

Many Labs

USER MANUAL

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Introduction

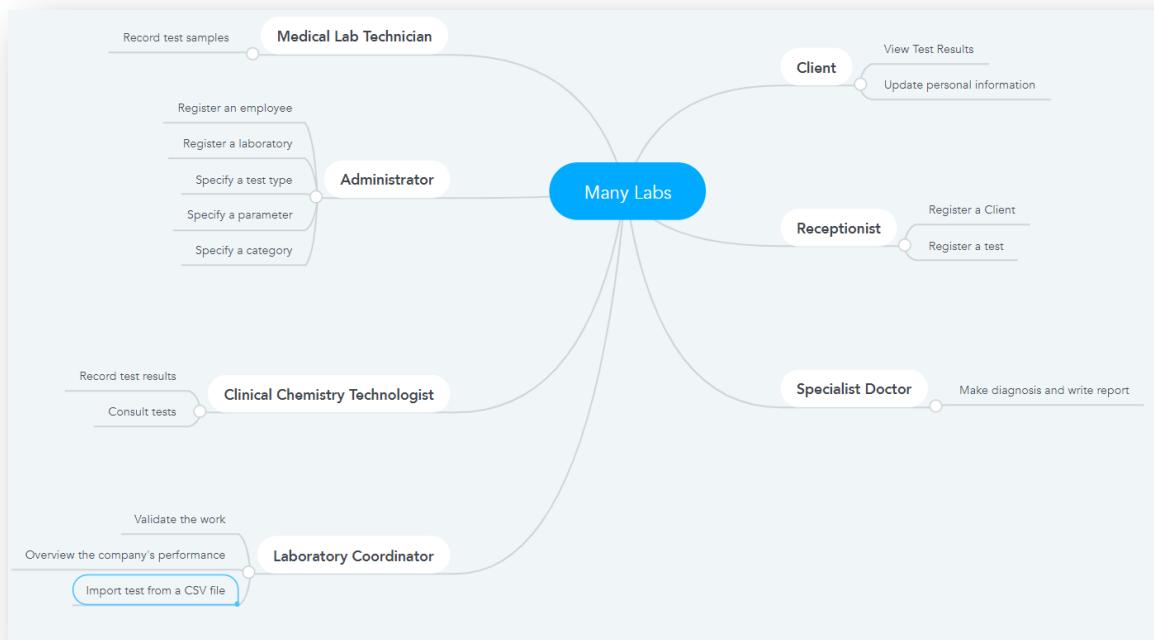
PURPOSE AND SCOPE

This manual contains information concerning all the functionalities, who can access, how to use and which errors can occur when running them. It is addressed to all user, whether they are clients or Many Labs employees. In System Features it is possible to find detailed step by step guides for each of the mentioned functionalities.

SYSTEM OVERVIEW

Many Labs is a company whose object is to test multiple individuals, who will be registered in the system's database, for blood and covid tests, although the application supports the addition of more test types, categories, and parameters. These tests have samples which are analysed and diagnosed by doctors, all tests are validated before they became available for the clients to check their results.

The following diagram highlights the application's structure and core modules.



SYSTEM REQUIREMENTS

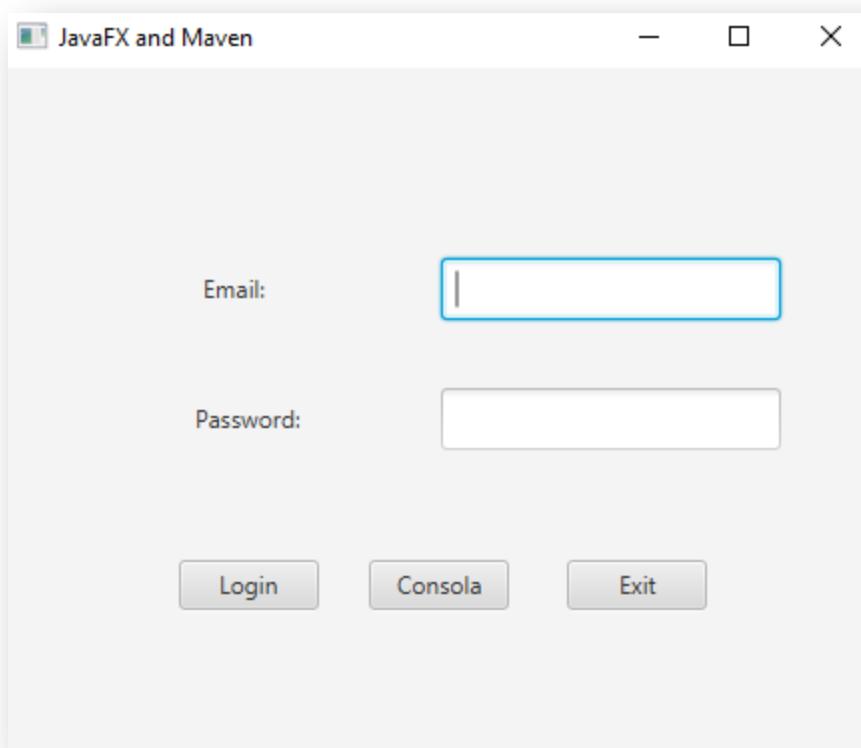
The user must have Java Runtime environment installed on the computer.

SOFTWARE INSTALATION

The files are in a git repository, to install them it should take a maximum of 2 minutes.

