

## Unit 1 – Compulsory assignment

Using the information of the Newspapers database that you created last unit, build the following Java application:

The database is corrupted, and the company is going to use a file system to store the information until the database is recovered:

- The information will be stored in text files: newspapers.txt, articles.txt, articles-type.txt
- The application should have the following options:
  - Show all newspapers
  - Show articles by type
  - Append a new article: Make sure that the newspaper and the article-type exist
  - Delete a newspaper: If it has any article, ask the user, and if so, delete articles before deleting newspaper
- Use a constructor(String fileLine) for the model classes to convert the line into an object, and a toStringTextFile() method to do the opposite.

```
6 public class Newspaper {
7     private int id;
8     private String nombre;
9     private double precio;
10    private String director;
11
12    public Newspaper(String linea) {
13        String[] charArray = linea.split(";");
14        this.id = Integer.parseInt(charArray[0]);
15        this.nombre = charArray[1];
16        this.precio = Double.parseDouble(charArray[2]);
17        this.director = charArray[3];
18    }
19
20    public String toStringTextFile() {
21        return id + ";" + nombre + ";" + precio + ";" + director;
22    }
23 }
```

- The file paths are stored into a Properties file.
- The user's name and password needed to access the files are stored into a Yaml file. The application has to verify the credentials of the user before loading the main scene.

Use java.NIO library. Use singleton patterns for the Properties and Yaml files. Use a layered architecture.

Example of Newspaper's file:

```
newspapers.txt
1 1;Legacy;9.06;Noell Smullin
2 2;RSX;6.19;Amalle Jarritt
3 3;Suburban 2500;1.98;Bowie Godain
4 4;Nitro;4.22;Felipa Garber
5 5;Rendezvous;8.79;Ashien Jakubiak
6 6;Tempo;4.13;Rebeca Kollaschek
7 7;PT Cruiser;2.42;Dorry Dilleway
8 8;Mazda3;6.25;Philip Bulger
9 9;Grand Vitara;4.42;Linc Perrett
10 10;Sienna;2.54;Devina Mation
11 11;QX56;3.92;Dewitt Ubank
12 12;Navigator L;6.81;Charlotte Roz
13 13;Ghost;3.94;Sheelah Middis
14 14;Sonata;8.18;Anna-diana Klimt
15 15;Mustang;7.32;Mindy Sotheron
16 16;Aerostar;6.55;Korie Beaulieu
17 17;B-Series;8.0;Donia Rapp
18 18;Jetta;9.37;Loy Grise
19 19;Tucson;8.22;Lidia Fitzmaurice
20 20;SLS AMG;7.77;Sheeree Rickasse
```

Ln: 1 Col: 1 Sel: 0|0 Windows (CR LF) UTF-8 INS