BIRZEIT UNIVERSITY

Faculty of Engineering & Technology
ENCS, Computer Systems Engineering
LINUX LABORATORY
REPORT#1

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Sec:7

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Testing the program

• Add a new medical test record: the system will allow the user to store a new medical test with the required data. The system will check the validity of the input data.

```
================================
        Medical Test System
================================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
================================
Please choose an option: 1
You selected: Add a new medical test record
Enter Patient ID (7-digit integer):
1478523
Enter Test Name (e.g., 'Hgb' or 'BGT' or 'LDL' 'systole' or 'diastol'):
Ldl
Enter Test Date (format YYYY-MM):
2023-07
Enter Test Result (e.g., '13.5 g/dL'):
88
Enter Test Status (Pending, Completed, Reviewed):
Completed
Record added successfully.
Press Enter to continue...
```

If you press 1 as an option the program will check if the id is exactly 7digit int and then it will check if every other field is in suitable format

• Search for a test by patient ID: the system will have the following functionality based on user selection:

First it will search if the provided information does exist then it will print the required info

a)Retrieve all patient tests

```
================================
        Medical Test System
================================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
================================
Please choose an option: 2
You selected: Search for a test by patient ID
a. Retrieve all patient tests
b. Retrieve all abnormal patient tests
c. Retrieve all patient tests in a given specific period
d. Retrieve all patient tests based on test status
Please choose an option: a
Retrieve all patient tests
Enter Patient ID (7-digit integer):
1234567
All tests for Patient ID 1234567:
1234567: hgb, 2024-06, 14.2, Pending
1234567: systole, 2024-08, 130, Completed
Press Enter to continue...
```

b)Retrieve all up normal patient tests

```
================================
        Medical Test System
================================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
================================
Please choose an option: 2
You selected: Search for a test by patient ID
a. Retrieve all patient tests
b. Retrieve all abnormal patient tests
c. Retrieve all patient tests in a given specific period
d. Retrieve all patient tests based on test status
Please choose an option: b
Retrieve all abnormal patient tests
Enter Patient ID (7-digit integer):
1234567
Abnormal tests for Patient ID 1234567:
1234567: systole, 2024-08, 130, Completed
Press Enter to continue...
```

c) Retrieve all patient tests in a given specific period

```
================================
        Medical Test System
================================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
================================
Please choose an option: 2
You selected: Search for a test by patient ID
a. Retrieve all patient tests
b. Retrieve all abnormal patient tests
c. Retrieve all patient tests in a given specific period
d. Retrieve all patient tests based on test status
Please choose an option: c
Retrieve all patient tests in a given specific period
Enter Patient ID (7-digit integer):
1234567
Enter Start Date (format YYYY-MM):
2023-06
Enter End Date (format YYYY-MM):
2024-07
Tests for Patient ID 1234567 from 2023-06 to 2024-07:
1234567: hgb, 2024-06, 14.2, Pending
Press Enter to continue...
```

d) Retrieve all patient tests based on test status

```
==================================
        Medical Test System
==================================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
==================================
Please choose an option: 2
You selected: Search for a test by patient ID
a. Retrieve all patient tests
b. Retrieve all abnormal patient tests
c. Retrieve all patient tests in a given specific period
d. Retrieve all patient tests based on test status
Please choose an option: d
Retrieve all patient tests based on test status
Enter Test Status (Pending, Completed, Reviewed):
Completed
Tests with Status 'Completed':
1234567: systole, 2024-08, 130, Completed
Press Enter to continue...
```

• Average test value: the system will retrieve the average value of each medical test

```
==================================
        Medical Test System
==================================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
==================================
Please choose an option: 3
You selected: Average test value
Average value for bgt: 13.50
Average value for hgb: 14.90
Average value for Ldl: 88.00
Average value for systole: 130.00
Press Enter to continue...



Terminal
```

•delete an existing patient info

```
==============================
        Medical Test System
==============================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
==============================
Please choose an option: 4
You selected: Delete an existing test result
Enter Patient ID (7-digit integer):
9876543
Enter Test Name (e.g., 'Hgb' or 'BGT'):
hgb
Enter Test Date (format YYYY-MM):
2022-08
Existing record found: 9876543: hgb, 2022-08, 15.6, Reviewed
Are you sure you want to delete this record? (y/n):
y
Record deleted successfully.
Press Enter to continue...
```

• Update an existing test result.

```
==============================
        Medical Test System
==============================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
==============================
Please choose an option: 5
You selected: Update an existing test result
Enter Patient ID (7-digit integer):
1234567
Enter Test Name (e.g., 'Hgb' or 'BGT'):
hgb
Enter Test Date (format YYYY-MM):
2024-06
Existing record found: 1234567: hgb, 2024-06, 14.2, Pending
Enter new Test Result (e.g., '14.2 g/dL'):
14.6
Enter new Test Status (Pending, Completed, Reviewed):
Completed
Record updated successfully.
Press Enter to continue...
```

• exit

```
==============================
        Medical Test System
==============================
1. Add a new medical test record
2. Search for a test by patient ID
   a. Retrieve all patient tests
   b. Retrieve all abnormal patient tests
   c. Retrieve all patient tests in a given specific period
   d. Retrieve all patient tests based on test status
3. Average test value
4. Delete an existing test result
5. Update an existing test result
6. Exit
==============================
Please choose an option: 6
Exiting...
```