Login

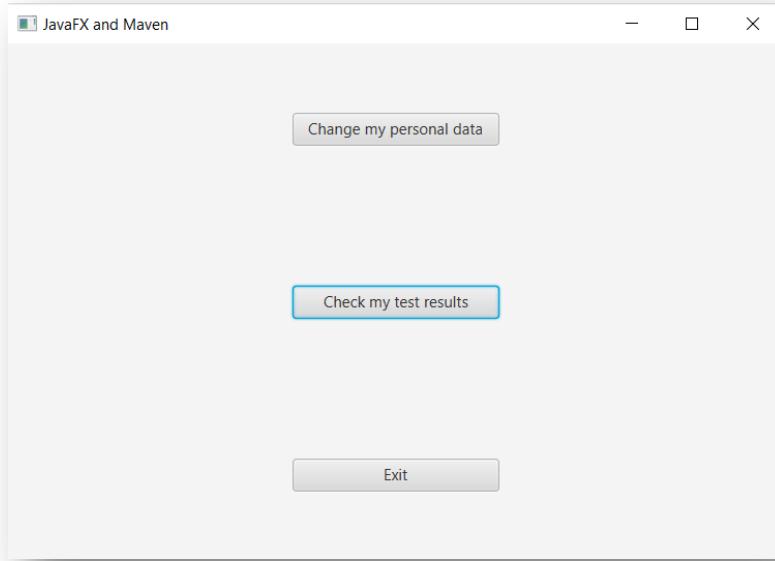
When starting the application the Login interface will appear, to login just introduce your e-mail and password. Accounts linked to employees will have their respective menus while accounts linked to clients have options to change personal information and check results.



User Story 1: View the results of the tests I have performed

This functionality can only be accessed by a client, it allows the user to view the results of the tests he performed.

To start registering a test, press “Check my tests results”.



After choosing the option to view the results of tests you have already taken, a list of all tests you have taken will appear. If it doesn't show up, it means you haven't done any tests yet.

After the list appears, you have to enter the nhs code of a test that is in the list, to see its results.

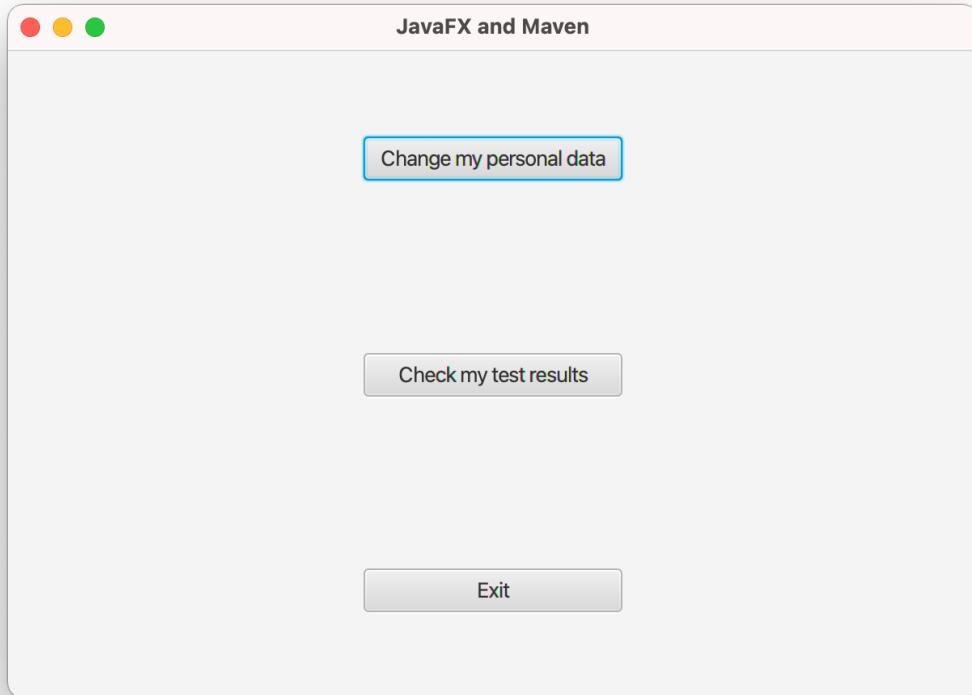
Possible errors:

If you put the nhs code wrong, the app will display an error.

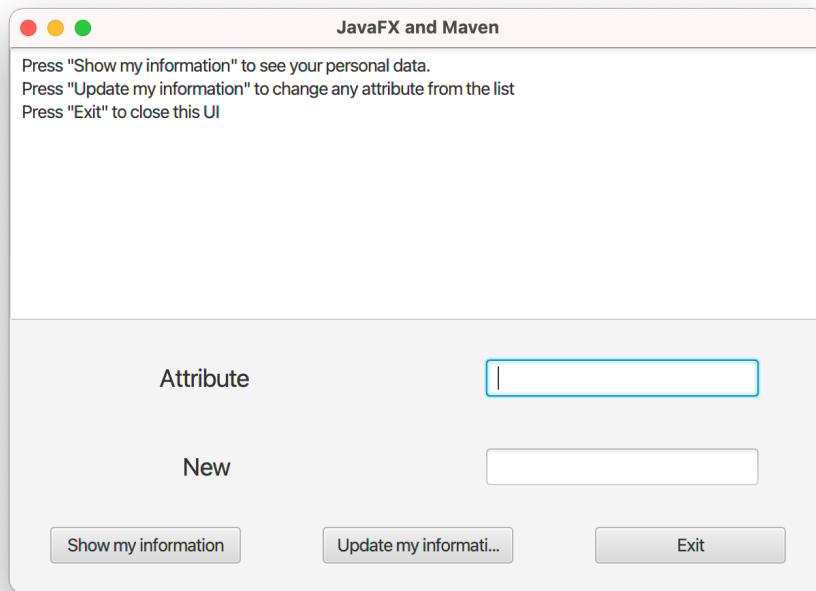
User Story 2: As a client, I want to update my own data

This functionality can only be accessed by a client. Once that you log in, you'll be allowed to change your personal data such as name, e-mail, etc ...

