Structured Programming

Project Documentation

Name: muhanad

Surname: tuameh

Student number: 19011913

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**HOW THE PROGRAM WORKS**

Firstly when the user opens the program the main menu shows up and asks the user to choose which user type he/she wants to proceed with.

1. Admin

2. Instructor

3. Student

4. Exit

Select user type:

The admin can do the following:

1. Register a new instructor.
2. Remove an instructor.
3. Add a new student.
4. Remove a student.
5. Add a new course.
6. Delete a course.

The instructors can do the following:

1. Update their own courses.

The students can do the following:

1. Enroll in a course
2. Unenroll from a course

**ADMIN**

When entering as an admin three types of operations will appear.

## ADMIN ##

1. Instructor operations

2. Student operations

3. Course operations

4. Back

Select operation:1

In the following section I will explain all the operations and how they work.

**1. Instructor operations:**

## INSTRUCTOR OPERATIONS ##

1. Register new instructor

2. Delete an instructor

3. Update an instructor informations

4. List all instructors

5. Back

Select operation:1

1) Register a new instructor.

Enter the details of the instructor to be registered. Then press ENTER

Note: inputs that contain space are not accepted.

Enter the following informations to add an instructor

Instructor ID: 123

Name: yunus

Surname: selcuk

Title: prof.

If the instructor added successfully the following will be printed. And the data will be printed in the file.

123,yunus,selcuk,prof.

Data successfully written in file instructors.txt

## ADMIN ##

1. Instructor operations

2. Student operations

3. Course operations

4. Back

Select operation:

The content of instructors.txt:

123,yunus,selcuk,prof.

If you try to register another instructor with the same id:

Enter the following informations to add an instructor

Instructor ID: 123

This instructor is already registered

Repeating the previous operation several times we got the following data in our instructors.txt file

123,yunus,selcuk,prof.

111,xxx,xxx,lect.

222,Ahmet,Elbir,lect.

333,Banu,Dir,prof.

444,Furkan,cakmak,lect.

2) Delete an instructor.

## INSTRUCTOR OPERATIONS ##

1. Register new instructor

2. Delete an instructor

3. Update an instructor informations

4. List all instructors

5. Back

Select operation:2

To delete an instructor entering his/her id is enough.

Enter the id of the instructor you want to remove

Id:111

The instructor has been deleted successfully.

Updated instructors.txt content:

123,yunus,selcuk,prof.

222,Ahmet,Elbir,lect.

333,Banu,Dir,prof.

444,Furkan,cakmak,lect.

If you enter a non valid instructor id:

Enter the id of the instructor you want to remove

id:555

Non valid instructor id.

3) Update an instructor informations

## INSTRUCTOR OPERATIONS ##

1. Register new instructor

2. Delete an instructor

3. Update an instructor informations

4. List all instructors

5. Back

Select operation:3

Enter the id and the new details of the instructor to make updates.

Note: inputs that contain space are not accepted.

Enter the following informations to add an instructor

Instructor ID: 333

Name: Banu

Surname: Diri

Title: prof.

333,Banu,Diri,prof.

Data successfully written in file instructors.txt

The updated content of instructors.txt

123,yunus,selcuk,prof.

222,Ahmet,Elbir,lect.

333,Banu,Diri,prof.

444,Furkan,cakmak,lect.

4)List all instructors

## INSTRUCTOR OPERATIONS ##

1. Register new instructor

2. Delete an instructor

3. Update an instructor informations

4. List all instructors

5. Back

Select operation:4

Enter 4 to print all the instructors in instructors.txt on the screen

:4

ID - NAME - SURNAME - TITLE

123,yunus,selcuk,prof.

222,Ahmet,Elbir,lect.

444,Furkan,cakmak,lect.

333,Banu,Diri,prof.

**2. Student operations**

## ADMIN ##

1. Instructor operations

2. Student operations

3. Course operations

4. Back

Select operation:2

The same instructor operations are valid for the students

1)Register new student

## STUDENT OPERATIONS ##

1. Register new student

2. Delete a student

3. Update a student informations

4. List all students

5. Back

Select operation:1

Note: inputs that contain space are not accepted.

Enter the following informations to add an student

Student ID: 19011913

Name: muhanad

Surname: tuameh

19011913,muhanad,tuameh,0,0

Data successfully written in file students.txt

The content of students.txt

19011913,muhanad,tuameh,0,0

The two zeros at the end of the data are the number of courses taken by the student and the number of credits.

