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Housing Price Prediction using Machine Learning Technique

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Abstract: As house prices increase every year, so there is a need for implementing machine learning in a real estate to develop a model that predicts the current house prices. House prices prediction can help the developers to determine the estimated selling price of a house and can help the buyers to arrange the budget at the right time to purchase a house. There are many factors that influence the price of a house positively and some impact negatively such as the age of the house and include physical conditions, concept and location. This paper presents a model that can generate predictions for housing prices by training the system with a 2001 data set so that it can learn how to forecast the market price of the house based on certain factors which have already mentioned bellow. The connection between the houses costs and the economy of the nation is a critical factor for predicting house prices as housing prices trends are not only the concern of buyers and sellers, but it also plays major role in the current economic situation. Therefore, it is important to predict housing prices to help all the stack holders such as the buyers and the sellers to make their decisions accordingly. In order to select a prediction method, various regression methods were explored such as a multiple linear regression will be chosen for this research proposed work due to its Flexibility and probabilistic approach to learning and model prediction is very high.

Factors affecting the housing prices Including house age, longitude, latitude, number of rooms, number of restrooms, number of schools around the house, carports, parks, shopping centers, condition of the house, total number of floors a house has and other distinctive.

Keywords: ML multiple linear regression, gradient descent, Kmeans, RMSE, MSE, R squared, flask

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