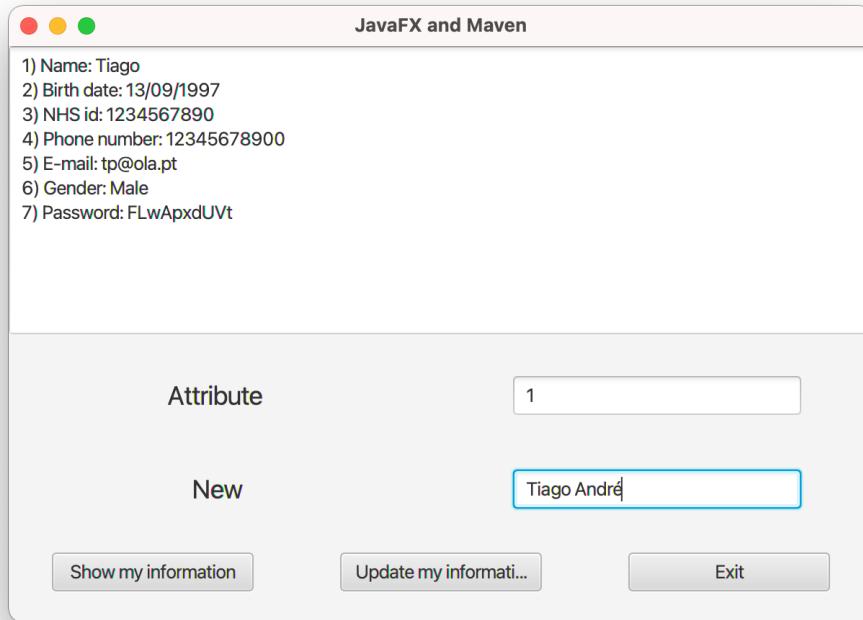
After signing in, this window will show up.



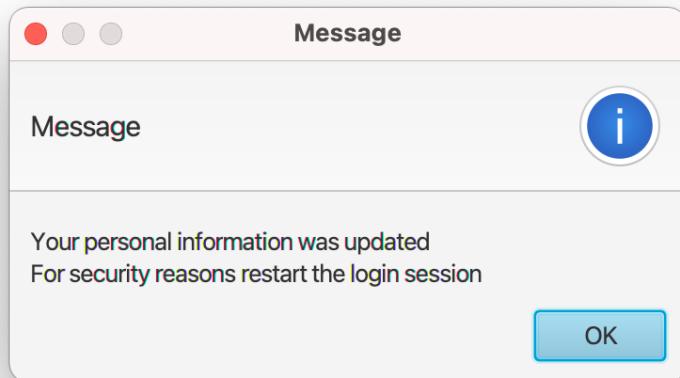
To change your own data, you need to choose the first option “Change my personal data”. This is what you’ll see:



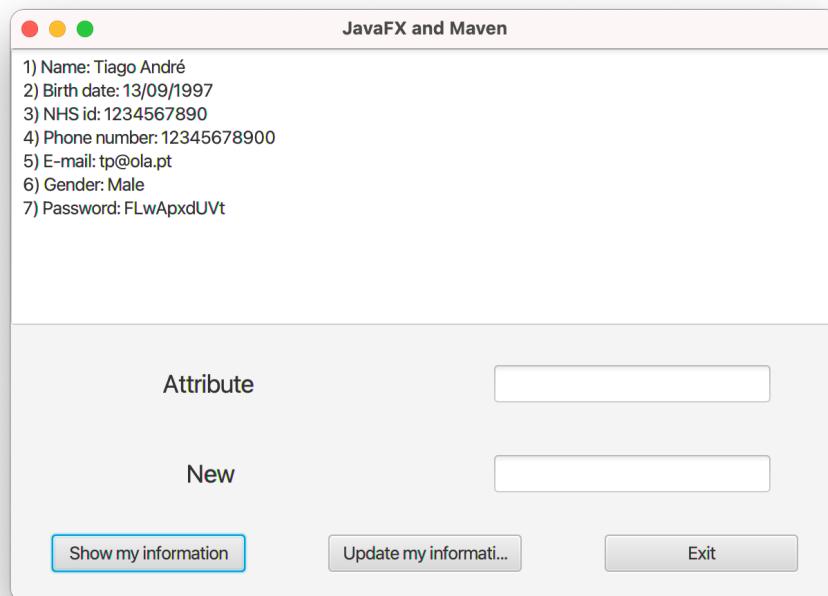
Now, you should check your data to choose what attribute you need to change. For that, you can click on “Show my information”. You’ll see now displayed a list with your personal data as shown below.



As you can see, the first attribute “Name” is Tiago but, I want to change to “Tiago André”. To do that, in the field “Attribute” you put the number that refers to the attribute you want to change and then in the “New” field you write the new information. After that, you must click on “Update my information”. Will appear a window that confirms your changes and asks you to do again your login for security reasons.



Now, if you log in again and repeat the first 3 steps, you'll see that your information was changed successfully.



