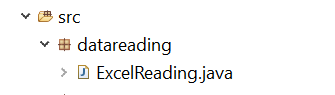
**Reading the data from the excel sheet:**

Now we need to have a functionality to read the data from the excel and return it to the test case. Normally, we develop the java files for reading the excel files separately in a different package as it would be easier for us to identify the actual tests from the helper classes.

So, create a new package under the project with name “datareading” and create a class “ExcelReading.java” under that. It should look like the following.



ExcelReading.java:

**package** datareading;

**import** java.io.FileInputStream;

**import** java.io.IOException;

**import** java.util.ArrayList;

**import** java.util.HashMap;

**import** java.util.Iterator;

**import** java.util.List;

**import** java.util.Map;

**import** org.apache.poi.ss.usermodel.Cell;

**import** org.apache.poi.ss.usermodel.DataFormatter;

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

**import** org.apache.poi.xssf.usermodel.XSSFSheet;

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

**public** **class** ExcelReading {

**public** Map<String, Map<String, String>> readdata() **throws** IOException {

Map<String, Map<String, String>> mp = **new** HashMap<String, Map<String, String>>();

//Get access to the workbook

FileInputStream fis = **new** FileInputStream("./data/vehicledata.xlsx");

XSSFWorkbook workbook = **new** XSSFWorkbook(fis);

//Get the sheet you want

XSSFSheet sheet = workbook.getSheet("vehiclesinfo");

//Get all the rows

Iterator<Row> rows = sheet.iterator();

List<String> fieldnames = **new** ArrayList<String>();

**while**(rows.hasNext()) {

String testcase = "";

List<String> ls = **new** ArrayList<String>();

Map<String, String> mpss = **new** HashMap<String, String>();

Row rowno = rows.next();

Iterator<Cell> cells = rowno.iterator();

**int** i = 0;

**if**(rowno.getRowNum() == 0)

{

**int** k = 0;

**while**(cells.hasNext()) {

Cell value = cells.next();

DataFormatter df = **new** DataFormatter();

String cellvalue = df.formatCellValue(value);

**if**(k>0) {

fieldnames.add(cellvalue);

}

k++;

}

}

**if**(rowno.getRowNum() > 0) {

**while**(cells.hasNext()) {

i++;

Cell value = cells.next();

DataFormatter df = **new** DataFormatter();

String cellvalue = df.formatCellValue(value);

**if**(i == 1) {

testcase = cellvalue;

}

**else** {

ls.add(cellvalue);

}

}

**for**(**int** j=0; j<fieldnames.size(); j++) {

mpss.put(fieldnames.get(j), ls.get(j));

}

mp.put(testcase, mpss);

}

}

workbook.close();

**return**(mp);

}

}

In the above class what we are doing is we are opening the file and get all the data required into a map. We don’t keep the excel open until our test is completed, because if we are running the tests parallelly other tests might try to access the data sheet for other information and it will slow down the tests.

First, we read the header part of the data sheet like “adminvehcletitle”, “adminselectbrand” etc into a list.

Then we will go through each row of data and read it into a list. Now we create a map using the header names and the actual data by creating a loop.

Now we get 3 maps of data for the 3 data rows created. We will add it to a main map and return it.