BIRZEIT UNIVERSITY

Computer Systems Engineering ENCS

First project

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Section: 4

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```
raghed@raghed-VirtualBox:~$ sh medical
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
1
Enter Patient ID (7 digits):
9637415
Enter Test Name (Hgb,BGT,LDL,systole,diastole):
LDL
Enter Test Date (YYYY-MM):
2018-10
Enter Result :
99
Enter the Unit (mg/dL, g/dL, mm Hg):
mm Hg
Enter Status (Pending/Completed/Reviewed):
pending
Record added successfully!
```

```
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
2
Enter Patient ID (7 digits):
1234567
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
1
1234567:LDL,2024-11,88,reviewed
1234567:Hgb,2022-12,22,pending
1234567:BGT,2020-05,88,pending
1234567:diastole,2015-06,88,reviewed
1234567:systole,2021-08,100,pending
```

```
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
2
Patient ID: 1234567 | Test Name: Hgb | Test Result: 22 | Expected Range: >13.8, <17.2 | Status: up normal
Patient ID: 1234567 | Test Name: diastole | Test Result: 88 | Expected Range: >0, <80 | Status: up normal
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
3
Enter start date (YYYY-MM):
2015-06
Enter end date (YYYY-MM):
2022-12
1234567:Hgb,2022-12,22,pending
1234567:BGT,2020-05,88,pending
1234567:diastole,2015-06,88,reviewed
1234567:systole,2021-08,100,pending
```

```
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
4
Enter status (Pending/Completed/Reviewed):
reviewed
1234567:LDL,2024-11,88,reviewed
1234567:diastole,2015-06,88,reviewed
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
5
Exiting...
```

```
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
3
Patient ID: 1234567 | Test Name: Hgb | Test Result: 22 | Expected Range: >13.8, <17.2 | Status: up normal
Patient ID: 4563218 | Test Name: systole | Test Result: 220 | Expected Range: >0, <120 | Status: up normal
Patient ID: 1234567 | Test Name: diastole | Test Result: 88 | Expected Range: >0, <80 | Status: up normal
```

```
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
4
Average value for BGT: 39.73
Average value for diastole: 49.00
Average value for Hgb: 22.00
Average value for LDL: 70.00
Average value for systole: 160.00
```

```
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
5
Enter Patient ID (7 digits):
1234567
Patient ID found.
Enter Test Name (Hgb, BGT, LDL, systole, diastole):
LDL
Test Name found.
Enter Test Date (YYYY-MM):
2024-11
date found.
Current Test Value: 88
Enter new Test Value:
100
Current Test Status: reviewed
Enter new Test Status (Pending/Completed/Reviewed):
completed
Test record updated.
```

```
Test record updated.
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
6
Enter Patient ID (7 digits):
1234567
Patient ID found.
Enter Test Name (Hgb, BGT, LDL, systole, diastole):
systole
Test Name found.
Test result deleted successfully.
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
7
raghed@raghed-VirtualBox:~$
```

- **Some of error massege**

```
raghed@raghed-VirtualBox:~$ sh medical
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
1
Enter Patient ID (7 digits):
88
Error: Patient ID must be a 7-digit integer.
Invalid ID
Enter Patient ID (7 digits):
7412589
Enter Test Name (Hgb,BGT,LDL,systole,diastole):
l
Error: The test name must be one of the following: (Hgb,BGT,LDL,systole,diastole)
Invalid test name
Enter Test Name (Hgb,BGT,LDL,systole,diastole):
BGT
Enter Test Date (YYYY-MM):
20
Error: Test date must be in the format YYYY-MM.
Invalid Date
Enter Test Date (YYYY-MM):
2018-12
```

```
Enter Result :
66
Enter the Unit (mg/dL, g/dL, mm Hg):
mg
Error: The unit must be one of the following: mg/dL , g/dL , mm Hg
Invalid status
Enter the Unit (mg/dL, g/dL, mm Hg):
mg/dL
Enter Status (Pending/Completed/Reviewed):
comp
Error: Status must be one of the following: Pending, Completed, Reviewed.
Invalid status
Enter Status (Pending/Completed/Reviewed):
completed
Record added successfully!
```

```
Medical Test Management System
1. Add a new medical test record
2. Search for a test by patient ID
3. Search for up normal tests
4. Calculate average test value
5. Update an existing test result
6. delete
7. Exit
2
Enter Patient ID (7 digits):
1234567
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
3
Enter start date (YYYY-MM):
2011-09
Enter end date (YYYY-MM):
2012-04
Error: Start date not found. Please enter a valid start date.
Enter start date (YYYY-MM):
2022-12
Enter end date (YYYY-MM):
2024-11
1234567:LDL,2024-11,100,completed
1234567:Hgb,2022-12,22,pending
```

```
Enter Patient ID (7 digits):
1234567
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
4
Enter status (Pending/Completed/Reviewed):
comp
Error: Status must be one of the following: Pending, Completed, Reviewed.
Enter status (Pending/Completed/Reviewed):
completed
Error: status not found for the patient. Please try again.
Enter status (Pending/Completed/Reviewed):
pending
1234567:Hgb,2022-12,22,pending
1234567:BGT,2020-05,88,pending
1234567:systole,2021-08,100,pending
1234567:Hgb,2022-12,22,pending
1234567:BGT,2020-05,88,pending
1234567:systole,2021-08,100,pending
```

```
Enter Patient ID (7 digits):
1234567
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
9
Invalid choice.
Choose an option:
1. Retrieve all patient tests
2. Retrieve all up normal patient tests
3. Retrieve all patient tests in a given specific period
4. Retrieve all patient tests based on test status
5. Exit
```