Mini tutorials for use cases

The **Slash** project on GitHub is a web application designed to scrape popular e-commerce websites, helping users find the best deals quickly and efficiently. Here's a mini-tutorial series to demonstrate typical use cases with practical examples:

Use Case 1: Setup and Installation

Goal: Install Slash locally and configure the environment.

1. Clone and Set Up Local Environment

1. **Clone the Repository**
   First, ensure `git` is installed on your computer. Choose a desired location and run the following command to clone the GitHub repository:

   ```
   git clone <https://github.com/DFY-NCSU/slash-phase6.git>
   cd slash-phase6
   ```

2. **Set Up Python Environment and Install Dependencies**
   This project uses Python 3. Make sure Python and `pip` are installed on your system. All required libraries are listed in the `requirements.txt` file, which can be installed with the following command:

   ```
   pip3 install -r requirements.txt
   ```

3. **Install PostgreSQL Database**
   This project requires PostgreSQL for database support. If PostgreSQL is not installed, download and install the latest version from the PostgreSQL official download page.

2. Configure Database Connection

After installing PostgreSQL, configure the database connection by following these steps:

1. Open the `database.py` file in the project directory.

2. Locate the section where the database connection settings are defined, usually at the top of the file, which may look like the following:

```
username = 'postgres'
password = 'pass'
```

Replace the `username` and `password` values with your PostgreSQL username and password.

3. Run the Project

1. **Navigate to the `src` Directory**
   After installing all dependencies, move to the `src` folder:

   ```
   cd src
   ```

2. **Run the Main Program**

   - **For Mac**:

     ```
     python3 main.py
     ```

   - **For Windows**:

     ```
     python main.py
     ```

   While the main program is running, proceed with the steps below to start the Streamlit application.

4. Launch the Streamlit Interface

Open a new terminal window, go up one directory level (`cd ..`), and then run the following command to start the user interface:

- **For Mac**:

  ```
  python3 -m streamlit run slash_user_interface.py
  ```

- **For Windows**:

```
streamlit run slash_user_interface.py
```

Following these steps should successfully set up and run the Slash application. If you have any questions or need further assistance, feel free to reach out.

Use Case 2: Running a Search Query

Goal: Retrieve deals for a specific item.

1. Run the application, which will launch a Streamlit interface.

2. Enter the item name or brand in the search box (e.g., "laptop" or "dell").

3. Slash will scrape supported e-commerce sites, presenting results in a JSON format.

Use Case 3: Filtering and Sorting Results

Goal: Narrow down deals by price, brand, or rating.

1. Use the built-in filters provided in the Streamlit UI.

2. Results can be customized based on preferences like lowest price or highest rating.