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***NORTH SOUTH UNIVERSITY***

**Lab Project Report**

**CSE 215.1**

**“ADVISOPEDIA”**

**Submitted by:**

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**Submitted to:**

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**Project Title: Advisopedia**

* The project is a partial demo of NSU advising system.
* All students/admin registered in the project should get an user name and password. By using the name and password, he/she can get access into the project.
* After getting accessed, the project should show the details of the user such as name, password, department, cgpa, credit passed, ID no, pre advised course etc.
* The project should show the offered course list with course initial, section, seat no and times and will ask to choose a course.
* After putting a course no, it’ll ask to choose 1 or 2. 1 for adding and 2 for dropping the course.
* Each course contains 3 credit hours and maximum credit limit for a student is 15. As a result, a student can advise for maximum 5 courses.
* Only the admin can increase the sits for any section.
* User can add and drop any course from the list.
* Each time after dropping or adding the program will show the course list that the user has chosen, and will show the offered course list until the user chooses at least 5 courses.

**UML Class Diagram:**

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| **Course** |
| - course: String  - time: String |
| + Course ()  + Course (Course: String, time: String)  /\* accesor - mutator \*/  /\* toString \*/ |

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| **readFile** |
| - x : Scanner |
| + openFile() : void  + read() : Student[]  + closeFile() : void |

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| **Launch** |
| + main(String args[]) : void |

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| **Student** |
| - IndexOfAdvised = 0 : int  - advised [100] : String  - limit = 15 : int  - name : String  - password : String  - department : String  - ID : double  - credit : double  - cgpa : double  - pre : String |
| + Student (name : String, password : String, department : String, ID : double, credit : double, cgpa : double, pre : String)  + Student ( name : String, password : String, department : String, ID : double, credit : double, cgpa : double)  /\* accesor - mutator \*/  /\* toString \*/ |

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| **Driver** |
| - admin = false : boolean |
| + main(String args[]) : void  + createAcc() : void  + write(Student st[],int count) : void  + login() : void  + loggedin(Student st) : void  + Isavailable(Student st) : void  + taken(Student st,String c,boolean add) : void |

**toString():**

**For Course class:** Should represent the courses with course details and time.

**For Student class:** Should represent the Student with the following details: name, password, department, ID, credit , cgpa and pre advised courses.

**For readFile class:**

**openFile():** It opens the "chinese.txt" file and throws FileNotFoundException if file was not found.

**read() : I**t takes an array of object Student st[], reads file from it, and return st.

**closeFile() :** It saves and closes the file.

**For Student class:**

**setLimit(int limit,boolean add):** if(add == true) then limit will be enlessed, else it’ll grow.

**setAdvised(String advised,boolean add):** Sets all advised courses.

**For Launch class:**

In**main()** method, it creats an object RF of readFile class and calls RF.openFile(). Then it creats an array of object st[] of Student class and calls st = RF.read(). Then it calls RF.closeFile() and closes the file.

**For Driver class:**

In **main()** method, it calls **createAcc()**, **Launch.main(null)** and **login()** methods.

**createAcc() :** It creates an Student array st[] and puts student attributes in st[]. Then it calls write(st,st.length).

**write(Student st[],int count) :** It writes students attributes in the file "chinese.txt" and throws FileNotFoundException if file wasn’t found.

**login()** : It takes name and passwordfrom user and matches it with file. If matches, user can log in. then call the method loggedin(st[i]). Here, SZZ is admin who can increase sits.

**loggedin(Student st):** Prints pre advised courses and calls Isavailable(st).

**Isavailable(Student st) :** Reads "courses.txt" and "timing.txt" and shows in a list. Takes input as course serial and ask for add/drop it.

**taken(Student st,String c,boolean add) :** Adds or drops courses.

**Contribution:**

* **Sharif Hossain:** Files, Exception handling, Driver & UML Class diagram, Course, Launch & Student class, Project report