

# Project Proposal

## *House Price Prediction in Milwaukee*

### Project Team:

Davion Cook

Nathan Fisher

Danny O'Shea

### Project Overview:

This project aims to develop a predictive model for house prices in Milwaukee, using a dataset of historical house sales data. The dataset includes information such as the district, exterior material, number of bedrooms, number of bathrooms, and month of sale.

### Project Goals:

- Describe the dataset and all the variables that will be used for the model
- Develop and evaluate a regression model to predict house prices in Milwaukee
- Identify the key factors that influence house prices in Milwaukee
- Provide insights into the Milwaukee housing market

### Project Methodology:

**Data exploration and preparation:** The dataset will be explored and cleaned to identify any outliers or missing values. The data will also be transformed into a format that is suitable for modeling.

**Model selection:** A variety of regression models will be considered for the analysis, including linear regression, logistic regression, and decision trees. The best model will be selected based on its performance on a held-out test set.\*

**Model evaluation:** The selected model will be evaluated on its ability to predict house prices accurately. The evaluation metrics will include mean squared error, R-squared, and adjusted R-squared.

**Model interpretation:** The coefficients of the selected model will be interpreted to identify the key factors that influence house prices in Milwaukee.