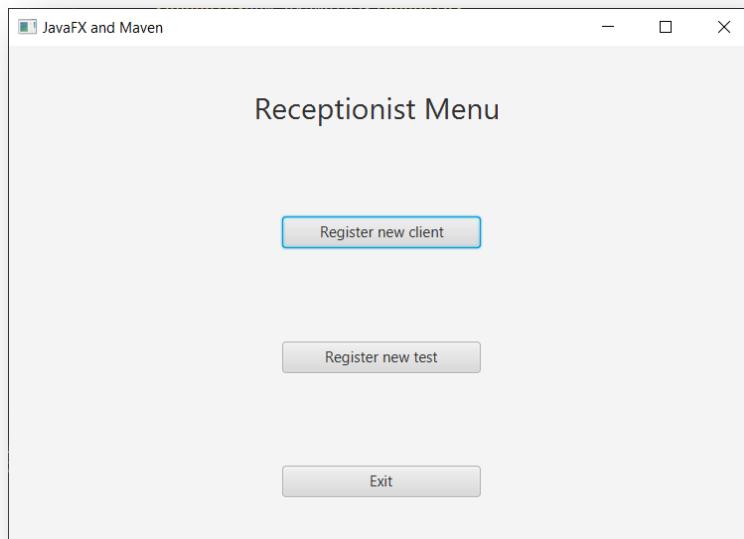
User Story 3: Register a new Client

This functionality can only be accessed by a receptionist, it allows the user to create a client.

For the creation client have the following attributes:

- name: 1 to 35 alphanumeric characters code;
- cc: must have 16 digits;
- Birth date: must have be in dd/MM/yyyy format;
- NHSID: must have 10 digits;
- TIN: must have 10 digits;
- Email: client's email;
- Phone Number: must have 11 digits;
- Gender: Is Optional.

To start registering a test, press “Register new Client”.



After that the app ask for data described above.

Then the app shows the data you entered for creating the client, and then the app asks if you want to save. If you choose 1, the app saves and then shows the complete data of client with his password. If you choose 0, the app not save the client which you created.

Possible errors:

- If you enter the data wrongly, it will give an error;
- If you create a client that already exists.

User Story 4: Register a new Test

This functionality can only be accessed by a receptionist, it allows the user to create a test.

For the creation Tests have the following attributes:

NHS code: 12 alphanumeric characters code, there can be no more than a single test with the same NHS code, it is unique.

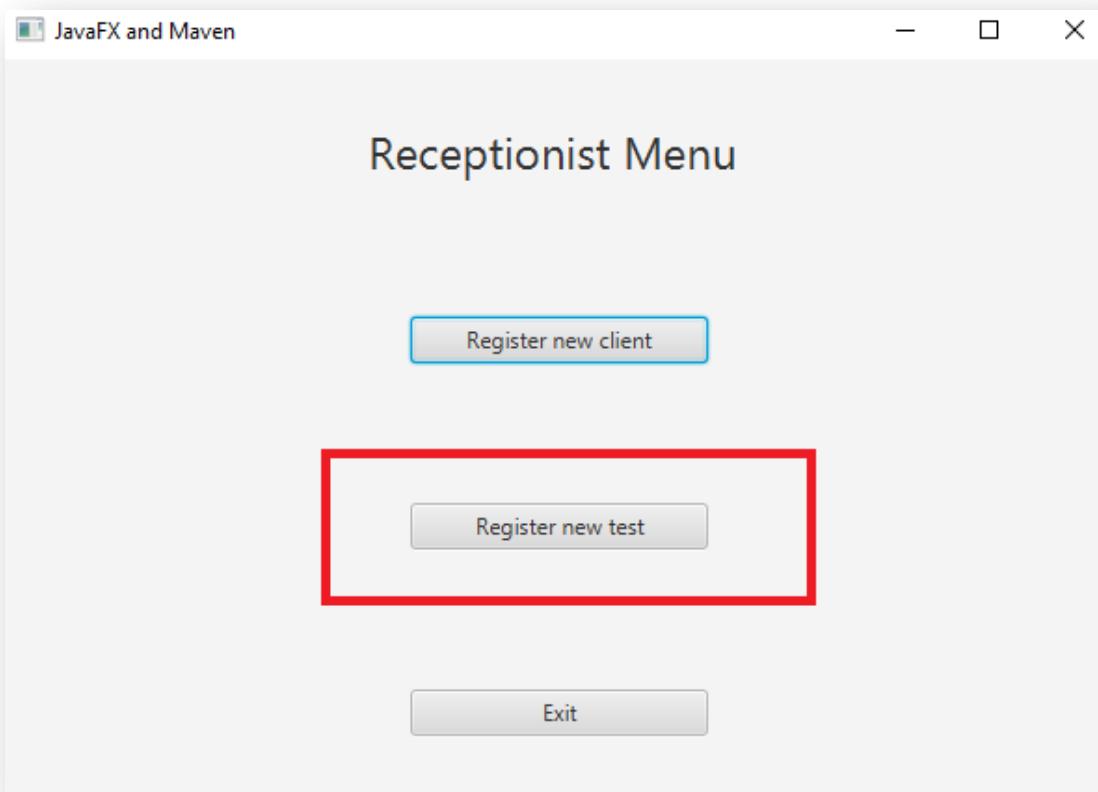
Client: The client who is being tested; it will be identified by its TIN number.

Test Type: Each test is of a test type, covid-19, or blood for example.

Category: Each test has a category, those are presented under the test type, hemogram is a category of blood test, for example.

