# QA Back-End Technologies Basics

# Exam Prep II

## Lost Interstellar Crew Records

In the Starlight Space Program, we've got a team of astronauts ready for thrilling space missions. But, there's a glitch: all the astronauts' records are messed up. These records are important for planning missions and keeping track of the team.

Your job is to help sort out these records, since you're great with computers and excited about space, so you're just the person for this task. Each astronaut's details include their ID, name, age, job, years of experience, one current mission, and two past missions. Your task is to arrange everything neatly in a JSON format. It's a simple, structured way to keep any records.

There is the information on 7 astronauts, in a scrambled sentence. You need to organize it:

1. "Currently on **Europa Exploration**, **Rachel Nguyen**, age **29**, past missions include **Lunar Research** and **Solar Flare Study**, Astronaut **1001**, **7 years** in **Biologist**."
2. "Mike Johnson, Engineer with 10 years of experience, 34 years old, ID 1002, assigned to the Starlight Mission, previously worked on Venus Survey and Asteroid Belt Mapping."
3. "Medic, age 30, Emily White, ID 1003, has 8 years in the field, currently on the Orion Project, past missions: Earth Orbital Station and Comet Analysis."
4. "Astronaut 1004, Carlos Martinez, 36 years old, a Geologist with 12 years of experience, now on Mars Habitat Mission, former missions include Moon Landing Expedition and Asteroid Composition Study."
5. "ID 1005, Sarah Chen, 31 years old, Navigator with 9 years of experience, currently exploring Deep Space, previously involved in Jupiter Rings Study and Neptune Flyby Analysis."
6. "Physicist Alex Turner, 33 years old, ID 1006, in the field for 10 years, part of the Quantum Teleportation Research team, has worked on Black Hole Observation and Dark Matter Research."
7. "Lisa Adams, a Pilot aged 35, ID 1007, with 13 years of flying experience, currently engaged in the Galaxy Mapping Initiative, past expeditions include Saturn Ring Analysis and Interstellar Boundary Explorer."

**Convert** the scrambled data into **structured JSON format manually:**

* **Use a text or a code editor** to write the JSON document. We recommend **Notepad++ or VS Code**.
* **Extract relevant details** from each musician's description.
* **Organize the data** into a structured JSON format.

### Each astronaut record should include:

* **astronautId:** **Integer** (unique identifier for each astronaut)
  + **astronautName:** **String** (full name of the astronaut)
  + **age:** **Integer** (age of the astronaut)
  + **profession:** **String** (the astronaut's profession)
  + **yearsExperience:** **Integer** (number of years of professional experience)
  + **missions:** **Object** with two fields:
    - **current:** **String** (names of the current mission)
    - **past:** **Array of Strings** (names of past missions)

### Example:

**NB! Keep in mind that there won't be an example in the exam!**

|  |
| --- |
| **Austronauts.json** |
| [  {  "astronautId": 1099,  "astronautName": "Kevin O'Neil",  "age": 33,  "profession": "Astrophysicist",  "yearsExperience": 8,  "missions": {  "current": "Galactic Survey Mission",  "past": ["Orbiting Laboratory Research", "Deep Space Probe"]  }  },  **... other austronauts ...**  ] |

You are provided with a **JSON** **parser application**. Use it to **parse and validate** the JSON file you have created.

* **Replace the content of Astronauts.json** with the JSON data you created.
* After pasting your JSON data into the coresponding JSON file, **make sure to save any changes**.
* **Run the parser** application within your IDE.
* **The parser will process the chosen JSON file** and display the extracted data **in the console**.
* Carefully review the output in the console.
* If the parser displays an error message, check your JSON file for any syntax errors or formatting issues.
* Ensure all required keys are present and correctly named.
* **Copy the results from the console into the Judge System.**

\*Use Ctrl + C to copy from the console.