

CS/IT 122 Computer Programming 2

Midterm Group Programming Project 2

Problem Description:

Problem.

Create an application that may be used by a BSCS/BSIT student of Saint Louis University in monitoring his/her progress with respect to the curriculum that he/she is pursuing.

Required Theoretical Frameworks:

1. The application must be developed using the IntelliJ IDEA IDE
2. The data for the curriculum (e.g. courses under the curriculum) should be read from a data file.
3. The updated records (e.g. courses with grades) should be saved in a datafile and such file should be read by the application as needed.

The following is a sample run of the application with minimum features. You are expected to add additional features as deemed necessary.

===== Sample Run =====

My Checklist Management

- <1> Show subjects for each school term
- <2> Show subjects with grades for each term
- <3> Enter grades for subjects recently finished
- <4> Edit a course
- <5> Quit

Enter a number :8

The number must be from 1 to 5.

Enter a number :x

You entered an invalid integer. Please enter integer: Enter a number :-1

The number must be from 1 to 5.

Enter a number :1

Year = First Year Term = First Semester

Course No	Descriptive title	Units

IT 111	Introduction to Computing	2.0
IT 111L	Introduction to Computing (Lab)	1.0
IT 112	Computer Programming 1	2.0
IT 112L	Computer Programming 1 (Lab)	1.0
IT 113	Discrete Mathematics	3.0
GART	Art Appreciation	3.0
GSELF	Understanding the Self	3.0
GHIST	Readings in Philippine History	3.0
FIT HW	Physical Activity Towards Health and Fitness (Health and Wellness)	2.0
CFE 101	God's Journey with His People	3.0

Press enter key to see courses for the next term.

Year = First Year Term = Second Semester		
Course No	Descriptive title	Units
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IT 121	Information System Fundamentals	3.0
IT 122	Computer Programming 2	2.0
IT 122L	Computer Programming 2 (Lab)	1.0
IT 123	Platform Technologies	2.0
IT 123L	Platform Technologies (Lab)	1.0
GMATH	Mathematics in the Modern World	3.0
GPCOM	Purposive Communication	3.0
GCWORLD	The Contemporary World	3.0
FIT CS	Physical Activity Towards Health and Fitness (Combative Sports)	2.0
CFE 102	Christian Morality in Our Times	3.0

Press enter key to see courses for the next term.

Year = First Year Term = Short Term		
Course No	Descriptive title	Units
<hr/>		
IT 131	Computer Architecture	2.0
IT 131L	Computer Architecture (Lab)	1.0
GRIZAL	The Life and Works of Rizal	3.0

Press enter key to see courses for the next term.

Year = Second Year Term = First Semester		
Course No	Descriptive title	Units
<hr/>		
IT 211	Requirements Analysis and Modeling	3.0
IT 212	Data Structures	2.0
IT 212L	Data Structures (Lab)	1.0
IT 213	Network Fundamentals	2.0
IT 213L	Network Fundamentals (Lab)	1.0
GSTS	Science Technology and Society	3.0
GENVI	Environmental Science	3.0
NSTP-CWTS 1	Foundations of Service	3.0
FIT OA	Physical Activity Towards Health and Fitness (Outdoor and Adventure Activities)	2.0
CFE 103	Catholic Foundation of Mission	3.0

// and so on

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- <4> Edit a course
- <5> Quit

Enter a number :

You entered an invalid integer. Please enter integer: Enter a number :2

Year = First Year Term = First Semester

Course No.	Descriptive title	Units	Grade
IT 111	Introduction to Computing	2.0	80
IT 111L	Introduction to Computing (Lab)	1.0	80
IT 112	Computer Programming 1	2.0	79
IT 112L	Computer Programming 1 (Lab)	1.0	79
IT 113	Discrete Mathematics	3.0	76
GART	Art Appreciation	3.0	85
GSELF	Understanding the Self	3.0	86
GHIST	Readings in Philippine History	3.0	88
FIT HW	Physical Activity Towards Health and Fitness (Health and Wellness)	2.0	94
CFE 101	God's Journey with His People	3.0	85

Press enter key to see courses for the next term.

Year = First Year Term = Second Semester

Course NO.	Descriptive title	Units	Grade
IT 121	Information System Fundamentals	3.0	Not yet taken
IT 122	Computer Programming 2	2.0	Not yet taken
IT 122L	Computer Programming 2 (Lab)	1.0	Not yet taken
IT 123	Platform Technologies	2.0	Not yet taken
IT 123L	Platform Technologies (Lab)	1.0	Not yet taken
GMATH	Mathematics in the Modern World	3.0	Not yet taken
GPCOM	Purposive Communication	3.0	Not yet taken
GCWORLD	The Contemporary World	3.0	Not yet taken
FIT CS	Physical Activity Towards Health and Fitness (Combative Sports)	2.0	Not yet taken
CFE 102	Christian Morality in Our Times	3.0	Not yet taken

Press enter key to see courses for the next term.

// and so on.

My Checklist Management

- <1> Show subjects for each school term
- <2> Show subjects with grades for each term

<3> Enter grades for subjects recently finished

<4> Edit a course

<5> Quit

Enter a number :5

..Thank you.

Process finished with exit code 0

Notes:

- I. Include additional useful features and functionalities of the application. For example, the application may show the outstanding General Point Average of the student on demand; the application may show an arranged list of the courses taken following descending order based on grades.
- II. Let your application address different possible cases.

Examples of possible cases

1. A student may earn a failing grade for a course. A course that was taken but with a failing grade should be part of the record of the student.
 2. The student may be a shifter from another program. The course finished by the student through another program and is credited to the his/her BSIT program should be made part of the record and the equivalent course should be easily traced.
 3. Any course finished by the student, even if the course is not required in his/her BSIT curriculum, must be a part of his record.
 4. The actual elective courses finished must be reflected on the record and the data should be made part of the display when needed. (Initially, the course is referred to as elective. When finished, an actual course number and descriptive title should be reflected on record)
- III. You are expected to demonstrate your creativity. However, creativity should not sacrifice elegance, aesthetics, simplicity, and the like.