



Faculty of Engineering & Technology
Electrical & Computer Engineering Department

ENCS 3130

Lab Linux

Project 2 Test Cases

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Section: 5

	main.py	≡ midecalRecord.txt ×	≡ medicalTest.txt
1	1300500: HGB, 2024-03-01 05:20, 15.8, g/dL, completed, 2024-03-01 05:30		
2	1300500: DBP, 1999-08-09 12:12, 120, mg/dL, completed, 2000-02-02 12:20		
3	1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06		
4	1234567: BGT, 2000-09-09 12:30, 100, mg/dL, pending		
5	1234567: LDL, 2000-09-09 12:30, 100, mg/dL, pending		
6	1234123: LDL, 2000-09-07 12:14, 44, mg/dL, pending		
7	1341341: HGB, 2000-01-01 12:12, 100, mg/dL, reviewed		

Figure 1: file midecalRecord.txt

	main.py	≡ midecalRecord.txt	≡ medicalTest.txt ×
1	hamza (HGB); Range: >80; Unit: mg/gg, 00-09-08		
2	Blood Glucose Test (BGT); Range: > 70, < 99; Unit: mg/dL, 00-12-06		
3	LDL Cholesterol Low-Density Lipoprotein (LDL); Range: < 100; Unit: mg/dL, 00-17-06		
4	Systolic Blood Pressure (SBP); Range: < 120; Unit: mm Hg, 00-08-04		
5	Diastolic Blood Pressure (DBP); Range: < 80; Unit: mm Hg, 00-10-00		

Figure 2: file medicalTest.txt

```

Run main x
" C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
1
Enter the name of the new medical test: 3gain of bulse
Invalid input. Test name should not be empty or contain numbers.
Enter the name of the new medical test: gain of bulse
Enter the symbolic name of the new medical test (3 Capital Letters): hgf
Invalid input. Symbolic name should be exactly 3 Capital letters.
Enter the symbolic name of the new medical test (3 Capital Letters): HHHH
Invalid input. Symbolic name should be exactly 3 Capital letters.
Enter the symbolic name of the new medical test (3 Capital Letters): HHH
Enter the range of the test (e.g., > 70, < 99): ><90
Invalid input. Range should follow the format: > 70, < 99.
Enter the range of the test (e.g., > 70, < 99): >90
Enter the unit of measurement (e.g., mg/dL): m3
Invalid input. Unit should be non-empty and can contain letters and/or slashes.
Enter the unit of measurement (e.g., mg/dL): mg/dd
Enter the turnaround time (e.g., 00-12-06): 0-01-01
Invalid input. Turnaround time should follow the format: 00-12-06.
Enter the turnaround time (e.g., 00-12-06): a1-01-01
Invalid input. Turnaround time should follow the format: 00-12-06.
Enter the turnaround time (e.g., 00-12-06): 00-01-02
gain of bulse (HHH); Range: >90; Unit: mg/dd, 00-01-02

```

Figure 3: Add medical test and check error handling for it

```

main.py  midecalRecord.txt  medicalTest.txt x
1 hamza (HGB); Range: >80; Unit: mg/gg, 00-09-08
2 Blood Glucose Test (BGT); Range: > 70, < 99; Unit: mg/dL, 00-12-06
3 LDL Cholesterol Low-Density Lipoprotein (LDL); Range: < 100; Unit: mg/dL, 00-17-06
4 Systolic Blood Pressure (SBP); Range: < 120; Unit: mm Hg, 00-08-04
5 Diastolic Blood Pressure (DBP); Range: < 80; Unit: mm Hg, 00-10-00
6 gain of bulse (HHH); Range: >90; Unit: mg/dd, 00-01-02
7

```

Figure 4: the file medicalTest after add new test

```

Run main x
C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_final
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
2
Enter the 7-digit medical record ID: 123456
Error: ID must be a 7-digit number. Please try again.
Enter the 7-digit medical record ID: a123456
Error: ID must be a 7-digit number. Please try again.
Enter the 7-digit medical record ID: 1234567
Enter the 3-character test name: lll
Error: Test name must be exactly 3 letters. Please try again.
Enter the 3-character test name: LLL
This not Found in System
Error: Test name must be exactly 3 letters. Please try again.
Enter the 3-character test name: LDL
Enter the date (YYYY-MM-DD): 01-01-01
Error: Date must be in the format YYYY-MM-DD. Please try again.
Enter the date (YYYY-MM-DD): 0000-01-01
Error: Date must be in the format YYYY-MM-DD. Please try again.
Enter the date (YYYY-MM-DD): a000-0-01
Error: Date must be in the format YYYY-MM-DD. Please try again.
Enter the date (YYYY-MM-DD): 2000-01-02
Enter the time (HH:MM): 12:30
Enter the result value: 100
Enter the unit of measurement: mg
Error: The unit you entered does not match the unit for the test name you entered.
Error: Invalid unit. Please try again.
Enter the unit of measurement: mg/dL
Unit matches.
Enter the status (completed, pending, reviewed): completed
Medical record added successfully.