Parameters: These are the values being tested, the categories have parameters, hemogram for example has red blood cells and white blood cells.

To start registering a test, press “Register new test”.



Next the application will ask for the test's NHS code and the Client's TIN number If the client is not found or the NHS code is already registered you can still try to introduce valid values.

```
Please introduce the following data
Test's NHS code(must be composed of 12 alphanumeric chars)
123456123456
Client's TIN
1234567890

Something went wrong!
This issue is caused when:
1)Client does not exist
2) Test code already registered

Please introduce the following data
Test's NHS code(must be composed of 12 alphanumeric chars)
```

If the values are introduced correctly, the system will demand the user to select a type of test by introducing its code, if the input is a non-existing test type it will allow the user to keep trying until a correct test type is selected.

```
Please introduce the following data
Test's NHS code(must be composed of 12 alphanumeric chars)
112233445566
Client's TIN
1122334455

TestType Code: tt001
Description: CovidTest

TestType Code: tt002
Description: BloodTest

Select a TestType by introducing its code:
```

After selecting the test type, the user will introduce the category's code just like the test type code.

```
TestType Code: tt001
Description: CovidTest

TestType Code: tt002
Description: BloodTest

Select a TestType by introducing its code:
tt002

ParameterCategory Code: pc002
Description: Hemogram

Select a Category by introducing its code:
```

Once the category is chosen, the user can add which of its parameters will be tested by introducing its code, to add another parameter input “1”, to stop adding them input “-1”.

```
Select a Category by introducing its code:  
pc002  
  
Parameter Code: RBC00  
Description: rbc  
Category Description: Hemogram  
  
Parameter Code: WBC00  
Description: wbc  
Category Description: Hemogram  
  
Parameter Code: PLT00  
Description: Platelets  
Category Description: Hemogram  
  
Select a Parameter by introducing its code:  
RBC00  
Add another parameter?  
1) Yes  
-1) No  
-1
```

Once all the information is introduced, the created test will be shown, and the system will ask for confirmation to save it. To save the test, input “1”, to delete the test input “-1”. If the user decides to save the test, it will be added to the list of tests in the system.

TEST CREATED

Test Code: 000000006078
NHS code: 112233445566
Client's name: Carlos
TestType: BloodTest
Category: Hemogram
Parameters: [Parameter
Code: RBC00 Description: rbc Category id: pc002]

Save this Test?

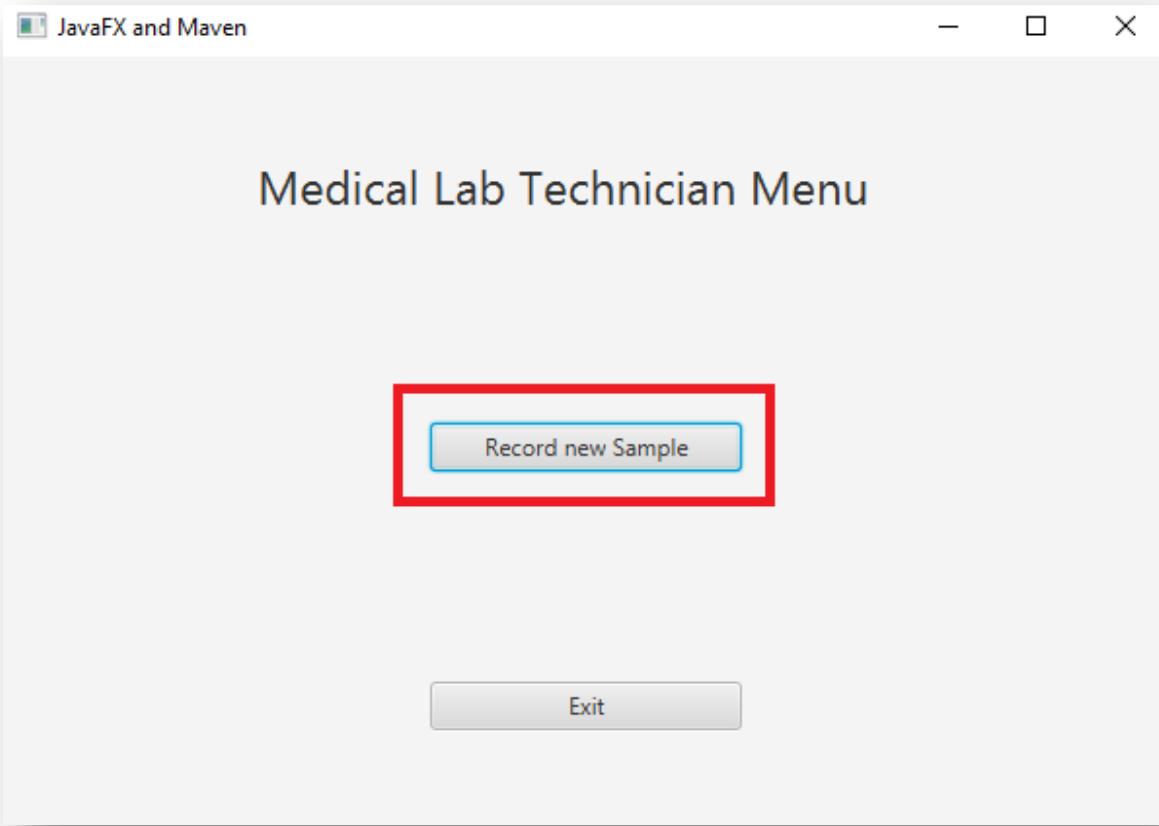
- 1) Yes
- 1) No

1

User Story 5: Register samples of a test

This functionality can only be accessed by a Medical Lab Technician, it allows the user to register samples and generate barcodes for a registered test and makes use of an external API called Barbecue to generate them.

