ‘Address’ – Address of the houses

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