**Script Documentation**

**Overview**

This script utilizes the Azure OpenAI API to process a doctor's appointment transcription, extracting relevant medical diagnoses and procedures along with their corresponding Australian Medicare Codes (MBS codes). It then enriches this information with additional details from a pre-existing dataset of Medicare codes.

**Dependencies**

* dotenv: For loading environment variables from a .env file.
* os: For interacting with the operating system and environment variables.
* json: For handling JSON data.
* openai: For interacting with the Azure OpenAI service.

**Setup**

1. **Environment Variables**:
   * Ensure you have a .env file in your working directory with the following variables:
     + API\_KEY: Your Azure OpenAI API key.
     + API\_VERSION: The API version you are using.
     + AZURE\_ENDPOINT: The endpoint for the Azure OpenAI service.
2. **Input Files**:
   * input\_file.json: Contains the transcription of the doctor's appointment in JSON format.
   * australianmedicarecodes.json: Contains the dataset of Australian Medicare codes.

**Functions**

**provide\_australian\_medicare\_codes(json\_transcription)**

**Purpose**:

* To extract diagnoses and procedures from the doctor's summary notes and generate relevant Australian Medicare Codes.

**Parameters**:

* json\_transcription (dict): JSON object containing the transcription of the doctor's appointment.

**Returns**:

* filtered\_list (list): A list of dictionaries containing the diagnosis, procedure, Medicare code, and additional details like Schedule Fee and Description.

**Process**:

1. **Load Environment Variables**:
   * Uses load\_dotenv() to load the API key, version, and endpoint from the .env file.
2. **Prepare Prompt**:
   * Creates a prompt to instruct the Azure OpenAI API on what information to extract from the transcription.
3. **Call Azure OpenAI API**:
   * Makes a request to the Azure OpenAI service to process the transcription and extract relevant information.
4. **Parse Response**:
   * Parses the response from the Azure OpenAI service to obtain the JSON output.
5. **Load Medicare Codes Data**:
   * Loads the dataset of Medicare codes from australianmedicarecodes.json.
6. **Filter and Enrich Data**:
   * Filters the extracted information to ensure only valid Medicare codes are included.
   * Enriches the information with additional details (Schedule Fee and Description) from the Medicare codes dataset.
7. **Return Result**:
   * Returns the enriched and filtered list of diagnoses and procedures.