To record a new sample press “Record new Sample”.



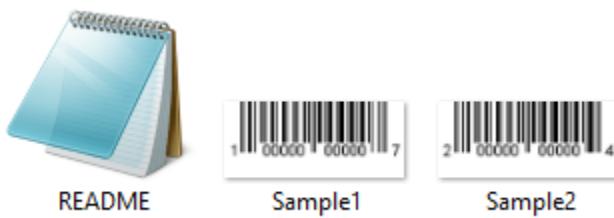
A list with test without samples recorded will appear, to select one just introduce the number next to the test, introduce 0 to cancel the operation. If there are no tests without samples the list will be empty.

```
Tests:  
1 - Test: Code = 00000003201 NHS Code = 888877776666 Description = Blood  
Test Type: Code = tt002 Description = BloodTest Collect method = Blood  
Client: Name = Amogus  
Parameters = Code = RBC00 Description = rbc Category description = Hemogram  
  
0 - Sair  
  
Choose an option:  
1
```

Next the user must introduce how many samples are being recorded, the numbers generated for the samples will be shown.

```
Insert the number of samples associated to the chosen test:  
2  
Barcode Number: 100000000000  
Barcode Number: 200000000000  
The samples were recorded successfully.
```

An image with the barcode will be created in the App's folder.



User Story 7: Register a new employee

This functionality can only be accessed by an Administrator, it allows the user to register a new employee.

The Employee created have the following attributes:

Each user must have a single role defined in the system.

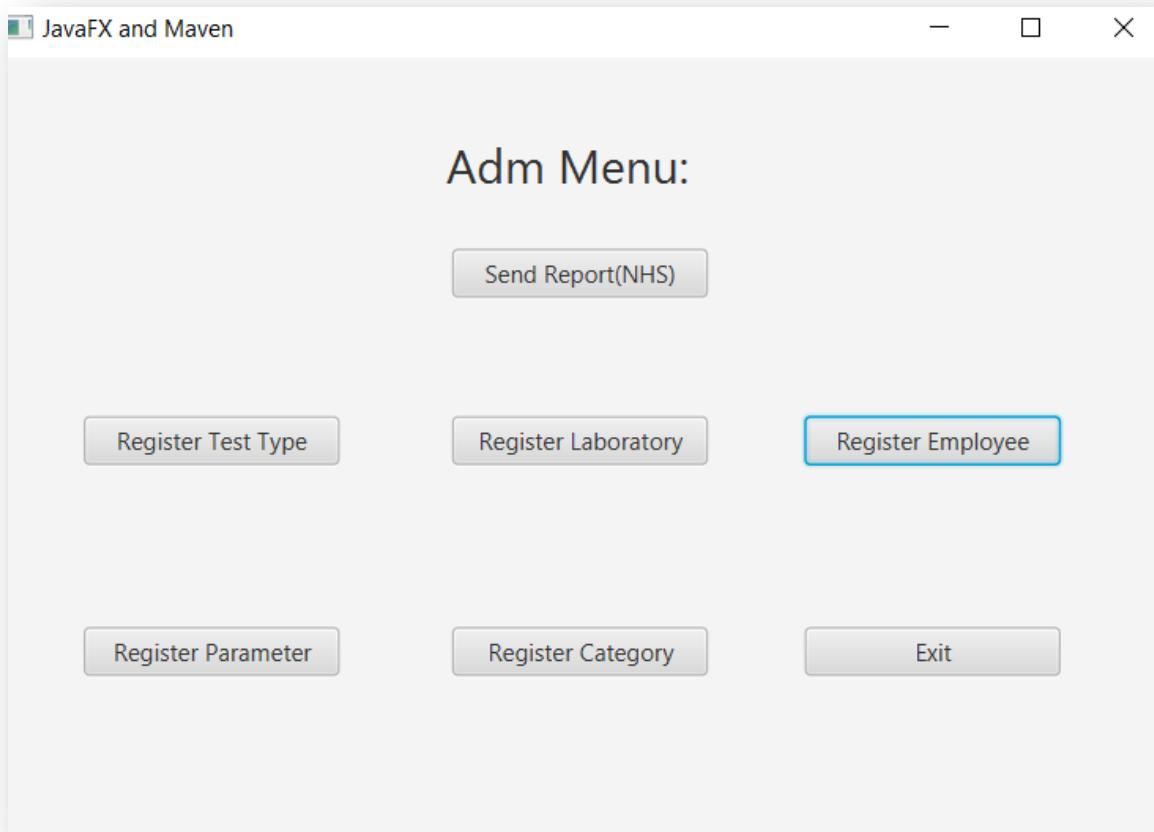
Email: Must be unique

PhoneNumber: Must have 11 digits, there can be no more than a single Employee with the same PhoneNumber, it is unique.

Name: No more than 35 characters.

Address: Cannot be blank

To start registering an employee, press “Register Employee”.