Repeating the previous operation several times.

The content of student.txt:

19011913,muhanad,tuameh,0,0

19001,tarik,akan,0,0

19002,yusuf,ozdemir,0,0

19003,mahmut,altay,0,0

19004,hatice,ilhan,0,0

If you try to enter the same id to register another student.

Enter the following informations to add an student

Student ID: 19011913

This student is already registered

2) delete a student

## STUDENT OPERATIONS ##

1. Register new student

2. Delete a student

3. Update a student informations

4. List all students

5. Back

Select operation:2

To delete a student entering his/her id is enough.

Enter the id of the student you want to remove

id:19003

The student has been deleted successfully.

The updated content of students.txt:

19011913,muhanad,tuameh,0,0

19001,tarik,akan,0,0

19002,yusuf,ozdemir,0,0

19004,hatice,ilhan,0,0

If you enter a non valid student id:

Enter the id of the student you want to remove

id:18001

Non valid student id.

3) Update a student informations

## STUDENT OPERATIONS ##

1. Register new student

2. Delete a student

3. Update a student informations

4. List all students

5. Back

Select operation:3

Note: inputs that contain space are not accepted.

Enter the following informations to add an instructor

Student ID: 19002

Name: mehmet

Surname: ozdemir

19002,mehmet,ozdemir

Data successfully written in file students.txt

The updated students.txt

19011913,muhanad,tuameh,0,0

19001,tarik,akan,0,0

19004,hatice,ilhan,0,0

19002,mehmet,ozdemir

4) List all students

## STUDENT OPERATIONS ##

1. Register new student

2. Delete a student

3. Update a student informations

4. List all students

5. Back

Select operation:4

ID - NAME - SURENAME

19011913,muhanad,tuameh,0,0

19001,tarik,akan,0,0

19004,hatice,ilhan,0,0

19002,mehmet,ozdemir

**3. Course operations**

## ADMIN ##

1. Instructor operations

2. Student operations

3. Course operations

4. Back

Select operation:3

The same instructor and students operations are valid for the courses

1)Add new course

## COURSE OPERATIONS ##

1. Add new course

2. Delete a course

3. Update a course details

4. List all courses

5. Back

Select operation:1

Note: inputs that contain space are not accepted.

Enter the details of the course you want to add

Code:BLM1

name:yapisal

instructor ID:123

credit:3

capacity:80

BLM1,yapisal,123,3,80

The content of courses.txt

BLM1,yapisal,123,3,80

Repeating the previous operation several times.

The file content:

BLM1,yapisal,123,3,80

BLM2,Assembly,444,3,90

BLM3,Math,333,4,90

BLM4,signals,222,3,80

BLM5,algebra,333,3,90

BLM6,BBG,123,4,100

If you try to enter the same id to add another course.

Enter the details of the course you want to add

Code:BLM1

This course is already added

If you try to enter the non valid instructor id

Enter the details of the course you want to add

Code:BLM2

Enter new name:Assembly

Enter new instructor ID:555

Not valid instructor

2) delete a course

## COURSE OPERATIONS ##

1. Add new course

2. Delete a course

3. Update a course details

4. List all courses

5. Back

Select operation:2

To delete a course entering its code is enough.

Enter the code of the course you want to remove

Code:BLM3

The course has been deleted successfully.

The updated content of courses.txt:

BLM1,yapisal,123,3,80

BLM2,Assembly,444,3,90

BLM4,signals,222,3,80

BLM5,algebra,333,3,90

BLM6,BBG,123,4,100

If you enter a non valid course code:

Enter the code of the course you want to remove

Code:BLM8

Non valid course code.

3) Update a student informations

Note: inputs that contain space are not accepted.

## COURSE OPERATIONS ##

1. Add new course

2. Delete a course

3. Update a course details

4. List all courses

5. Back

Select operation:3

Enter the code of the course you want to update

Code:BLM4

Enter new name:Signals

Enter new instructor ID:222

Enter new credit:3

Enter new capacity:100

BLM4,Signals,222,3,100

Data successfully written in file courses.txt

The updated students.txt

BLM1,yapisal,123,3,80

BLM2,Assembly,444,3,90

BLM5,algebra,333,3,90

BLM4,Signals,222,3,100

BLM6,BBG,123,4,100

4) List all students

## COURSE OPERATIONS ##

1. Add new course

2. Delete a course

3. Update a course details

4. List all courses

5. Back

Select operation:4

CODE - NAME - INSTRUCTOR - CREDIT - CAPACITY

BLM1,yapisal,123,3,80

BLM2,Assembly,444,3,90

BLM5,algebra,333,3,90

BLM4,Signals,222,3,100

BLM6,BBG,123,4,100

**INSTRUCTOR**

1. Admin

2. Instructor

3. Student

4. Exit

Select user type:2

To enter as an instructor you have to provide an id.

