**ACTIVITY #3**

1. **Multiple choice activity:**

Select the correct answer.

1. What role does NLP play in medical diagnosis and treatment according to the text?

a. NLP is not used in medical applications.

b. NLP facilitates law enforcement analysis.

c. NLP assists in automated customer service.

d. NLP aids in extracting information from medical records.

2. Why does the text mention the evolution of chatbots in the field of customer service?

a. To highlight the limitations of rule-based chatbots.

b. To emphasize their use in legal domains.

c. To showcase advancements in medical diagnosis.

d. To explain the concept of tokenization.

3. According to the text, why did the early rule-based chatbots have limited possibilities?

a. Due to the lack of data for training.

b. Because experts found rule encoding tedious.

c. Because they couldn't understand natural language.

d. Due to their inefficient handling of medical records.

4. What is the significance of the named entity recognition stage in NLP?

a. It analyzes the sentiment behind posts.

b. It recognizes entities associated with tokens, like locations or organizations.

c. It transforms unstructured text into structured form.

d. It focuses on the word strawberry in a sentence.

5. How has the evolution of NLP impacted the interaction between humans and technology in recent years?

a. It has led to the decline of voice interfaces.

b. It has reduced the need for data analysis in marketing.

c. It has enabled more sophisticated voice interactions.

d. It has made chatbots obsolete in customer support.

6. According to the text, what is the primary function of the TF-IDF model?

a. To count the frequency of unique words in an article.

b. To eliminate stop words like "is" and "the".

c. To create an encoder-decoder model.

d. To track the context of the text.

7. In what way is the BERT model mentioned in the text revolutionary?

a. It facilitates text classification.

b. It improves search results on browsers.

c. It counts the frequency of words.

d. It tracks the context of the text.

8. What future development does the text predict for NLP in terms of interaction with computers?

a. The integration of virtual assistants with browsers.

b. The rise of language-independent keyboards.

c. The creation of humanoid robotics by integrating NLP with biometrics.

d. The dominance of traditional input-output devices.

9. How does NLP address the challenge of machines understanding human language?

a. By creating a database of all sentences from a language.

b. By converting sentences into unstructured forms.

c. By resolving ambiguity related to natural languages.

d. By relying on traditional means to comprehend data.

10. Why is NLP considered vital for machines to analyze vast amounts of text data?

a. Because it focuses on speech synthesis.

b. Because it eliminates the need for data analysis.

c. Because it structures and analyzes unstructured text data.

d. Because it facilitates the recognition of phonemes.