

Task 1:

Objective: Write a Python script to scrape real-time event data from a public event listing website (e.g., Meetup, Eventbrite). A template script will be provided with necessary functions and their inputs.

Functionality:

- a. Your script should fetch the next 10 upcoming events from the website:
<https://www.themoviedb.org/movie/upcoming?language=en-CA>.
- b. Parse the website's HTML to extract key event details, such as the title, date, location, and description.
- c. The results should be structured as a **JSON** object.
- d. Include error handling in case of issues like network failures or missing data.

Requirements:

- a) Use **requests** to fetch the webpage.
- b) Use **BeautifulSoup** (or an equivalent HTML parser) to parse the HTML and extract event data.
- c) The JSON output should include the following fields for each event:
 - i) **title** (string)
 - ii) **date** (string)
 - iii) **location** (string)
 - iv) **description** (string)

2. Constraints:

- You may not use any pre-built web scraping libraries that would automatically handle the extraction (e.g., Scrapy, Selenium).
- Your code should not rely on scraping a particular website, so ensure it's generalizable.
- Aim for **clear, readable code** with meaningful variable names and comments explaining your logic.
- Test your script with a sample URL and ensure it handles empty or missing data correctly.

Example Output as a JSON:

```
[
  {
    "title": "Event 1",
    "date": "2024-11-25",
    "location": "CA",
    "description": "Description of Event 1"
  },
  {
    "title": "Event 2",
    "date": "2024-11-26",
    "location": "HK",
    "description": "Description of Event 2"
  }
]
```