ASSIGNMENT 2: DECISION SUPPORT SYSTEM PURPOSE

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Introduction:

In the name of God, the most gracious, the most merciful. Praise be to God who guided us to this. We would not have been guided if God did not guide us. I put this report in your hands. In this report, I will talk about the topic of extracting data and comments from the Nusuk program and use the sentiment analyzing it and presenting it in Bower BI Dashboard

In addition, I will provide this report with many pictures. I ask God to make my research useful and useful.

Overview:

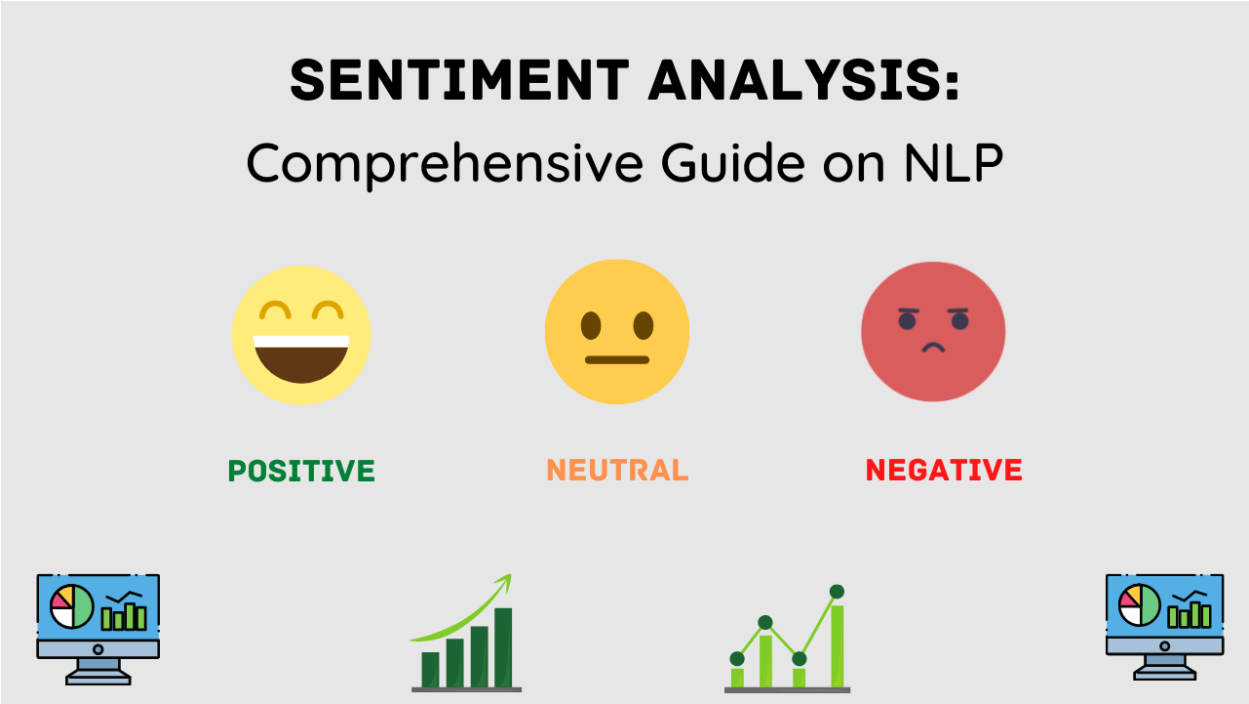
Sentiment analysis (also known as opinion mining or emotion AI) is the use of natural language processing, text analysis, computational linguistics, and biometrics to systematically identify, extract, quantify, and study affective states and subjective information. Sentiment analysis is widely applied to voice of the customer materials such as reviews and survey responses, online and social media, and healthcare materials for applications that range from marketing to customer service to clinical medicine. With the rise of deep language models, such as RoBERTa, also more difficult data domains can be analyzed, e.g., news texts where authors typically express their opinion/sentiment less explicitly.

NLP stands for natural language processing, which is a field of artificial intelligence that.

focuses on enabling computers to understand, interpret, and generate human language. It involves the development of algorithms and models that can analyze and understand the structure, meaning, and context of natural language text and speech.

