

Jackson Data Binding

Spring uses Jackson in the background and does data binding between Json and Java POJO.

By default, Jackson will call the getter/setter method.

Package: com.fasterxml.jackson.databind

Maven Dependency:

```
<dependency>
<groupId> com.fasterxml.jackson.core</groupId>
<artifactId>jackson-databind</ artifactId>
<version>2.9.0</ version>
</dependency>
```

JSON to Java POJO

```
import java.io.File;
import com.fasterxml.jackson.databind.ObjectMapper;

public class Driver {

    public static void main(String[] args) throws Exception {

        // create object mapper
        ObjectMapper mapper = new ObjectMapper();

        // read JSON from file and map/convert to Java POJO
        Student myStudent = mapper.readValue(new File("data/sample.json"), Student.class);
    }
}
```

```
{
  "id": 14,
  "firstName": "Mario",
  "lastName": "Rossi",
  "active": true
}
```

Call `setId(...)`
Call `setFirstName(...)`
Call `setLastName(...)`
Call `setActive(...)`

```
public class Student {
    private int id;
    private String firstName;
    private String lastName;
    private boolean active;

    public void setId(int id) {
        this.id = id;
    }

    public void setFirstName(String firstName) {
        this.firstName = firstName;
    }

    public void setLastName(String lastName) {
        this.lastName = lastName;
    }

    public void setActive(boolean active) {
        this.active = active;
    }

    // getter methods
}
```

1. Read data from this file

2. Create an instance of this class and populate it

To convert JSON to POJO....call setter methods on POJO

Java POJO to JSON

```
// create object mapper
ObjectMapper mapper = new ObjectMapper();

// read JSON from file and map/convert to Java POJO
Student myStudent = mapper.readValue(new File("data/sample.json"), Student.class);
...

// now write JSON to output file
mapper.enable(SerializationFeature.INDENT_OUTPUT);
mapper.writeValue(new File("data/output.json"), myStudent);
```

Jackson calls the getter methods on Student POJO to create JSON output file

File: data/output.json

```
{
  "id": 14,
  "firstName": "Mario",
  "lastName": "Rossi",
  "active": true
}
```

To convert POJO to JSON....call getter methods on POJO

When building Spring Rest applications spring will automatically handle Jackson integration behind the scenes. Json being passed to the REST controller is converted to POJO. The Java object being returned from the REST controller is converted to JSON.