Enter your ID:

ID: 123

Welcome

1. Update a course

2. List my courses

3. Back

Select operation:

If your id is available in instructors.txt you can enter as an instructor. Otherwise:

Enter your ID:

ID: xxx

Your ID is not correct if you are an instructor ask the admin to register you

When entering as an instructor you can just update your own courses.

1) Update a course

Welcome

1. Update a course

2. List my courses

3. Back

Select operation:1

Enter the code of the course you want to update

Code:BLM6

Enter new name:BBG

Enter new credit:3

Enter new capacity:50

BLM6,BBG,123,3,50

Data successfully written in file courses.txt

The instructor can’t update the instructor id of the course.

The updated courses.txt content.

BLM1,yapisal,123,3,80

BLM2,Assembly,444,3,90

BLM5,algebra,333,3,90

BLM4,Signals,222,3,100

BLM6,BBG,123,3,50

If the instructor try to update a course he/her don’t give

Enter the code of the course you want to update

Code:BLM2

you can't update a course you don't give!

2) List my courses

Welcome

1. Update a course

2. List my courses

3. Back

Select operation:2

This operation prints the instructor’s courses on the screen

COURSE ID, NAME, INSTRUCTOR ID, CREDIT, CAPACITY

BLM1,yapisal,123,3,80

BLM6,BBG,123,3,50

**STUDENT**

1. Admin

2. Instructor

3. Student

4. Exit

Select user type:3

To enter as a student you have to provide an id.

Enter your ID:

ID: 19011913

1. Enroll in a course

2. Unenroll from a course

3. List my courses

4. Back

Select operation:

If your id is available in students.txt you can enter as a student. Otherwise:

Enter your ID:

ID: xxx

Your ID is not correct if you are an student ask the admin to register you

The students can do 3 operations

1) Enroll in a course

1. Enroll in a course

2. Unenroll from a course

3. List my courses

4. Back

Select operation:1

The student can enroll in a course by entering the course code.

Enter the code of the course you want to enroll in

Code:BLM1

Enrolled successfully.

This operation prints the the course code, student id, the status of enrollment, the enrollment id and the date of the enrollment

The content of studentsEnrollment.txt:

BLM1,19011913,Enrolled,0,08/01/2021

If the student is already enrolled in the course:

Enter the code of the course you want to enroll in

Code:BLM1

You are already enrolled in this course!

If the student tries to enter a non existing course:

Enter the code of the course you want to enroll

Code:BLM3

This course is not existing

Repeating the same operation several times.

The content of studentsEnrollment.txt

BLM1,19011913,Enrolled,0,08/01/2021

BLM2,19011913,Enrolled,1,08/01/2021

BLM4,19011913,Enrolled,2,08/01/2021

2) Unenroll from a course

1. enroll a course

2. unenroll a course

3. List my courses

4. Back

Select operation:

Provide the code of the course you want to unenroll from to make this operation.

Enter the code of the course you want to unenroll

Code:BLM4

BLM4,19011913,Unenrolled,2,08/01/2021

Data successfully written in file studentsEnrollment.txt

The updated content of studentsEnrollment.txt:

BLM1,19011913,Enrolled,0,08/01/2021

BLM2,19011913,Enrolled,1,08/01/2021

BLM4,19011913,Unenrolled,2,08/01/2021

If the student enters a code of a course already unenrolled:

Enter the code of the course you want to unenroll

Code:BLM4

You are not enrolled in a course with BLM4 code

2) List my courses

1. enroll a course

2. unenroll a course

3. List my courses

4. Back

Select operation:3

This operation prints the student’s courses on the screen:

COURSE CODE, STUDENT ID, STATUS,ENROLLMENT ID, DATE

BLM1,19011913,Enrolled,0,08/01/2021

BLM2,19011913,Enrolled,1,08/01/2021

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*THE END\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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