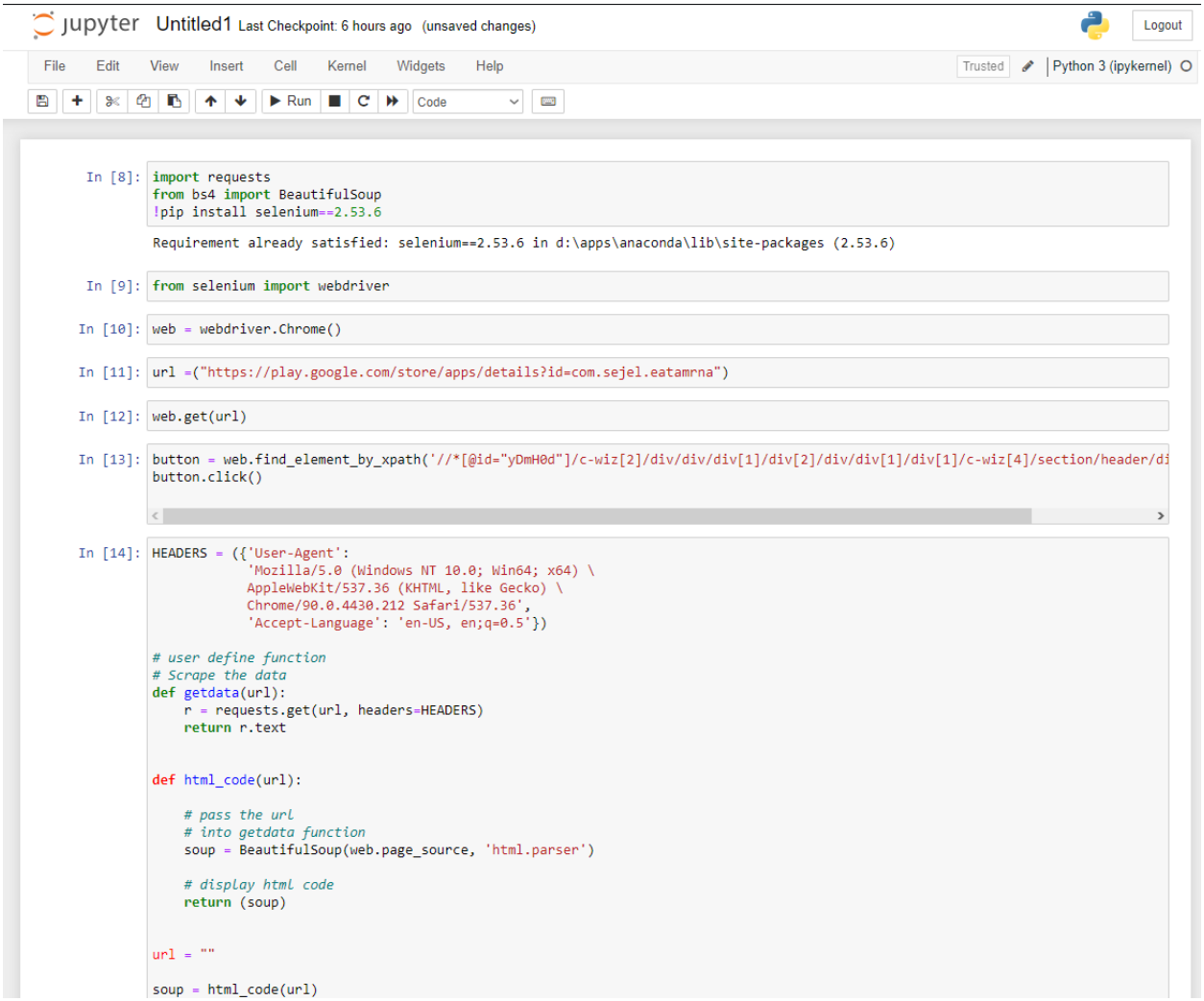
NLP techniques are used in a wide range of applications, including machine translation, sentiment analysis, speech recognition, chatbots, text summarization, and information retrieval. NLP algorithms can process large volumes of textual data, extract relevant information, and generate insights that can be used to improve decision-making and automate tasks.

Some of the key challenges in NLP include dealing with ambiguity and variability in language, handling different languages and dialects, and understanding the nuances of human communication, such as sarcasm, irony, and figurative language. Researchers in the field of NLP continue to develop new techniques and models to overcome these challenges and improve the accuracy and effectiveness of natural language processing systems.

