



Faculty of Engineering and Technology
Department of Electrical and Computer Engineering
Computer Architecture
ENCS4370
Project #1
MIPS Assembly Project

Made by:

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Sections: 2,3.

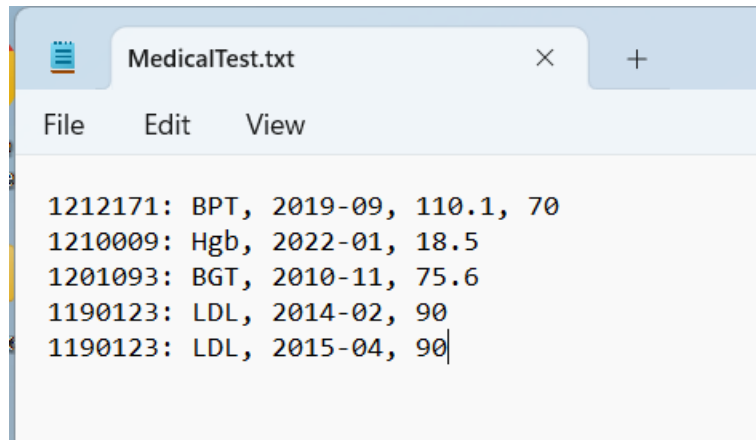
Date: 30/4/2024.

Birzeit University

2023-2024

Some test cases for the project:

- File content example:



```
MedicalTest.txt
File Edit View
1212171: BPT, 2019-09, 110.1, 70
1210009: Hgb, 2022-01, 18.5
1201093: BGT, 2010-11, 75.6
1190123: LDL, 2014-02, 90
1190123: LDL, 2015-04, 90
```

- Example of printing all tests:

```
Choose an option:
1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
9
1212171, BPT, 2019-09, 110.1, 70.0
1210009, Hgb, 2022-01, 18.5
1201093, BGT, 2010-11, 75.6
1190123, LDL, 2014-02, 90.0
1190123, LDL, 2015-04, 90.0
```

- Example of adding a test:

```
5. Search for unnoraml tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
1
Enter patient id:
1239
Invalid id, try again:
1239008
Enter test name:
EOR
Invalid name, try again:
LDL
Enter test date (you must enter a date in the following format YYYY-MM):
2013-09
Enter test result:
40.8
The test has been added.

Choose an option:
1. Add a new medical test.
2. Retreive all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnoraml tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
9
1212171, BPT, 2019-09, 110.1, 70.0
1210009, Hgb, 2022-01, 18.5
1201093, BGT, 2010-11, 75.6
1190123, LDL, 2014-02, 90.0
1190123, LDL, 2015-04, 90.0
1239008, LDL, 2013-09, 40.8
```

Clear



- Example of printing all patient tests:

Clear

Choose an option:

1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit

2

Enter patient id:

1190123

1190123, LDL, 2014-02, 90.0

1190123, LDL, 2015-04, 90.0

Choose an option:

1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit

- Example of printing all up normal tests for a person:

| | |
|---|---|
| Clear | Choose an option: |
| | 1. Add a new medical test. |
| | 2. Retrieve all patient tests. |
| | 3. Retrieve all up normal patient tests. |
| | 4. Retrieve all patient tests in a given specific period. |
| | 5. Search for unnormal tests. |
| | 6. Retrieve average values of tests. |
| | 7. Update an existing test result. |
| | 8. Delete a test. |
| | 9. Print all medical tests. |
| 10. Exit | |
| 3 | |
| Enter patient id: | |
| 1210009 | |
| 1210009, Hgb, 2022-01, 18.5 | |
| Choose an option: | |
| 1. Add a new medical test. | |
| 2. Retrieve all patient tests. | |
| 3. Retrieve all up normal patient tests. | |
| 4. Retrieve all patient tests in a given specific period. | |
| 5. Search for unnormal tests. | |
| 6. Retrieve average values of tests. | |
| 7. Update an existing test result. | |
| 8. Delete a test. | |
| 9. Print all medical tests. | |
| 10. Exit | |

- Example of printing patient's tests in specific period:

Clear

```

1210009, Hgb, 2022-01, 18.5

Choose an option:
1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
4
Enter patient id:
1190123
Enter the start date of the period:
2013-01
Enter the end date of the period:
2015-03
1190123, LDL, 2014-02, 90.0

```

- Example of printing all up normal tests for a given test name:

Clear

```

Choose an option:
1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
5
Enter test name:
Hgb
1210009, Hgb, 2022-01, 18.5

```

- Example of average values function:

Choose an option:
1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit

6

The average value of Hgb tests is: 18.5
The average value of BGT tests is: 75.6
The average value of LDL tests is: 73.6
The average value of BPT systolic tests is: 110.1
The average value of BPT diastolic tests is: 70.0

- Example of updating a test:

Clear

Choose an option:

1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit

7

1212171, BPT, 2019-09, 110.1, 70.0

1210009, Hgb, 2022-01, 18.5

1201093, BGT, 2010-11, 75.6

1190123, LDL, 2014-02, 90.0

1190123, LDL, 2015-04, 90.0

1239008, LDL, 2013-09, 40.8

Enter patient id:

1210009

Enter test name:

Hgb

Enter test date (you must enter a date in the following format YYYY-MM):

2022-01

Enter test result:

20.5

Test result is updated successfully.

Clear

Choose an option:

1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit

9

1212171, BPT, 2019-09, 110.1, 70.0

1210009, Hgb, 2022-01, 20.5

1201093, BGT, 2010-11, 75.6

1190123, LDL, 2014-02, 90.0

1190123, LDL, 2015-04, 90.0

1239008, LDL, 2013-09, 40.8

- Example of deleting a test:

Choose an option:
1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
8
1212171, BPT, 2019-09, 110.1, 70.0
1210009, Hgb, 2022-01, 20.5
1201093, BGT, 2010-11, 75.6
1190123, LDL, 2014-02, 90.0
1190123, LDL, 2015-04, 90.0
1239008, LDL, 2013-09, 40.8

Clear

Enter patient id:
1212171
Enter test name:
BPT
Enter test date (you must enter a date in the following format YYYY-MM):
2019-09
The test is successfully deleted

Choose an option:
1. Add a new medical test.
2. Retrieve all patient tests.
3. Retrieve all up normal patient tests.
4. Retrieve all patient tests in a given specific period.
5. Search for unnormal tests.
6. Retrieve average values of tests.
7. Update an existing test result.
8. Delete a test.
9. Print all medical tests.
10. Exit
9
1210009, Hgb, 2022-01, 20.5
1201093, BGT, 2010-11, 75.6
1190123, LDL, 2014-02, 90.0
1190123, LDL, 2015-04, 90.0
1239008, LDL, 2013-09, 40.8

Clear