Java Basics

Training Assignment

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RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1	20/May/2020	Createw a new assignment	Create new	DieuNT1	VinhNV

Contents

Reading and Writing XML, JSON in Java

Objective

- Reading and Writing XML, Json in Java.

Business needs

- TBD

Working requirements

- Working environment: Eclipse IDE.
- Delivery: Source code, deployment and testing, reviewing evident packaged in a compress archive.

Product architecture

- N/A

Technologies

The product implements one or more technology:

- Java basics
- JAXB, DOM Parser, json-simple, Jackson

Stored Data

- N/A

Exercise 1:

1. Create a new class called ReadXML to parse XML file.

2. Load file ”student.xml” to Java and parse the file using Java DOM parser.

3. Read the following information about the power grid components from XML file:

Note Name
Name
Age
Subject
gender

4. Create a method extractNode to read data from a XML node.

5. Print out all the required data.

student.xml file :

```
<students>
 <student>
   <name>Rick Grimes</name>
   <age>35</age>
   <subject>Maths</subject>
   <gender>Male</gender>
 </student>
 <student>
   <name>Daryl Dixon </name>
   <age>33</age>
   <subject>Science</subject>
   <gender>Male</gender>
 </student>
 <student>
   <name>Maggie</name>
   <age>36</age>
   <subject>Arts</subject>
   <gender>Female</gender>
 </student>
</students>
```

Exercise 2:

1. Create a new class called ReadJSon to parse JSON file.

2. Load file ”jobs.json” to Java and parse the file using Jackson.

3. Read the following information about the power grid components from JSON file:

Note Name
employer
Duration - start
Duration - end
Title
description

4. Create a method extractNode to read data from a JSON node.

5. Print out all the required data.

jobs.json

```
{
  "jobs": [
    {
      "employer": "ITHS",
      "duration": {
        "start": "2016-01-01 00:00:00",
        "end": "2016-02-28 00:00:00"
      },
      "title": "Database teacher",
      "description": "Teacher for a Database course"
    },
    {
      "employer": "GU",
      "duration": {
        "start": "2016-06-01 00:00:00",
        "end": "2016-12-31 00:00:00"
      },
      "title": "Database teacher",
      "description": "Lecturer for an introductory Java course etc"
    },
    {
      "employer": "Yrgo",
      "duration": {
```

```
      "start": "2017-01-01 00:00:00",
      "end": "2017-06-30 00:00:00"
    },
    "title": "Java teacher",
    "description": "Teacher for a Java course"
  }
 ]
}
```


-- THE END --