

Munich – Analysis of the neighbourhoods for newcomers

Applied Data Science Capstone Project

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1. Introduction

1.1 Background

The city of Munich, Germany is third biggest city in Germany and home to approximately 1.5 Million (Q1/2020) inhabitants. With many national and international companies, Munich is one of the most important centres of economy in Germany and therefore interesting for employees from Germany as well as foreigners.

According to the official city website, there were 118.000 new (domestic and foreign) inhabitants registered in 2019. That means, that 118.000 people came last year to Munich and needed to search for accommodation and a place to live.

Geographically, Munich consists of 25 neighbourhoods, each with its own organisational structure and administration.

The real estate situation in Munich is tense; Munich is currently the most expensive city in Germany according to immobilienmarkt magazine 'immobilienmarkt.faz'

<https://immobilienmarkt.faz.net/immobilien-ratgeber/miete-teuerste-staedte-deutschland>

1.2 Problem

Each of the 25 city neighbourhoods is unique and offers a different setup and environment for its new inhabitants. The requirements of each newcomer are individual and requires personal assessment.

The aim to this project is to provide a qualitative analysis of Munich neighbourhoods and answer the question:

Which of the 25 neighbourhoods in Munich is best suitable for me/us?

1.3 Interest

According to the official city website, there were 118.000 new (domestic and foreign) inhabitants registered in 2019. That means, that 118.000 people came last year to Munich and needed to search for accommodation and a place to live.

2. Data acquisition

2.1 Data sources

All of the basic geographical and demographical data of the city of Munich can be scraped on Wikipedia page in German language [here](#). This data was used as a base for neighbourhood analysis as well as for part of a demographical analysis.

Further data about city criminality were used to analyse criminal rate occurrence for each neighbourhood. The data can be found [here](#).

To be able to analyse one of the most important factors for newcomers (Real estate Price), data from miet.check.de were used. For purpose of this analysis, only average price/m² for renting an apartment were used. For visualisation purposes, .json data of Munich neighbourhoods can be downloaded and adjusted [here](#).

2.2 Data cleaning/pre-processing

Downloaded and scraped data were combined into one table/dataframe. Several adjustments were made to be able to proceed with this data.

Since most of the website from which data originated are in German language, all data used were changed to English language.

JSON data were manipulated, for easier identification and pairing of the neighbourhoods.