Next the application will assign the employee in a role, it must be:

ADMINISTRATOR, CLINICAL CHEMISTRY TECHNOLOGIST, SPECIALIST DOCTOR,
LABORATORY COORDINATOR, MEDICAL LAB TECHNICIAN, RECEPTIONIST.

```
REGISTER A NEW EMPLOYEE:

Roles:
•ADMINISTRATOR
•CLINICAL CHEMISTRY TECHNOLOGIST
•SPECIALIST DOCTOR
•LABORATORY COORDINATOR
•MEDICAL LAB TECHNICIAN
•RECEPTIONIST

Write the employee role description:
ADMINISTRATOR|
```

Then the system will ask for the Name with no more than 35 characters.

```
Insert employee's name:Joao
```

After that the system will require an Address.

```
Insert employee's address:Rua do Pinto
```

Finishing the Address, the system also needs the phone number that must be 11 digits.

```
Insert employee's phone number (must have 11 digits): 00099988877
Insert employee's email:|
```

And finally, the Email that needs to follow the conventional email creation.

```
Insert employee's phone number (must have 11 digits): 00099988
Insert employee's email:pinto@ola.pt
```

Once all the information is introduced, the Employee being created will be shown. Then the system will ask you to save it, “1” to save and “-1” to delete.

```
Employee:
Organization Role: ADMIN
Name: Joao
Address: Rua do Pinto
Phone Number: 00099988877
Email: pinto@ola.pt
Standard Occupational Code: Par12

Save?(1 to confirm 0 to delete)
1
Success
```

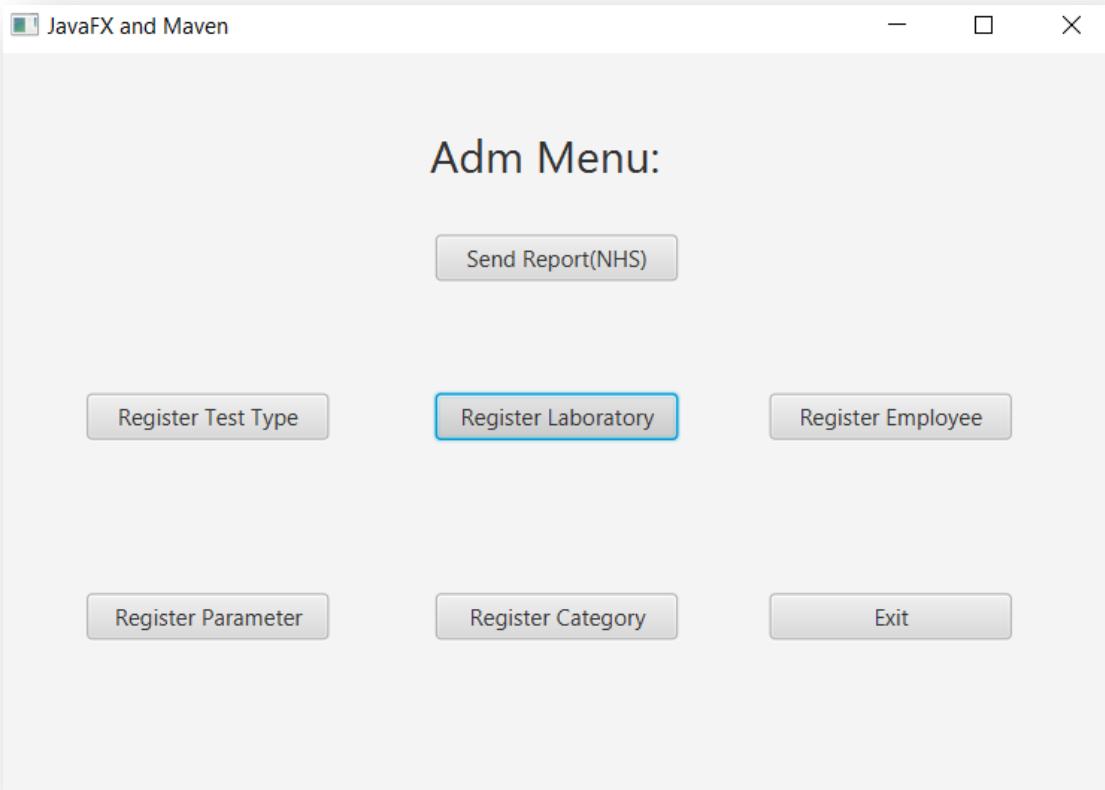
User Story 8: Register a new Laboratory and specify test type(s) to be performed

This functionality can only be accessed by an Administrator, it allows the user to register a new Laboratory.

The laboratory created have the following attributes:

- LaboratoryID: 5 alphanumeric characters, there can be no more than a single Lab with the same LaboratoryID, it is unique;
- TIN: Must have 10 digits, there can be no more than a single Lab with the same TIN number, it is unique;
- TestType: Each Lab needs to have at least 1 test type, covid-19 or blood for example;
- PhoneNumber: Must have 11 digits, there can be no more than a single Lab with the same PhoneNumber, it is unique;
- Name: No more than 20 characters;
- Address: No more than 30 characters, there can be no more than a single Lab with the same Address, it is unique.

To start registering a Lab, press “Register Laboratory”.



