A NEW HOME
IN KING COUNTY

Considerations on the choice of location

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INITIAL SITUATION

What I wanted to find out

02

THE WAY

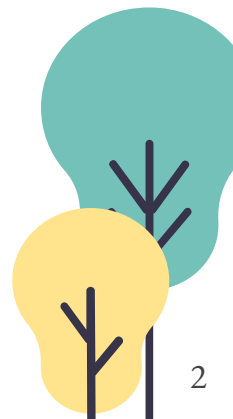What I have done

03

RECOMMENDATIONS
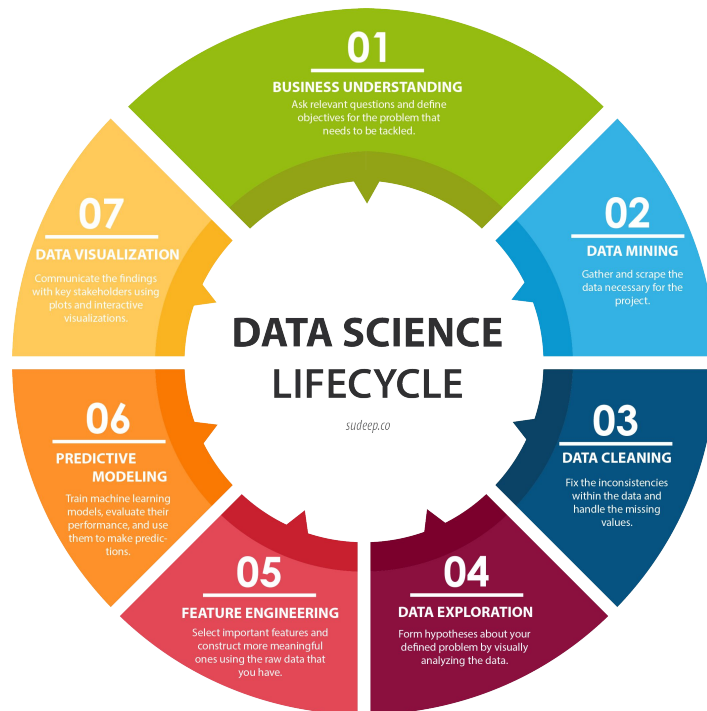
What I have found out

04

OUTLOOK

What I will do next

- Looking for a new home in the region of King County

- Best value for money (ratio of square metre price to quality)

- Home Office:Exact location (zipcode) is not important.

- 120 square meters (living space).

- 4 rooms

- Lotsize < 1000qm

- Budget 500.000 USD

- No hurry

- No cellar needed. But if it's cheap...

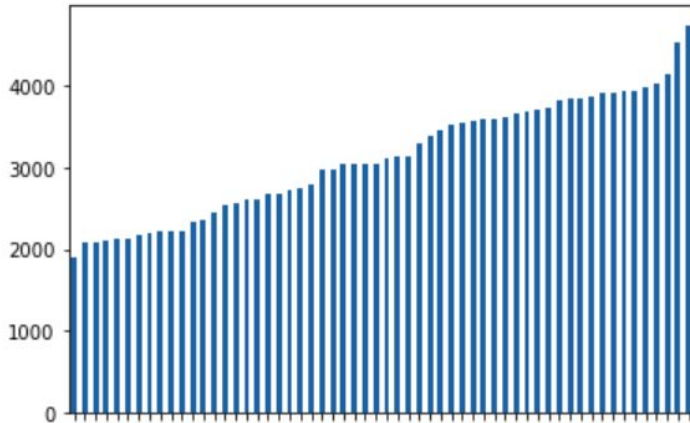- Dataset of House-Prices (2014/2015)

MY QUESTIONS

- Which regions (Top 10 zipcodes) should I choose?

- Is there a time of purchase in the year to get an advantage?

- Is it perhaps worth taking a cellar? What does it cost more?