```

Figure 5: Add medical recored and check error handling for it

```

main.py  midecalRecord.txt  medicalTest.txt
1  1300500: HGB, 2024-03-01 05:20, 15.8, g/dL, completed, 2024-03-01 05:30
2  1300500: DBP, 1999-08-09 12:12, 120, mg/dL, completed, 2000-02-02 12:20
3  1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06
4  1234567: B6T, 2000-09-09 12:30, 100, mg/dL, pending
5  1234567: LDL, 2000-09-09 12:30, 100, mg/dL, pending
6  1234123: LDL, 2000-09-07 12:14, 44, mg/dL, pending
7  1341341: HGB, 2000-01-01 12:12, 100, mg/dL, reviewed
8  1234567: LDL, 2000-01-02 12:30, 100, mg/dL, completed, 2000-01-02 12:47
9

```

Figure 6:the file midecalRecored after add new test

```

Run  main x
4.Update medical tests in the medicaltest file
5.Filter medical tests
6.exit
3
Enter the Patient ID to update records: 111111
Error: No records found for this Patient ID.
Enter the Patient ID to update records: 1300500
1. 1300500: HGB, 2024-03-01 05:20, 15.8, g/dL, completed, 2024-03-01 05:30
2. 1300500: DBP, 1999-08-09 12:12, 120, mg/dL, completed, 2000-02-02 12:20
3. 1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06
Enter the number of the record you want to update: 1
Which part would you like to update?
1. Test Name
2. Start Date
3. Start Time
4. Result
5. Unit
6. Status
7. End Date
8. End Time
9. Exit and save changes
Enter the number of the field you want to update: 1
Enter the new value for Test Name: LdL
Error: Test Name must be exactly 3 uppercase letters.
Enter the new value for Test Name: LDL
Test Name updated successfully.
Which part would you like to update?
1. Test Name
2. Start Date
3. Start Time
4. Result
5. Unit
6. Status
7. End Date
8. End Time
9. Exit and save changes
Enter the number of the field you want to update: 5
Enter the new value for Unit: mg/dL
Unit updated successfully.

```

Figure 7: update medical Recorded

```

main.py x  midecalRecord.txt x  medicalTest.txt
1  1300500: LDL, 2024-03-01 05:20, 15.8, mg/dL, completed, 2024-03-01 05:30
2  1300500: DBP, 1999-08-09 12:12, 120, mg/dL, completed, 2000-02-02 12:20
3  1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06
4  1234567: BGT, 2000-09-09 12:30, 100, mg/dL, pending
5  1234567: LDL, 2000-09-09 12:30, 100, mg/dL, pending
6  1234123: LDL, 2000-09-07 12:14, 44, mg/dL, pending
7  1341341: HGB, 2000-01-01 12:12, 100, mg/dL, reviewed
8  1234567: LDL, 2000-01-02 12:30, 100, mg/dL, completed, 2000-01-02 12:47
9

```

Figure 8: file midecalRecorded after update

```
Run main x
"C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_final_E
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
4
1. hamza (HGB); Range: >80; Unit: mg/gg, 00-09-08
2. Blood Glucose Test (BGT); Range: > 70, < 99; Unit: mg/dL, 00-12-06
3. LDL Cholesterol Low-Density Lipoprotein (LDL); Range: < 100; Unit: mg/dL, 00-17-06
4. Systolic Blood Pressure (SBP); Range: < 120; Unit: mm Hg, 00-08-04
5. Diastolic Blood Pressure (DBP); Range: < 80; Unit: mm Hg, 00-10-00
6. gain of bulse (HHH); Range: >90; Unit: mg/dd, 00-01-02
Enter the index of the medical test you want to update: 1
Selected Test: hamza (HGB); Range: >80; Unit: mg/gg, 00-09-08
What would you like to update?
1. Name
2. Symbolic Name
3. Range
4. Unit
5. Time
Enter the number corresponding to the field you want to update: 6
Error: Please choose a number between 1 and 5.
Enter the number corresponding to the field you want to update: 2
Enter the new Symbolic Name (3 capital letters): hHH
Error: Symbolic Name must be exactly 3 capital letters.
Enter the new Symbolic Name (3 capital letters): HHH
Medical test updated successfully.
```

Figure 9: update midical Test

```
main.py x midecalRecord.txt medicalTest.txt x
1 hamza (HHH); Range: >80; Unit: mg/gg, 00-09-08
2 Blood Glucose Test (BGT); Range: > 70, < 99; Unit: mg/dL, 00-12-06
3 LDL Cholesterol Low-Density Lipoprotein (LDL); Range: < 100; Unit: mg/dL, 00-17-06
4 Systolic Blood Pressure (SBP); Range: < 120; Unit: mm Hg, 00-08-04
5 Diastolic Blood Pressure (DBP); Range: < 80; Unit: mm Hg, 00-10-00
6 gain of bulse (HHH); Range: >90; Unit: mg/dd, 00-01-02
7
```

