Class29FileHandling in java:

Reading, writing and manipulating files using java code is called fileHandling.

Why should we learn FileHandling:

1) When we perform data driven testing we need to store data in files.

2) Storing critical data like userNames and passwords inside the code is bad, because when we push the code to GitHub

that info will also be pushed with it, to avoid this we use properties files.

3) Sometimes data can be huge in GBs, and it is very bad practice to push GBS to GitHub.

How can we read data from a file?

1) First we need to know the location(path) of the file.

2) Navigate to that location where file is stored.

3) We need a special class/Software that can help us read/write to that file.

package Class29;

import utils.ConfigReader;

import utils.ExcelReader;

import java.io.IOException;

public class FilesDemo {

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

String path="/Users/apple/IdeaProjects/SDETBatch14Java/Data/config.properties";

var properties= ConfigReader.read(path);

System.out.println(properties.getProperty("browser"));

String excelPath="/Users/apple/IdeaProjects/SDETBatch14Java/Data/Test.xlsx";

var excelData= ExcelReader.read(excelPath);

System.out.println(excelData);

}

}

package Class29;

import class27.Dog;

import utils.ExcelReader;

import java.io.IOException;

import java.util.LinkedHashMap;

import java.util.Map;

public class MethodsDemo {

public static Dog returnDog(){

return new Dog("Fuff","green","German");

}

public static Map<String,String> getMap(){

Map<String,String> map=new LinkedHashMap<>();

map.put("Apple","Mango");

return map;

}

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

Dog dog=returnDog();

System.out.println(dog);

System.out.println(getMap());

var data= ExcelReader.read("/Users/apple/IdeaProjects/SDETBatch14Java/Data/Test.xlsx");

System.out.println(data.get(1));

Map<String,String> map=data.get(2);

System.out.println(map.get("Age"));

}

}

package Class29;

import org.apache.poi.ss.usermodel.Row;

import org.apache.poi.ss.usermodel.Sheet;

import org.apache.poi.xssf.usermodel.XSSFWorkbook;

import java.io.FileInputStream;

import java.io.IOException;

import java.util.ArrayList;

import java.util.LinkedHashMap;

public class ReadingExcelFileDemo1 {

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

//Location of the file on your HardDrive where file is stored.

String path="/Users/apple/IdeaProjects/SDETBatch14Java/Data/Test.xlsx";

// Reads the data from HardDrive brings it to RAM in the raw form 10101010101010

// In simple words we can say computer has navigated to that file

FileInputStream fis=new FileInputStream(path);

// this class converts the raw bytes to Excel format or in simple words it is that special software

// that helps us read and write data to an Excel file.

XSSFWorkbook excel=new XSSFWorkbook(fis);

Sheet sheet= excel.getSheet("Sheet1");

int noOfRow=sheet.getPhysicalNumberOfRows();

// getting the first row so that we can use it as keys for our map

Row headerRow= sheet.getRow(0);

// the Map that will store the data for each row

ArrayList<LinkedHashMap<String,String>> excelData=new ArrayList<>(); // a list that can hold maps

// A loop that goes through all the rows that contain the data.

for (int rowNo = 1; rowNo < noOfRow; rowNo++) {

LinkedHashMap<String,String> rowMap=new LinkedHashMap<>();

// get a dataRow from sheet one by one through loop

Row dataRow=sheet.getRow(rowNo);

// getting the count of how many cells contain the data

int noOfCell=dataRow.getPhysicalNumberOfCells();

// A loop to go through all the cells

for (int cellNo = 0; cellNo < noOfCell; cellNo++) {

//getting keys from header row and values from data row

String key=headerRow.getCell(cellNo).toString();

String value=dataRow.getCell(cellNo).toString();

rowMap.put(key,value);

}

excelData.add(rowMap);

// System.out.println(rowMap);

}

System.out.println(excelData);

}

}

package Class29;

import utils.ExcelReader;

import java.io.IOException;

public class ReadingExcelFileDemo2 {

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

var excelData= ExcelReader.read("/Users/apple/IdeaProjects/SDETBatch14Java/Data/Test.xlsx");

System.out.println(excelData);

}

}

package Class29;

import utils.ExcelReader;

import java.io.IOException;

public class Review1 {

/\*

we wanted to read data from files

\*/

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

String path="/Users/apple/IdeaProjects/SDETBatch14Java/Data/Book.xlsx";

var data= ExcelReader.read(path);

/\* Map<String ,String> row1=data.get(0);

System.out.println(row1.get("Name"));\*/

/\* for (var row:data

) {

System.out.println(row);

}\*/

System.out.println(data);

}

}

package Class29;

import java.util.LinkedHashMap;

public class Task1 {

public static void main(String[] args) {

/\* Create a map of a building.

Store floor number and its associated company name.

(Example: 1= Google, 2=Syntax etc..).

Insert 7 entries with duplicate keys and values.

Check how many entries you have?

Update company on a 4th floor.

Remove company on the 7th floor.

Print your map.

\*/

LinkedHashMap<Integer,String> building=new LinkedHashMap<>();

building.put(1,"Google");

}

}