

Gradient Boosting-Based Web-Based Home and Lot Price Prediction in Zamboanga City

Abstract

When looking for a new home, as well as when it comes to budgeting and marketing strategies, people exercise caution. In the Philippine real estate market, machine-based forecasting methods are no longer known or used to estimate homes or other real estate properties. In order to forecast house and lot property prices in the Philippines, specifically in Zamboanga City, the researchers created a web-based house and lot price prediction and inserted a machine-learning algorithm into it. The goal of this study is to create a system that can estimate the price of a house and lot. The information on the property listing was compiled using historical assessment data for the home and lot from Zamboanga City's City Assessor's Office. The study chose Gradient Boosting Regression out of three (3) distinct machine learning methods to forecast the price of the property. The dependent and independent variables have a favorable association when using the Gradient Boosting Regression approach. The gradient boosting method for predicting real estate values has a high accuracy value when compared to all other algorithms. Preprocessing can be applied before data fitting to further enhance the measure. This study's objectives are to assist the seller in selling a property at a fair price and to assist the buyer in understanding the variables that influence the selling price of the property. Location, physical circumstances, and the materials utilized were a few of the additional elements that affected the cost.