DATA SCIENCE LIFECYCLE

sudeep.co

01 BUSINESS UNDERSTANDING
Ask relevant questions and define objectives for the problem that needs to be tackled.

02 DATA MINING
Gather and scrape the data necessary for the project.

03 DATA CLEANING
Fix the inconsistencies within the data and handle the missing values.

04 DATA EXPLORATION
Form hypotheses about your defined problem by visually analyzing the data.

05 FEATURE ENGINEERING
Select important features and construct more meaningful ones using the raw data that you have.

06 PREDICTIVE MODELING
Train machine learning models, evaluate their performance, and use them to make predictions.

07 DATA VISUALIZATION
Communicate the findings with key stakeholders using plots and interactive visualizations.

- View data in detail

- Analyse individual values and check them for plausibility

- Research for understanding the data

- Clean up data (replace missing values)

- Translate data into known metrics

- Supplement important data for my question: Square metre prices
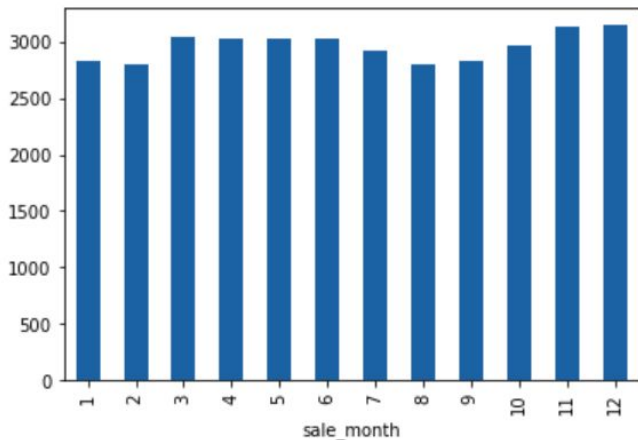
- Data queries

QUESTION 1

- Which regions (Top 10 zipcodes) should I choose?

ANSWER

- Top10 Zipcodes:
  98022, 98092, 98168, 98030, 98002, 98148, 98001, 98023, 98042, 98010

- Average square meter prices are between 1904 and 4746 USD

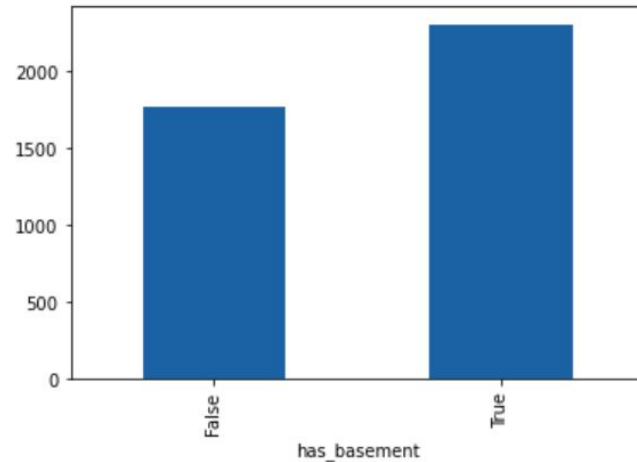- Savings can be up to 59.88%

QUESTION 2

- Is there a time of purchase in the year to get an advantage?

ANSWER

- Average square meter prices are between 2794 and 3148 USD

- Buy in February! It's about 12% cheaper than in the most expensiv month (December)

QUESTION 3

- Is it perhaps worth taking a cellar after all? What does it cost more?

ANSWER

- Average square meter prices are:
  Without cellar: 1770 USD
  With cellar: 2306 USD

- Surcharges are about 30.3%

- Recommendation:
  Search for houses without cellars

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OPEN QUESTIONS

- How good is the supply situation (supermarkets) in the Top10 regions?
  - Additional research
  - External data is needed
  - Important, because I will not buy without this knowlegde

THANK YOU

**... AND FINALLY I WOULD LIKE TO LET YOU KNOW
HOW IT FELT TO COME TO THE PRESENTED FINDINGS**

WHEN THE DEADLINE COMES CLOSER AND CLOSER

... SOMEHOW LIKE THIS