Figure 10: file midecalTest after update

```
Run main x
C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_fi
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
5
Chooes the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
7
invalid choise , enter agian
Chooes the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
1
Enter the ID of patinet you want filter it :1300500
1300500: LDL, 2024-03-01 05:20, 15.8, mg/dL, completed, 2024-03-01 05:30
1300500: DBP, 1999-08-09 12:12, 120, mg/dL, completed, 2000-02-02 12:20
1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06
```

Figure 11: filter patinet id

```
Run main x
C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_final_EN
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
5
Chooses the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
2
Enter the 3-character test name: LDL
1300500: LDL, 2024-03-01 05:20, 15.8, mg/dL, completed, 2024-03-01 05:30
1234567: LDL, 2000-09-09 12:30, 100, mg/dL, pending
1234123: LDL, 2000-09-07 12:14, 44, mg/dL, pending
1234567: LDL, 2000-01-02 12:30, 100, mg/dL, completed, 2000-01-02 12:47
Tou want use the filter options again ? yes or no |
```

Figure 12: filter Test name

```
Run main x
C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_fin
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
5
Chooses the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
3
70.0
1300500: LDL, 2024-03-01 05:20, 15.8, mg/dL, completed, 2024-03-01 05:30
1234567: BGT, 2000-09-09 12:30, 100, mg/dL, pending
1234123: LDL, 2000-09-07 12:14, 44, mg/dL, pending
Tou want use the filter options again ? yes or no
```

Figure 13: filter abnormal


```
Run main x
C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_final
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
5
Chooses the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
4
Enter the start date (YYYY-MM-DD): 1-01-01
Error: Date must be in the format YYYY-MM-DD. Please try again.
Enter the start date (YYYY-MM-DD): 2000-01-01
Enter the start time (HH:MM): 12:30
Enter the end date (YYYY-MM-DD): 2001-01-01
Enter the end time (HH:MM): 12:20
1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06
1234567: LDL, 2000-01-02 12:30, 100, mg/dL, completed, 2000-01-02 12:47
```

Figure 14: filter with period

```
Run main x
C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_final
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
5
Chooses the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
5
Enter the status (completed, pending, reviewed): completed
1300500: LDL, 2024-03-01 05:20, 15.8, mg/dL, completed, 2024-03-01 05:30
1300500: DBP, 1999-08-09 12:12, 120, mg/dL, completed, 2000-02-02 12:20
1300500: HGB, 2000-09-09 12:36, 100, mg/dL, completed, 2000-09-07 01:06
1234567: LDL, 2000-01-02 12:30, 100, mg/dL, completed, 2000-01-02 12:47
You want use the filter options again ? yes or no |
```

Figure 15: filter with status

```
Run main x
"C:\Users\hamza\Desktop\University courses\Lab Linux - Hamza Al Shaer\Hamza_1211162_final
select the service you want make (1-9) :
1.Add new medical test
2.Add a new medical test record
3.Update patient records including all fields
4.Update medical tests in the medicalTest file
5.Filter medical tests
6.exit
5
Chooes the type of filter (1-6) :
1.Patient ID
2.Test Name
3.Abnormal tests
4.within a specific period (start and end dates)
5.Test status
6.Test turnaround time within a period (minimum and maximum turnaround time)
6
Enter the start turnaround time (e.g., 00-12-06): 00-00-0
Invalid input. Turnaround time should follow the format: 00-12-06.
Enter the start turnaround time (e.g., 00-12-06): 00-00-01
Enter the end turnaround time (e.g., 00-12-06): 00-02-00
1300500: LDL, 2024-03-01 05:20, 15.8, mg/dL, completed, 2024-03-01 05:30
1234567: LDL, 2000-01-02 12:30, 100, mg/dL, completed, 2000-01-02 12:47
Tou want use the filter options again ? yes or no |
```

Figure 16: filter with turnaround time

```
Tou want use the filter options again ? yes or no no
select the service you want make (1-2) :
1.Maximum and Minimum and Aerage for tests Results
2.Maximum and Minimum and Aerage for Turnaround Time
1
Test HHH not found in records. Max=0, Min =0, Avg = 0
Test BGT: Max = 100.0, Min = 100.0, Avg = 100.00
Test LDL: Max = 100.0, Min = 15.8, Avg = 64.95
Test SBP not found in records. Max=0, Min =0, Avg = 0
Test DBP: Max = 120.0, Min = 120.0, Avg = 120.00
Test HHH not found in records. Max=0, Min =0, Avg = 0
Tou want use the filter options again ? yes or no |
```

Figure 17: report test result

```
Tou want use the filter options again ? yes or no no
select the service you want make (1-2) :
1.Maximum and Minimum and Aeration for tests Results
2.Maximum and Minimum and Aeration for Turnaround Time
2
Max Turnaround Time: 00-17-06
Min Turnaround Time: 00-01-02
Avg Turnaround Time: 00-09-34
```

Figure 18: report turnaround time