Analysis API Task NASA

Tools and Technologies Required

Programming Language: The task specifies that any Object-Oriented Programming (OOP) language can be used, with a preference for C#. I am using Java.

Libraries: URI and HTTP for communication with the API, both included in java.net. Gson for working with JSON.

API Documentation: API offers various endpoints and parameters for performing a search. We are going to be using /search endpoint and focus on combination of five parameters - q (free text search), keywords, media_type, year_start, year_end.

Steps to Accomplish the Task

1 Setup and Configuration
• Set up a Java console application project.
• Include any necessary libraries for making HTTP requests and parsing JSON.

2 API Interaction Class
• Create a class responsible for making API requests. This class will handle URI's and making HTTP GET requests.

3 Search Functionality
• Implement methods to construct search queries based on the requirements (photographs and videos from Mars, 2018).
• Parse the search results to extract the necessary information
  • For photographs: the URLs of the images.
  • For videos: the URLs of the video files.

4 Testing and Validation
• Manually test the application with the described scenarios to ensure accuracy and reliability.