# QA Back-End Technologies Basics

# Exam Prep I

You can check your solutions in [Judge](https://judge.softuni.org/Contests/4698/Exam-Prep-I).

## Lost Music Festival Records

In Harmonyville, a small town, there is a **big music festival** every year. People from all over come to this festival. They play **different types of music and instruments**.

This year, something strange happened. Mr. Melody, who plans the festival, always keeps good records of everyone who comes to play music. But **his computer messed up**! Now, all the information about the musicians is mixed up. The festival is very soon, and Mr. Melody needs this information to be right.

Since we know that **you are smart with computers and we hope you love music**, your task is to help Mr. Melody. He needs to organize who is playing, what instruments they play, and what types of music they prefer.

You are given a **list of 5 musicians**, each described with details like **name**, **date of birth**, **instrument** they play, **skill level**, and **preferred genres**. The details are **presented in a sentence format**:

1. **Emma Johnson**, ID **101**, loves **Classical** and **Jazz**, plays **Violin** at level **4.2** and **Piano** at **3.6**, born on **1988-03-21**.
2. Liam Brown, born 1992-07-12, enjoys Rock and Pop, ID 102, skilled in Guitar at 3.5 and Drums at 3.0.
3. Olivia Martinez, ID 103, born 1995-01-08, skilled in Drums at 4.0 and Bass Guitar at 3.5, into Rock and Metal music.
4. Noah Garcia, prefers Funk and Blues, born 1989-09-15, ID 104, plays Bass Guitar at 4.5 and Keyboard at 3.2.
5. Sophia Rodriguez, skilled in Keyboard at 3.3 and Violin at 3.1, loves Pop and Electronic music, ID 105, born 1993-05-22.
6. Mason Lee, enjoys Jazz and Classical, ID 106, Saxophone player at 3.7 and Clarinet at 3.4, born 1991-11-30.
7. ID 107, Isabella Harris, born 1996-02-19, plays Cello at 4.1 and Viola at 3.8, loves Opera and Classic genres.

**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 musician** should have the following attributes:
  + **participantId: Integer** (unique number for each participant)
  + **participantName: String** (text field that includes the first and last name of the musician)
  + **dateOfBirth: String** (in the format "YYYY-MM-DD")
  + **instrumentSkills: Array of Objects** (what instruments the participant can play and how good they are at each). Each item in the list is an **object** that contains the following:
    - **instrumentName: String** (the name of the musical instrument)
    - **experienceLevel: Double** (from 1.0 to 5.0)
  + **preferredGenres: Array of Strings** (list of music types)

### Example:

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

|  |
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| **Musicians.json** |
| [  {  "participantId": 99,  "participantName": "William Young",  "dateOfBirth": "1990-04-27",  "instrumentSkills": [  {  "instrumentName": "Trumpet",  "experienceLevel": 4.3  },  {  "instrumentName": "French Horn",  "experienceLevel": 3.9  }  ],  "preferredGenres": ["Electronic", "Ambient"]  },  **... other musicians ...**  ] |

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

* **Replace the content of Musicians.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.