

User documentation:

1. **Audiences of this task:** The healthcare providers (Doctors and physicians)
2. **Purpose of this task:**
 - a. The primary objective is to Summarize problem lists at the BioNLP Workshop 2023. The purpose for participants is to create a list of diagnoses and problems in a patient's overall treatment plan utilizing information from the provider's patient record while in the hospital.
 - b. Another objective is to attract future research initiatives to create NLP models for real-world decision support applications, where a system generating relevant and accurate diagnoses will aid healthcare providers' decision-making process and improve patient care quality.
3. **Outline of the report:** This report includes an Introduction part in section I and a literature review on several motivating works in section II. Section III presents a system design, which includes a system overview and various system models of the overall system's operation. Section IV demonstrates implementation. The testing section is covered in Section V. Section VIII contains a brief conclusion.
4. **Programming Language:** Python in Google Colab Pro platform using extensive PyTorch libraries.
5. **Instructions for installation:** One user may upload the input file named BioNLP2023-1A-Train.csv and view the raw files with some basic data read programming. Running the code T5.ipynb and BART.ipynb in Google Colab allows the user to get the produced summarized document in the drive and download it to obtain the predicted summary.
6. **Future Strategy:** There is a plan to make this into a web application, at which point it intends to provide online assistance.