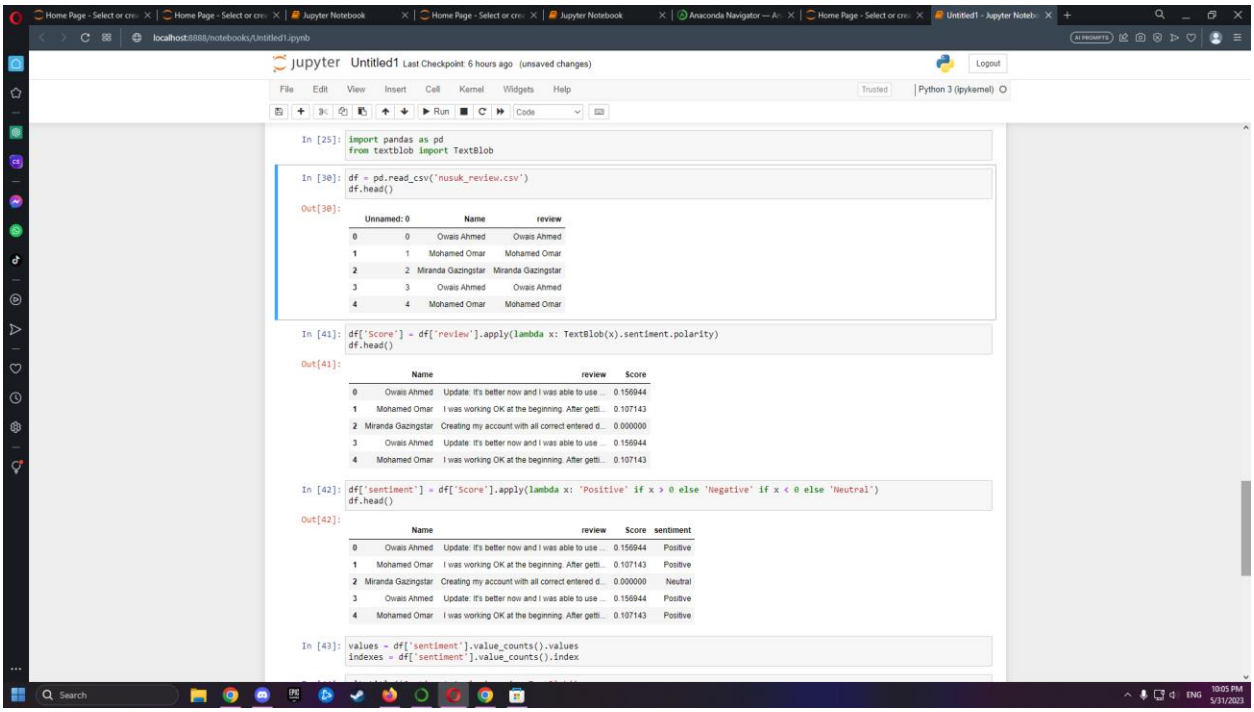

SENTIMENT ANALYSIS:
Comprehensive Guide on NLP
POSITIVE
NEUTRAL
NEGATIVE

Implementation:

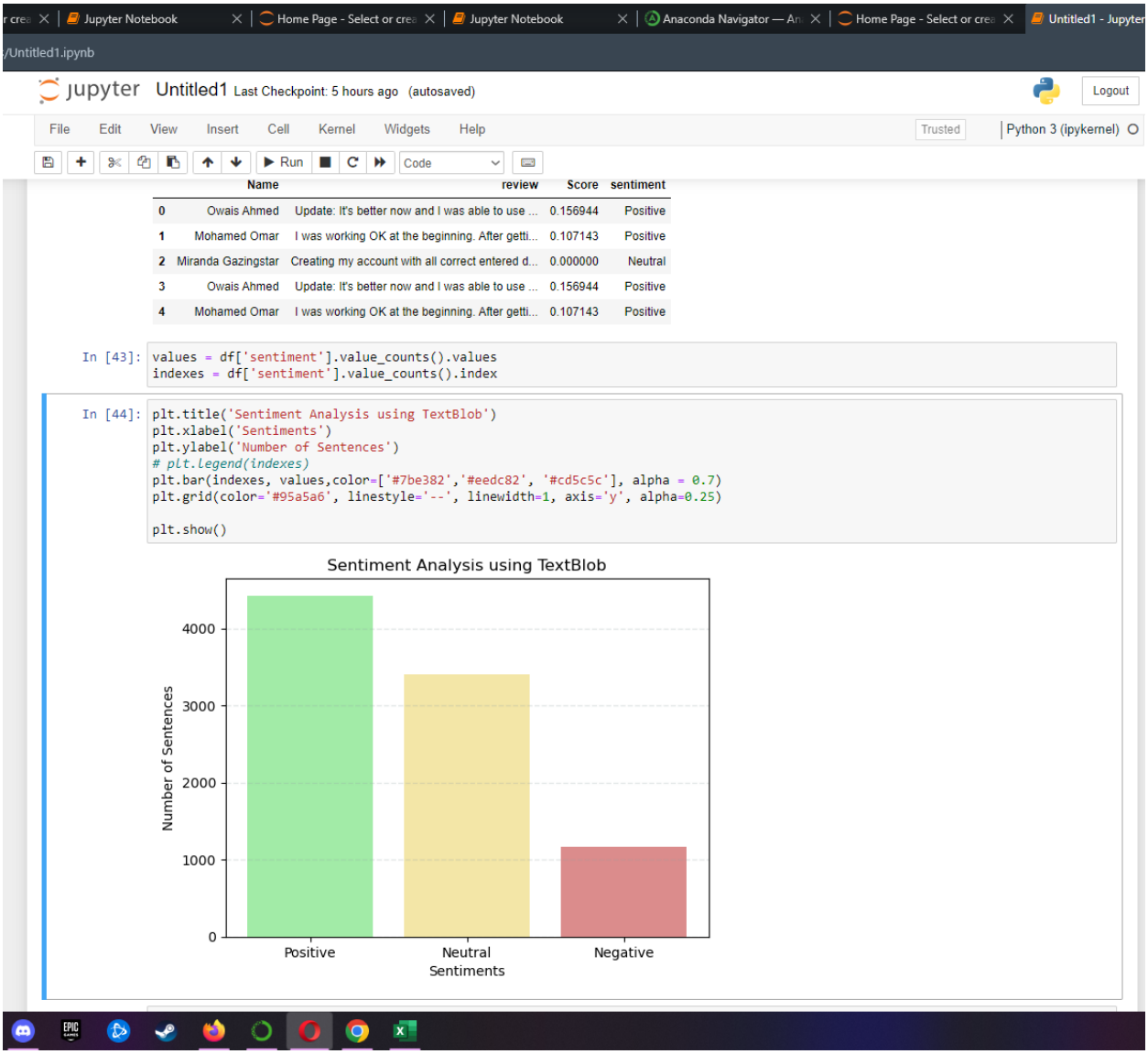
Step1: First, the Nusuk program was selected, added, and user comments extracted.



