Emergency Type Classifier Script

How to Run This Script

Navigate to the folder containing the script and the rest of the files. To execute this script, you need to pass a CSV file as an argument containing the test samples. In this case, the csv file to use will be the "test_samples.csv" file.

Use the following command in your terminal:

```
python emergency_type_classifier.py test_samples.csv
```

Required Arguments:

<input_csv>: The path to the input CSV file containing the test samples.

Notice: This file should include the necessary features for prediction! Use test_samples.csv for testing. Some dependencies might need to be installed for the code to run.

What the Script Does

This script performs the following operations:

1. It loads a pre-trained Naive Bayes model from a file named naive_bayes_model.pkl.
2. It reads the input CSV file specified as an argument, extracts the features from the data, and prepares it for prediction.
3. Using the loaded model, it predicts the target values for the input samples.
4. The script connects to a SQLite database named patient_data.db and inserts the predicted results into a table named model_predictions. If the table does not exist, it creates the table with the appropriate schema.
5. It ensures proper handling of database operations, including committing transactions and closing the database connection, with error handling, in place, to manage potential issues.

By running this script, you can efficiently predict and store the classification results for a given set of input samples.

System Requirements & Dependencies

The folder contains a file **"dependencies_for_environment.txt"** containing all the pip dependencies from the development environment. The script and the model were developed using a Conda environment with the following characteristics:

- conda version : 23.7.4
- conda-build version : 3.26.1

- python version : 3.11.5.final.0
- virtual packages : __archspec=1=arm64__osx=13.2.1=0__unix=0=0