**Project Overview:**

MarsOne is an ambitious aerospace company that’s doing research about resource extraction and potential reality TV content from nearby planets. In this project we will be gathering information about the climate of Mars by performing full web-scraping and data analysis.

**Resources used for this project:**

* Data Source:
  + Mars News
  + Mars Temperature Data
* Software: Python, Jupyter Notebook.
* Analysis of Data and Results
* Splinter for automated browsing
* Beautiful Soup - Scrape Titles and Preview Text from Mars News
* JSON
* MongoDB

**Project Objective:**

The aim of this project is to apply full web-scraping for the mission to Mars by collecting data, organizing and storing data, analyzing data, and then visually communicating our insights.

Scrape and Analyze Mars Weather Data

Splinter and Beautiful Soup was used to read and pull data from the assigned Mars URL. The data that was compiled was then used to answer various questions for the project. The data was then converted into a Pandas DataFrame and we have cleaned the data by editing its data types. Then finally the data was compiled into a JSON and MongoDB.

The questions in question that were presented in the challenge are:

1. How many months exist on Mars?
2. Which month, on average, has the lowest temperature? The highest?
3. Which month, on average, has the lowest atmospheric pressure? The highest?
4. How many terrestrial days exist in a Martian year? A visual estimate within 25% was made.

**Summary:**

Web scraping is a powerful process that can aggregate a lot of data from various URLs and HTML code to be used for visualization, interpretation, and analysis.