Assignment on Design Patterns

April 8, 2017

1 Overview

In this assignment, you will make a simple File Explorer. The purpose of this assignment is to test whether you can identify and apply appropriate design patterns in you applications. Further details of your tasks can be found below.

1.1 Tasks

- File Explorer is an application that provides a graphical interface to access or browse the files and folders of a file system. You application should perform exactly the same.

- You have to provide a graphical user interface that can show all the files in any directory.

- You have to support two different style of viewing the files.

- Provision for switching between different style should be provided.

- Your application should provide the functionality so that one can browse the folders by double-clicking on them.

- Your application should be able to run from any folder and show the files of that folder. You can create a jar file and test it yourself.

- A tree like hierarchy of the folders should be shown on the interface and users should be able to click on the folders and navigate to that folder easily.

- You have to write a small documentation of your project.

2 Documentation Guidelines

- Divide your documentation in two parts.

- The first part will describe the classes you have created. Write a short description on what is the purpose of the class and provide a list of functions of the class. If you use appropriate function names there will be no need to describe each functions. We recommend using self-describing names.

- The second part will contain a list of design patterns that you have used and the corresponding classes that are representative of the design pattern. You should note that if the JAVA API classes that you have used, uses some design patterns you have to mention them too.

- You don't need to cover additional design patters that were not covered in the class.

- You documentation must not exceed 3 pages.

- Your documentation will play a vital role in evaluation. So it is recommended that you spent adequate amount of time writing it.

3 Submission Procedure

- Submission deadline is 21-04-2017 23.55.

- Your submission encompasses three things.

  - Source Code
  - Documentation soft copy
  - Documentation hard copy

- In your local machine, create a new folder; the name of the folder should be your 7 digit roll number.

- Put the entire project and the soft copy of the documentation in the folder created in 3

- Finally, compress the folder created in 3 to produce a .zip file. The name of the .zip file should be your 7 digit roll number.

- Submit the .zip file in Moodle.

- Bring a hard copy of your documentation with you on evaluation day.

4 General Guidelines

- Plagiarism will be penalized.

- Emphasize on application of design patterns rather than look and feel.

- You will be given an online. So be prepared to integrate changes in your code.

- For any query feel free to contact rakinhaider@gmail.com

5 Useful Links

- https://docs.oracle.com/javase/tutorial/uiswing/components/list.html

- https://docs.oracle.com/javase/tutorial/uiswing/components/table.html

- http://docs.oracle.com/javase/tutorial/uiswing/components/tree.html

- http://www.javaworld.com/article/2076632/core-java/mvc-meets-swing.html

6 Sample UI