



Specialization: Mathematics and Computer Science
Course: Advanced Programming Methods

Lab 6 Assignments

Java Application Configuration

Lab-assignment:

Modify one of your previous assignments that used files, in order to obtain the needed filenames from a Java configuration (or properties) file.

Ex. a Java properties file, called `ComputerApp.properties`

```
RequestFile=ComputerRequests.txt  
FormsFile=ComputerRepairedForms.txt
```

You have to use the `java.util.Properties` class in order to get the data from the file.

```
try {  
    Properties properties = new Properties();  
    properties.load(new FileInputStream("ComputerApp.properties"));  
    String requestFileName=properties.getProperty("RequestsFile");  
    if (requestFileName==null){ //the property does not exist in the file  
        requestFileName="ComputerRequests.txt";  
        System.err.println("Requests file not found. Using default  
"+requestFileName);  
    }  
    String formsFileName=properties.getProperty("FormsFile");  
    if (formsFileName==null){  
        formsFileName="RepairedForms.txt";  
        System.err.println("RepairedForms file not found. Using default  
"+formsFileName);  
    }  
    ComputerRepairRequestRepository crrRepo = new  
ComputerRepairRequestFileRepository(requestFileName);  
    ComputerRepairedFormFileRepository crfRepo = new  
ComputerRepairedFormFileRepository(formsFileName, crrRepo);  
}catch (IOException ex){  
    System.err.println("Error reading the configuration file"+ex);  
}
```



Home-assignment:

Finish designing and implementing your application (UI, services, repositories). For the next lab, you must present the design and execution of your entire application.

Please make sure that the application that you have developed has the following:

- A graphical user interface developed with JavaFX
- At least 4 functionalities (adding, deleting, updating your entities, etc) and 3 reports that are useful for the end-user of your application. The reports should be about both your entities (eg. the list of available cars and the reservations for a certain date)
- A layered architecture (you must have classes and packages at least for the model, the repository, the services/controller).
- A hierarchy for the repository layer, with repository classes that persist the data in text files.
- A configuration file, where the filenames for the text files are kept.