Century College

CSCI 2082

Fall 2018

## PA2

## Due on 10/04 @ 11:30PM

(100 Points)

Design and implement a program to allow a college administrator to register new students and add courses to the existing one. In addition, your program should allow the administrator to do the following:

* Add/Remove a new student
* Add/Remove a course to/from a selected student
* Search for a student either by last name or by id.
* Search for a course either by name or by id.
* Display a selected student along with the courses s/he is registered for.
* List all registered students along with the courses each student is registered for.

To help you get started, you will need at least the following five classes:

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| Course |
| -id: int  -subject: String  -credits: int  -courseNumber: int  -courseSection: int  -status: String  -instructor: String |
| +Course()  +Course(id, subject, credits, +courseNumber, courseSection, status, instructor)  +toString(): String  +equals(): boolean  +clone(): Student  … |

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| --- |
| Student |
| - studentId: String  - firstName: String  - lastName: String  - birthdate: GregorianCalendar  - email: String |
| +Student()  +Student(fullName, birthdate)  +toString(): String  +equals(): boolean  +clone(): Student  … |

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| StudentCollection |

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| CourseCollection |

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| CourseNode |

For the StudentCollection and CourseCollection classes, you should implement the same methods defined in IntArrayBag (Page 141 from textbook). However, you should use an array to store students and linkedlist to store courses.

## What to turn in:

1. Create a project called CollegeManager
2. Add a package called edu.century.pa2 to your project
3. Add another packaged called edu.century.pa2.collections to your project
4. Add Student, Course and CourseNode classes to the edu.century.pa2 package
5. Add StudentCollection and CourseCollection classes to edu.century.pa2.collections package
6. Generate a Zip file of your CollegeManager project and that’s what you need to upload to pa2 dropbox.