NTOU Java Programming Exercise 7





Spring 2024

Exercise-File₁

- This is a Java application that reads and adds player names and salaries to a file.
- The following is the expected GUI (note that the Table is scrollable via the scrollbar):

Fisrt Name	Last Name	Salary	
Stephen	Curry	51,915,615	
Kevin	Durant	47,649,433	
Nikola	Jokic	47,607,350	
LeBron	James	47,607,350	
Joel	Embiid	47,607,350	
Bradley	Beal	46,741,590	
Kawhi	Leonard	45,640,084	
Paul	George	45,640,084	
Giannis	Antetokounmpo	45,640,084	
Damian	Lillard	45,640,084	



Exercise-File₂

 The player information displayed in the GUI is read from the data in players.txt.

```
Stephen Curry 51915615
     Kevin Durant 47649433
    Nikola Jokic 47607350
   LeBron James 47607350
     Joel Embiid 47607350
     Bradley Beal 46741590
     Kawhi Leonard 45640084
     Paul George 45640084
     Giannis Antetokounmpo 45640084
     Damian Lillard 45640084
10
     Jimmy Butler 45183960
11
     Klay Thompson 43219440
12
     Rudy Gobert 41000000
13
     Fred VanVleet 40806300
14
15
     Anthony Davis 40600080
16
     Trae Young 40064220
     Zach LaVine 40064220
17
18
     Luka Doncic 40064220
     Tobias Harris 39270150
19
     Ben Simmons 37893408
20
21
```



(players.txt)

Exercise-File₃

- If clicking [Add a Record], two dialog windows (InputDialog) will appear in sequence to ask for the player name and the player salary respectively.
- After filling in data, the Table in the GUI will be updated (newly added information will be at the end).



Fisrt Name	Last Name	Salary	
Klay	Thompson	43,219,440	4
Rudy	Gobert	41,000,000	
Fred	VanVleet	40,806,300	
Anthony	Davis	40,600,080	
Trae	Young	40,064,220	
Zach	LaVine	40,064,220	
Luka	Doncic	40,064,220	
Tobias	Harris	39,270,150	
Ben	Simmons	37,893,408	
James	Harden	35,680,595	-
Add a Record		Update Table	



Exercise-File₄

- If you modify the text file directly, then go back to the application and click [Update Table], the data will also be updated according to the content of the text file.
 - Please note that fields in each line must be separated by blanks or tabs, and no unnecessary blanks shall be left at the end of each line.



Exercise-File₅

- Please first understand the program flow of the three classes: Player, PlayerInfoReader, and PlayerInfoWriter.
- Please modify them:
 - Most of the program logic has been implemented. Please search //TODO to fill in the core logic:
 - PlayerInfoReader: Please convert the data read into Player objects, and then put them into ArrayList.
 - PlayerInfoWriter: Please actually write the data (first name, last name and salary) into the file.
 - After completing the modification, it is recommended to test whether the two programs can be executed correctly (in the main method).
 - Note: PlayerInfoWriter uses FileWriter which can write files continuously, which is slightly different from the textbook (no modification is required).

Exercise-File

- Finally, please understand the program flow of SalaryViewer, and modify it:
 - Most of the program logic has been implemented. Please search //TODO to fill in required code related to reading and writing files. (The code is very short)



Hint

- Understand the process of reading and writing files.
- Understand basic usage of ArrayList.
- The way of combining JTable with reading and writing files can be used as a reference for your final project.



Submission

- The naming should conform to the CamelCase style.
- □ "Package" is required: ntou.cs.java2024.
- Please submit .java files and .class files (upload them to TronClass).
- Code that fails to compile or execute is not accepted.

