Jackson JSON API

Colby King – Module 11 Assignment

As someone learning Java and working more with web development, I’ve noticed that JSON is easy and very popular everywhere. JSON, or aka "JavaScript Object Notation" , is a lightweight and easy-to-read format used to exchange data between systems. It’s especially common in APIs and web services. One of the most popular Java libraries for working with JSON is the Jackson API. It’s easy to use and beginner-friendly, which made it great for me. In this paper, I’ll explain what Jackson can do, a bit about its history, and how to download the JAR files you need to start using it.

Jackson was created by Tatu Saloranta in the early 2000s and became a popular JSON library for Java due to its speed and flexibility. JSON itself was developed around the same time by Douglas Crockford and Chip Morningstar as a simpler alternative to XML, and it’s now the standard format for REST APIs (Baker, 2017; Postman, 2022). Jackson is a feature that supports two main processes: serialization (converting Java objects into JSON) and deserialization (converting JSON into Java objects). The main class used for this is objectmapper , which makes it easy to convert between formats with just a few lines of code.

Jackson also supports streaming (reading JSON one token at a time), tree models (navigating JSON like a tree), and annotations that let you customize how your data is handled. For example, you can use jsonlgnore to skip fields or jsonproperty to rename them. JSON itself is a structured format that supports strings, numbers, booleans, arrays, and objects, which makes it ideal for representing complex data in a readable way (Walker, 2022). Jackson handles all of these types smoothly, making it a great tool for both simple and advanced use cases.

When it comes to downloading Jackson JAR files , if you’re not using a build tool like Maven or Gradle, you can still use Jackson by downloading the JAR files manually. A good place to find them is the Maven Repository, you can search for “Jackson” and download the latest versions. Once you have the JARs, add them to your project and this setup lets you start using Jackson right away, even in a basic Java project without a build tool.

Lastly, jackson is a powerful and easy-to-use JSON library for Java. It supports all the key features you need to work with JSON, from basic object mapping to more advanced customization. Even if you’re building a small app or working on a bigger system, Jackson helps you handle JSON cleanly and efficiently, with strong documentation and a supportive community, it’s a great tool to have in your Java toolbox.

References:

Baker, T. (2017, September 21). The rise and rise of JSON. Two Bit History. <https://twobithistory.org/2017/09/21/the-rise-and-rise-of-json.html>

Postman. (2022, July 6). A guide to the different types of APIs. <https://blog.postman.com/different-types-of-apis/>

Walker, J. (2022, August 12). What is JSON and how do you use it? How-To Geek. <https://www.howtogeek.com/devops/what-is-json-and-how-do-you-use-it/>