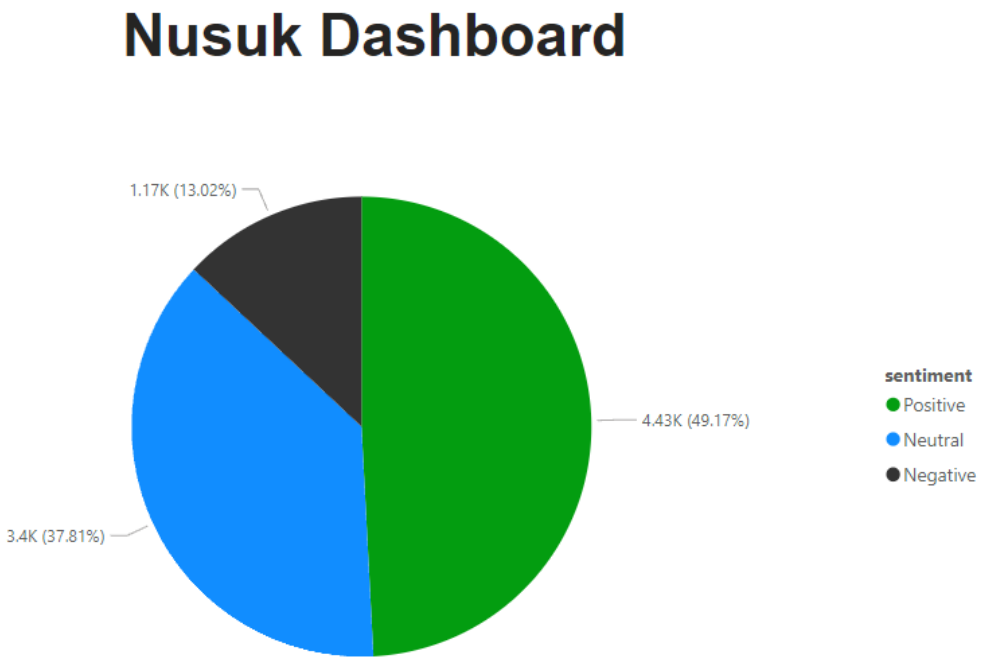
Step2: Here, the comments, the name of the person who sent the comment, and the written text were extracted.



Step3: In the third step, the comments were analyzed into positive comments that are above the rate of 0.1, negative comments that are below the rate of 0, and natural comments that are in the rate of 0.



Step4: Finally, positive, negative, and normal comments were displayed in the Dashboard.



Conclusion:

By the end of this report, I have written about the issue of extracting comments from the Nusuk program and the method of analyzing these comments into positive, negative and normal comments and displaying them in Dashboard. I hope you will like it.

I did my best to present the ideas with clarity and coherence. I hope I succeeded in presenting the ideas in a coherent manner.

Applications used: