# Usecase 6 (Project 3)


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## Utilizing your knowledge of advanced EDA tools, proceed with the analysis of the provided data.

**This project must at least satisfy the following minimum requirements:**

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| **Usecase 6**<br>For any **Data project** we should go through these steps: |
| **Step 1: Defining the Problem Statement** |
| Define at least 4 questions to answer using the data |
| **Step 2: Collecting Data** |
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- Use the following dataset.
  - https://www.kaggle.com/datasets/abdulmalikm/apartments-in-riyadh
  - https://www.kaggle.com/datasets/myfaisal/riyadh-aqaar-dataset
  - https://www.kaggle.com/datasets/salmanshir/riyadhhousingdata

## Step 3: Data Quality Checking and Remediation

## Step 4: Exploratory Data Analysis

- For these two steps, make sure to do:
  a. Data Profiling: apply the 7 types of data profiling
  b. Data Cleaning: handle missing values, correcting errors, and dealing with outliers.
  c. Univariate Analysis &Bivariate/Multivariate Analysis:  to understand their distribution and look at the relationships between variables. For your visualizations make sure to:
    - Drive meaningful insights (at least 10 different charts).
    - Choose a specific style for your charts.
      - Apply one color palette from your choice on all charts.
      - Use the title, x-y labels, font size, figure size, and legends.

## Step 5: Building Machine Learning Models

Not applicable

## Step 6: Model Evaluation

Not applicable

## Step 7: Communicating Results

- Create an interactive data story using Streamlit.
- Report your final conclusion and findings in one page (readme markdown file).
  - Team members.
  - Introduction (Problem, Objectives)
  - Dataset Overview and Source.
  - List of EDA steps that applied on data with description

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| ◦ Describe the final ten insights with their charts |
| **Step 8: Model Deployment** |
| Not applicable |
| **Step 9 : Model Performance Maintenance in Production** |
| Not applicable |

**Note:** the red steps means they are Not applicable in the project