Package ATU

Class Library

java.lang.Object
    javafx.application.Application
        ATU.Library

```
public class Library
extends javafx.application.Application
```

The JavaFx application that provide UI for user to perform automatic teaming up and reviewing record.

Nested Class Summary

Nested Classes

Modifier and Type	Class	Description
static class	Library.Person	Person class for displaying table of students in the GUI
static class	Library.Statistics	Statistics class for displaying Statistics table in the GUI

Nested classes/interfaces inherited from class javafx.application.Application

javafx.application.Application.Parameters

Field Summary

Fields inherited from class javafx.application.Application

STYLESHEET_CASPIAN, STYLESHEET_MODENA

Constructor Summary

Constructors

Constructor	Description
Library()	

Method Summary

| All Methods | Static Methods | Instance Methods | Concrete Methods |

Modifier and Type	Method	Description

Modifier and Type	Method	Description
static Library.Statistics[]	calculateStats (java.util.ArrayList<Student> studentList)	generate the statistics report of all student information
static java.util.ArrayList<Student>	getStudentArr()	
void	newATURecord()	This process will run if user choose to create a new ATU record Handle the gui to show the Person table and Statistics table, Then do the running of ATU engine and show teaming result table
static void	read(java.lang.String csvFile)	read the csv file (default: StuPi.CSV) into array of Person(for showing table gui) and array of Student(for ATUEngine Process)
void	reviewATURecord (ReviewMenuStage reviewStage)	This process will run if user choose to review previous ATU record Show the list of all ATU record found on this local program.
static void	run(java.lang.String[] args)	

Modifier and Type	Method	Description
void	start(javafx.stage.Stage stage)	entry point of the javaFX application - start the stages

Methods inherited from class javafx.application.Application

getHostServices, getParameters, getUserAgentStylesheet, init, launch, launch, notifyPreloader, setUserAgentStylesheet, stop

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Details

Library

public Library()

Method Details

getStudentArr

public static java.util.ArrayList<Student> getStudentArr()

read

public static void read(java.lang.String csvFile)

read the csv file (default: StuPi.CSV) into array of Person(for showing table gui) and array of Student(for ATUEngine Process)

Parameters:

csvFile - filePath of the target csv, default is src/main/resources/userInput/StuPi.CSV

run

public static void run(java.lang.String[] args)

start

```
public   void   start(javafx.stage.Stage   stage)
           throws java.lang.Exception
```

entry point of the javaFX application - start the stages

Specified by:

start **in class** javafx.application.Application

Throws:

java.lang.Exception

reviewATURecord

```
public   void   reviewATURecord(ReviewMenuStage   reviewStage)
```

This process will run if user choose to review previous ATU record
Show the list of all ATU record found on this local program.

Parameters:

reviewStage - stage for showing list of ATU record

newATURecord

```
public   void   newATURecord()
                    throws java.lang.Exception
```

This process will run if user choose to create a new ATU record
Handle the gui to show the Person table and Statistics table,
Then do the running of ATU engine and show teaming result table

Throws:

java.lang.Exception - Any possible Exception during the Create process

calculateStats

```
public static  Library.Statistics[]  calculateStats(
java.util.ArrayList<Student>  studentList)
```

generate the statistics report of all student information

Parameters:

studentList - the array of students obtained from StuPi.csv

Returns:

a Statistics array that contain some statistics of StuPi.csv, e.g. totalCount, k1_summary, k3_count...