Spell_Checker

Basic Architecture for Spell-Checker

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      ( USER )

   ┌──────────────────────┐
   │ Initialize Gramformer │
   │        Model          │
   │        Start          │
   └──────────────────────┘
        Initialize Gramformer Model

   ┌──────────────┐
   │  Input Text  │
   └──────────────┘
        Input Text

   ┌──────────────────┐
   │ Preprocess Text  │
   └──────────────────┘
        Preprocess Text (Tokenization, Lowercasing, etc)

   ┌──────────────────────────┐
   │ Pass Text to Gramformer  │
   └──────────────────────────┘
        Pass Text to Gramformer

   ┌──────────────────────┐
   │ Generate Corrections │
   └──────────────────────┘
        Generate Corrections

   ┌──────────────────────┐
   │ Output Corrected Text│
   └──────────────────────┘
        Output Corrected Text

        ●
```
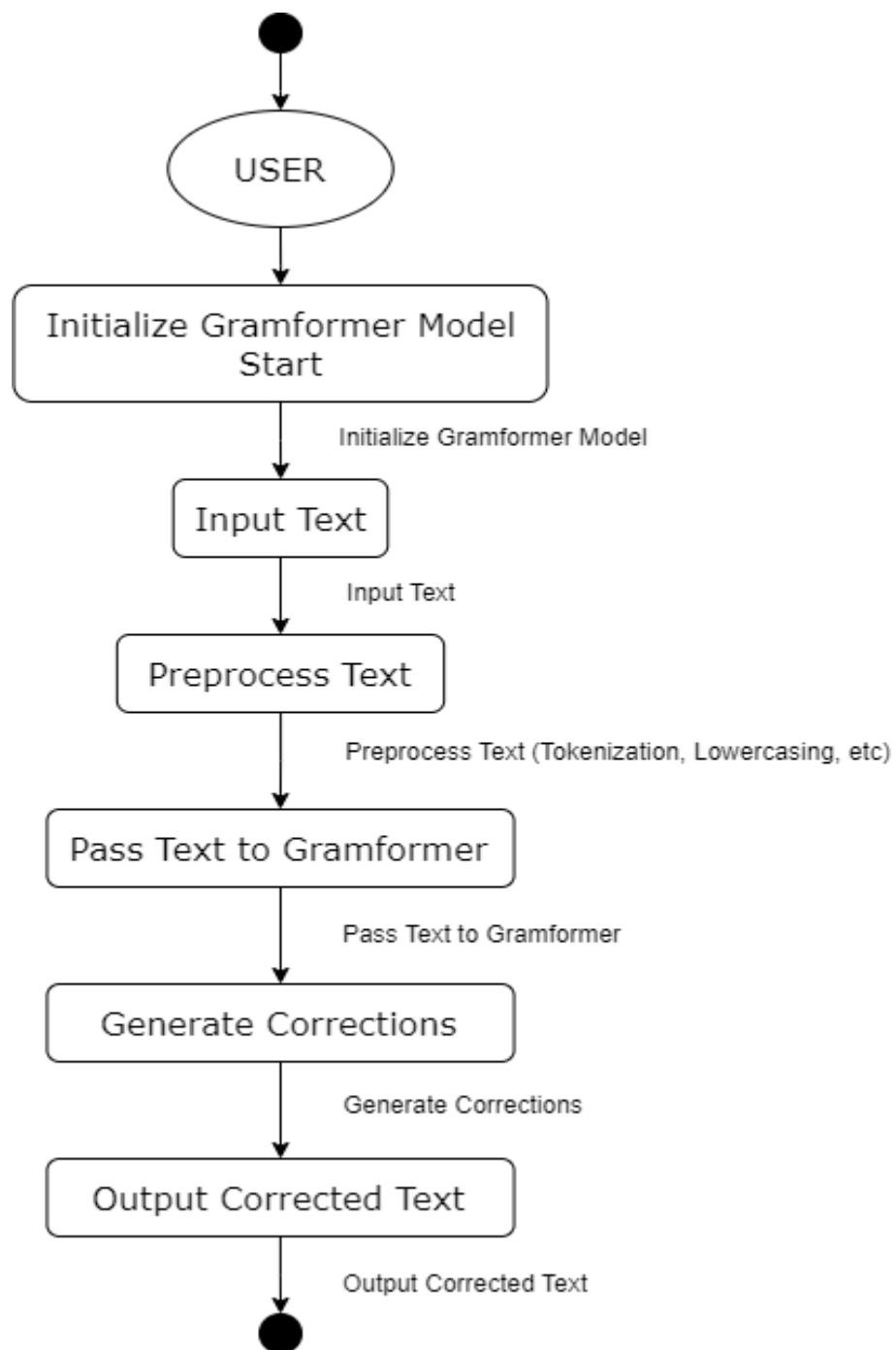
Explaination of the Architecture :

Intialize Gramformer Model : This state represents the initialization of the Gramformer model.The process starts here by initializing the Gramformer model.

Input-Text : This state represents taking input text from the user.After initializing the model, the program prompts the user to input text.

Preprocess-Text : This state represents preprocessing the input text.Preprocessing tasks like tokenization, lowercasing, etc., are performed on the input text.

PassText To Gramformer : The preprocessed text is sent to the Gramformer model for further processing.

Generate Corrections : The Gramformer model generates suggestions or corrections for the identified errors.

Output Corrected Text : The corrected text is produced as the final output of the process.

Need for the Spell-Checker :

- A spell checker helps users quickly identify and correct spelling errors, making the writing process more efficient.
- For students and language learners, a spell checker can serve as an educational tool, helping them learn correct spellings and improve their writing skills.
- For businesses, consistent and correct spelling is part of maintaining a strong and reliable brand image.