

COMMENTS

TASKS UNIT 3: CREATION OF VISUAL COMPONENTS: GUI APPLICATION JAVA SWING IMAGES JAR

FULL NAME:	[]
STARTING DATE:	[]
PC NAME:	[]
IP ADDRESS:	[]

Correction

- For every day of delay in delivery without justification, you subtract 1 point to mark.
- All questions are worth 1 point, except for those with the mark indicated in parentheses.

Delivery method

- Aules.
- Before delivering, remember to rename the document to: **First surname-Name-U3**
(Example: Luis Miguel Rico Cano: **Rico-Luis-U3**)

Documents to deliver (hand in)

- This file in **format docx** or **odt** (**do not use pdf**) with the questions answered into the parentheses **()** or brackets **[]**.
- For CLI Application **OSInfo<INITIALS>**: jar file **OSInfo<INITIALS>.jar**
- For GUI Application **GuiSwingOrderWin<INITIALS>**: jar file **GuiSwingOrderWin<INITIALS>.jar**

Rules

- Change <initials> by the initials of your name and surnames: Example: Luis Roca → LR.
- The answers must be enclosed into brackets the **[]**.
- Questions have to be summarised from theory. If you copy directly, you will get a lower mark.
- Take full screenshots, where the name of the virtual machine has to be observed.**

TASKS UNIT 3- CREATION OF VISUAL COMPONENTS: GUI APPLICATION-JAVA SWING-IMAGES-JAR

ID

TASKS [Take full screenshots, where the name of the virtual machine is observed] [Task must be answered in English]

USE WINDOWS WORKSTATION

Developing CLI Application OSInfo<INITIALS> (by using NetBeans IDE): Create project

- Create a project, Java with Maven-Java Application with the next configuration:
 - Name: **OSInfo<INITIALS>** (example if your name is David Rico: CliOrderWinDR),
 - Group ID: **com.<initials>** (example if your name is David Rico: com.dr)
 - Version: **1.0**
 Take screenshots [] (0.2)
- Change comment in source file to:
 - @author <full name>
 - @version 1.0
 Take screenshots [] (0.1)
- **Application requirements for OSInfo<INITIALS> Application:**
 - Clear screen and **print out** the next information:
 - **App: OSInfo<INITIALS>**
 - -----
 - OS: (Windows, Linux/Unix, MacOS, others)
 - Current time and date: (show full time and date)
 - Computer name: (show computer name)
 - Username: (show current OS username)
 - -----
 - Information provided by <your full name>
- Once developed and working **comment** line **package com.<initials>. OSInfo<INITIALS>** in the Java file use // to comment.
- Enter to terminal. Next, compile, create a jar file **OSInfo<INITIALS>.jar**, and run jar file **OSInfo<INITIALS>.jar**:
 Note: use commands: **javac** for compile, **jar** for create a jar file with manifest file **<initials>.mf** (**jar -cvmf <initials>.mf OSInfo<INITIALS>.jar *.class**) and run the jar file with command **java** (**java -jar OSInfo<INITIALS>.jar**). Create a manifest file called **<initials>.mf** in order to indicate the main class (add line in manifest file: Main-Class: **OSInfo<INITIALS>** and press to insert a new line character).
 Take screenshots of execution of all commands, and the content of files **OSInfo<INITIALS>.java** and manifest file **<initials>.mf**.

[] (2.2) (In addition, remember to deliver jar file **OSInfo<INITIALS>.jar**)

Improving GUI Application: GuiSwingOrderWin<INITIALS> with NetBeans by using your Windows Workstation

- First of all, install **7Zip zipper/compressor** (<https://www.7-zip.org>) in order to open an update the content of a jar file generated by NetBeans.
 [] (0.1) (take screenshot probing that it's installed: option **Help>About Windows on 7Zip**)
 - By using Microsoft Paint or other Image Software (Gimp, Photoshop, etc.) create an image logo (company logo) with your initials called **logo-<initials>.png** of size 250x250 pixels, and a reduced version of the logo called **icon-<initials>.png** of size 32x32 pixels (use option of resize of Image Software) for setting application icon.
 [] (0.2) (take screenshot of both the logo **logo-<initials>.png** and the icon **icon-<initials>.png**)
 - Create a resource **folder** called **resources** (use option view Files) inside folder **src-main**, and inside create a **java package** called **img-<initials>** for storing your images. Copy the images inside the package (drag and drop images into **img-<initials>** package).
 [] (0.3) (take screenshot of the content of Java package: **img-<initials>**)
 - Create a new **JDialog** (It's recommended to use **NetBeans Gui Tools** instead of coding manually) called **dlgLogo<INITIALS>** for show the Company Logo. The **JDialog** will have the next configuration:
 - Components: add panel with Free Layout, and inside add a label for showing the logo **logo-<initials>.png** and a button for closing the Windows (**JDialog**) and return to the Application.
 - Settings: undecorated = true (no title bar), resizable = false, Default Close Operation= HIDE, modal = true, Modal Exclusion Type = NO_EXCLUDE, Modality Type = APPLICATION_MODAL
 - The **JDialog** will be showed (use method **setVisible**) before the main windows of the application (main **JFrame**) until you click on the button for closing **dlgLogo<INITIALS>**.
 - Main Frame of Application. It will have the next configurations:
 - Set the icon **icon-<initials>.png** on the title bar (icon Application).
 - Menu: for executing the same options when clicking on buttons, create a Menu Bar with 2 menu options (and inside items menus):
 - App: View Full Order, Calculator, Exit. Use Shortcuts: key combinations
 - Help: Information, Company (Show **JDialog dlgLogo<INITIALS>** with the logo), About. Use Shortcuts: key combinations
- [] (4.4) (take screenshot of the execution with the new **JDialog**, items menus created, the main windows with its icon; and **source code** for showing and hiding **JDialog/Main Windows**, and **Events Methods** for new button and menu items).

Additional (+0.5): Use different images/icons for buttons and menus items

- Once finished up the development, use the option Clean and Build (right click on Project Name, in order to create a jar file with classes and resources such as images). Use 7Zip (open jar with 7Zip-File Manager) to open manifest file MANIFEST.MF inside META-INF folder and add at the end of the file the line **Main-Class: com.<initials>."Main class name"** (press enter to add a new line character), next save file, and finally update jar file. You will be able to run application with a double click on the jar file (also with command `java -jar GuiSwingOrderWin<INITIALS>.jar`). Note: if you have dependencies, you will have to **add the plugin** in file **pom.xml** and run the **GuiSwingOrderWin<INITIALS>-with-dependencies.jar** and show content and MANIFEST.MF of this jar file.

[/] (take screenshots of the content of jar file: MANIFEST.MF file and images and the running of jar file. What's is more deliver jar file)

Important:

- User experience and user interface is the most important, bear in mind that.
- Comment source code for an easy understanding.
- Test all menu options (your classmate could help you with the testing)

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