Harrison Thomas

Classes:

Object Classes:
Advisor, Doctor, Faculty, ITProfessional, MedicalStaff, Nurse, OfficeAssociate, Student, and UABPerson are the classes that create the objects. Each of the classes above has accessors and mutators for each field. All of the classes above except UABPerson are child classes of UABPerson and the Nurse and Doctor Classes are child classes of the Medical Staff Class.

ReadIn:
The ReadIn class has ArrayList fields that store all the objects separately and together.
Methods:
setFileString():
Reads in the file line by line adding each line as an entry in an ArrayList.
reading():
Reads in the file line by line adding each line to its respective object ArrayList.
setUABPeople():
Assigns the ArrayList UABPeople with an input ArrayList.
setListUABP():
Adds all of the object ArrayLists to one ArrayList.

The Rest of the methods are accessors for the ArrayList fields.
CLI:
CLI consists of a constructor that defines the name of the input and output file as a string, reads in the file with the ReadIn class, and defines an ArrayList<String> with the getUABPeople() method from the ReadIn class.

Methods:
driver():
The driver class takes in an int with a switch case and either adds or removes a line to the file; or, prints the objects from the input file in an easily readable list.
setChoice():
Sets the choice field for the driver() method to use.
write():
Appends a string to the end of the input file.
getFile():
Accessor method that returns the String with the file path.
displayFile():
Prints the file line by line in the terminal for options.

Driver:

Main method of the package. Handles all of the CLI calls and all of the user prompts.

```
19 openjdk-amd64/bin/java @/tmp/cp_2j0e0ihihsssdtdh2q14k5v4rg41tc-cs203VHMSVDriver
Add[0], Remove[1], View[2] a UABPerson, or Exit[3].
0
Input file path to read.
uabEmployee.txt
Please choose a type of UABPerson.
Advisor[A], Faculty[F], ITProfessionial[I] Medical Staff[M], Office Associate[O], Student[S].
A
Input UABPerson to add.
John Smith jsmith13 Math Graduate
```

Outputs:

```
Add[0], Remove[1], View[2] a UABPerson, or Exit[3].
1
Input file path to read.
uabEmployee.txt
[0] F Mahmut Unan unan CS 4
[1] F John Johnstone jkj CS 3
[2] S Jane Smith jsmith Junior Math 3.68
[3] O Angie Boyer angboyer Secretary Math
[4] A Lisa James jlisa2 Math Graduate
[5] S John Doe jdoe Sophomore CS 4.00
[6] O Rick Stein rickstein Admin Biology
[7] I Courtney Terrell terrellc Developer
[8] I Stanley Harvell stanley52 Networking
[9] O Nelson Miles nmiles3 Registrar CS
[10] F Jessica Hendricks jhend Math 2
[11] M Olivia Hall ohall Nurse Anesthesia Yes
[12] M Daniel Clark dclark Nurse Oncology No
[13] M Maria Garcia mgarcia Nurse Pediatrics No
[14] S Sarah Vega sarahv Senior Biology 3.87
[15] A Anthony Shannon ashan27 Biology Undergraduate
[16] A Rebecca Pendergrass rebecca25 CS Graduate
[17] I Susan Stack susanstack Developer
[18] S Mary Walker mwalkerr3 Freshman CS 4.00
[19] M Michael Brown mbrown Cardiologist Cardiology
[20] M Emily Davis edavis Nurse Pediatrics Yes
[21] A Samantha Miller smiller Psychology Undergraduate
[22] M John Johnson jjohnson Surgeon Orthopedics
[23] M Sandra White swhite Neurologist Neurology
[24] M Robert Green rgreen Surgeon Cardiovascular
[25] A John Smith jsmith13 Math Graduate

Choose from list
25
Add[0], Remove[1], View[2] a UABPerson, or Exit[3].
3
```

Add[0], Remove[1], View[2] a UABPerson, or Exit[3].
2
Input file path to read.
uabEmployee.txt
Welcome to the UAB Employee System

The UAB System has the following employees:

Total number of employees: 25

IT Professionals
Name: Courtney Terrell BlazerId: terrellc Team: Developer
Name: Stanley Harvell BlazerId: stanley52 Team: Networking
Name: Susan Stack BlazerId: susanstack Team: Developer

Students:
Name: Jane Smith BlazerId: jsmith Level: Junior Major: Math GPA: 3.68
Name: John Doe BlazerId: jdoe Level: Sophomore Major: CS GPA: 4.00
Name: Sarah Vega BlazerId: sarahv Level: Senior Major: Biology GPA: 3.87
Name: Mary Walker BlazerId: mwalkerr3 Level: Freshman Major: CS GPA: 4.00

Advisors:
Name: Lisa James BlazerId: jlisa2 Department: Math Group: Graduate
Name: Anthony Shannon BlazerId: ashan27 Department: Biology Group: Undergraduate
Name: Rebecca Pendergrass BlazerId: rebecca25 Department: CS Group: Graduate
Name: Samantha Miller BlazerId: smiller Department: Psychology Group: Undergraduate

Faculty
Name: Mahmut Unan BlazerId: unan Department: CS Courses: 4
Name: John Johnstone BlazerId: jkj Department: CS Courses: 3
Name: Jessica Hendricks BlazerId: jhend Department: Math Courses: 2

Nurses
Name: Olivia Hall BlazerId: ohall Role: Nurse Department: Anesthesia Yes
Name: Daniel Clark BlazerId: dclark Role: Nurse Department: Oncology No
Name: Maria Garcia BlazerId: mgarcia Role: Nurse Department: Pediatrics No
Name: Emily Davis BlazerId: edavis Role: Nurse Department: Pediatrics Yes

Doctors
Name: Michael Brown BlazerId: mbrown Role: Cardiologist Department: Cardiology
Name: John Johnson BlazerId: jjohnson Role: Surgeon Department: Orthopedics
Name: Sandra White BlazerId: swhite Role: Neurologist Department: Neurology
Name: Robert Green BlazerId: rgreen Role: Surgeon Department: Cardiovascular

Office Associates
Name: Angie Boyer BlazerId: angboyer Role: Secretary Department: Math
Name: Rick Stein BlazerId: rickstein Role: Admin Department: Biology
Name: Nelson Miles BlazerId: nmiles3 Role: Registrar Department: CS