README.md

Final Programming Assignment: Course Listing System

`COSC 211: Computer Science II` `August 2, 2022` `Soobin Rho`

What does this program do? The main purpose of this program, which is named `CourseListingSystem.java`, is to display all courses including who is teaching the course and which students are enrolled in it. In order to run it, type this into your terminal:

```
# Compile.
javac CourseListingSystem.java

# Run.
java CourseListingSystem
```

First, the program reads `courseList.txt`, `facultlyList.txt`, and `studentList.txt`. The program then prints each course information along with the corresponding faculty and students list. Here's how the output looks like:

```
dddd | dddd
```

Additional Functions: This program also has additional functions in case you want to test the program without having to input your own data. These functions create sample data for you:

```
# 1. Create 10 example courses.
#    Write to `courseList.txt`
javac CourseList.java
java CourseList

# 2. Create 5 example faculty members.
#    Write to `facultyList.txt`
javac FacultyList.java
java FacultyList

# 3. Create 20 example students.
#    Write to `studentList.txt`
javac StudentList.java
java StudentList

# (Bonus). Create 10 example student employees.
#          Write to staffList.txt
#
#          Note that the class StudentEmployees
#          is not used by the main program.
#          This is an extra class.
#
javac StaffList.java
java StaffList
```

By the way, notice that every class has a `...Test.java` file: `CourseTest.java`, `FacultyTest.java`, `StudentTest.java`, `PersonTest.java`, `EmployeeTest.java`, `StaffTest.java`, and `StudentEmployeeTest.java`.

End-users can ignore all `...Test.java` files becuase they are just for debugging purposes. Basically, they just test and show examples of how to use setter and getter methods. For example, `StudentTest.java` shows how to set and get the attributes of the class *Student*, such as *Date expGradDate* and *int crTaken*.

Design Approach

Everything you need to know in order to run the program was shown above. This section is for those who want to get a better understanding of what happens behind the scene each time the program is run.

```
System.out.println("t");
```

How This Documentation was Made

This documentation was first written as a markdown file. Then, it was exported to a GitHub flavored html file with *grip*:

```
# Install grip.
pip3 install grip

# Install wkhtmltopdf
sudo dnf -y install wkhtmltopdf

# Convert README.md to html and then
# host to http://localhost:6419
grip README.md 6419

# Export the html to a pdf file.
wkhtmltopdf http://localhost:6419 README.pdf
```

Thank you, Professor Steinwand! We've learned a lot about Java thanks to you, and I'm looking forward to learn C++ with you next semester. Have a great rest of the summer!

--- End of Assignment ---