



DREAM HOME

Group project with R



Skills:
Programming with
Advanced Computer Languages

University of St. Gallen
December 18, 2020

Mario Silic

Theresa Maria Seehofer 20-600-375
Julian Thomas Albrecht 20-601-696

Contents

1. INTRODUCTION	2
2. REQUIREMENTS.....	2
3. PROGRAMMING PROCEDURE	3
4. CODE.....	3
5. SOURCES.....	3

1. Introduction



Home buying

You always wanted to buy your dream home in King County in the U.S state of Washington?
But you do not know how expensive it is?



Home selling

You want to sell your home to discover another place?
But you do not know your home value?



HSG Calculator

Then our real estate calculator helps you as a seller or owner!
Just enter your dream conditions and our program calculates the price for you!

2. Requirements

The following program works with R.

In order to run it, the following libraries need to be installed:

- Openxlsx
- Leaflet
- Leaflet.extras

3. Programming procedure

This program takes house features as input and calculates an estimated property value on the basis of an existing dataset. The dataset contains house sale prices for King County, Washington between the time period May 2014 – May 2015. After importing the data, the program explores the dataset by estimating different variables and observations, so the user can become familiar with it. Different implemented visualizations illustrate for example the density of the properties or the price range in King County. Furthermore, the program estimates with regressions the effect of different house features on the house price. Finally, the user can enter his favored conditions, which include among others the number of bedrooms, bathrooms and floors, to get an estimated property value.

In summary the code is structured in the following five parts:

- 1. Load Packages and Import Data**
- 2. Explore Data and generate subsets**
- 3. Visualize Data**
- 4. Regressions**
- 5. Program:** How much is my (future) house worth?

The code returns error messages for different potential input mistakes to revise the input again.

4. Code

Hier kann die HTML Datei rein

5. Sources

Dataset: House Prices from King County, USA: [Kaggle.com](https://www.kaggle.com/datasets/kc_house)