Next the application will ask for the Lab's LaboratoryID, it must be composed by 5 alphanumeric characters.

```
Please introduce the following data
Clinical Analysis Laboratory ID(must be composed of 5 alphanumeric chars)
LA009|
```

Next the system will require a Name of no more than 20 characters.

```
Clinical Analysis Laboratory Name(must have 1 to 20 chars)
LAB Joao|
```

After that the system will ask for an Address of no more than 30 characters.

```
Clinical Analysis Laboratory Address(must have 1 to 30 chars)
Rua da Madeira
```

Then the Lab's Phone Number needs to be added and it needs to have 11 digits.

```
Clinical Analysis Laboratory Phone(must have 11 digits)
99977755522
```

And finally, the system will ask for the Lab's TIN number of 10 digits.

```
Clinical Analysis Laboratory TIN(must have 10 digits)
2345654321
```

Once all the information is introduced, the Laboratory being created will be shown, the user now has to select the Test Type(s) that will be performed in this Laboratory by introducing number (eg,1,2), to stop adding Test Types input “-1”. When -1 is selected the user will have the option to save the test type in the system by selecting “1” or “0” to delete.

```
Clinical Analysis Laboratory
LabID: LA009
Name: LAB Joao
Address: Rua da Madeira
PhoneNumber: 99977755522
TIN: 2345654321
```

```
Chose which Test Type will be given to the new Laboratory:
```

- 0) CovidTest
- 1) BloodTest

```
0
```

```
-1
```

```
Save?(1 to confirm 0 to delete)
```

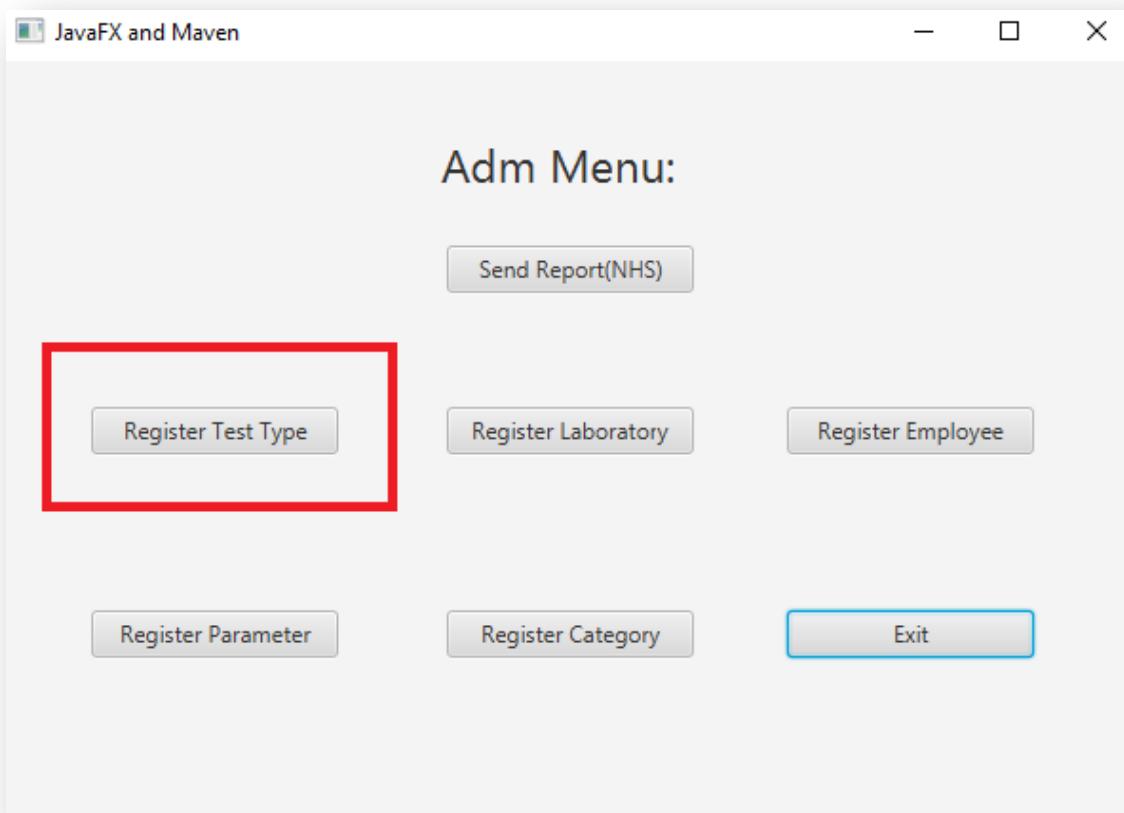
User Story 9: Register a new Test Type and its collecting methods

This functionality can only be accessed by an Administrator, it allows the user to create a test type.

For the creation, test types have the following attributes:

- Code: 5 alphanumeric characters;
- Description: A short description of the type of test;
- Collecting methods: How sample for this test can be collected;
- Categories: The categories presented under this type of test.

To start registering a test type, press “Register Test Type”.



Next the application will ask for the test type's code, it must be composed by 5 alphanumeric characters.

```
Please introduce the following data
Test type's code(must be composed of 5 alphanumeric chars)
tt004|
```

Next the system will require a short description composed of a maximum of 15 characters.

```
Please introduce the following data
Test type's code(must be composed of 5 alphanumeric chars)
tt004
Test type's description(must have 1 to 15 chars)
UrineTest|
```

Finally, the user must introduce the collecting methods, it has a maximum of 15 characters.

```
Please introduce the following data
Test type's code(must be composed of 5 alphanumeric chars)
tt004
Test type's description(must have 1 to 15 chars)
UrineTest
Test type's collecting methods(must have 1 to 20 chars)
Urine_Sample|
```

Once these informations are introduced, the test type being created will be shown, the user now has to select the categories that will be measured in this test type by introducing their codes, to stop adding categories input “-1”. When -1 is selected the user will have the option to save the test type in the system.

```
Test type
TestType Code: tt004
TestType Description: UrineTest
TestType Collecting methods: Urine_Sample

Chose which categories will be given to the new test type:

-1)Done

0)
Parameter Category #pc001
Covid
NHS id:nhs001

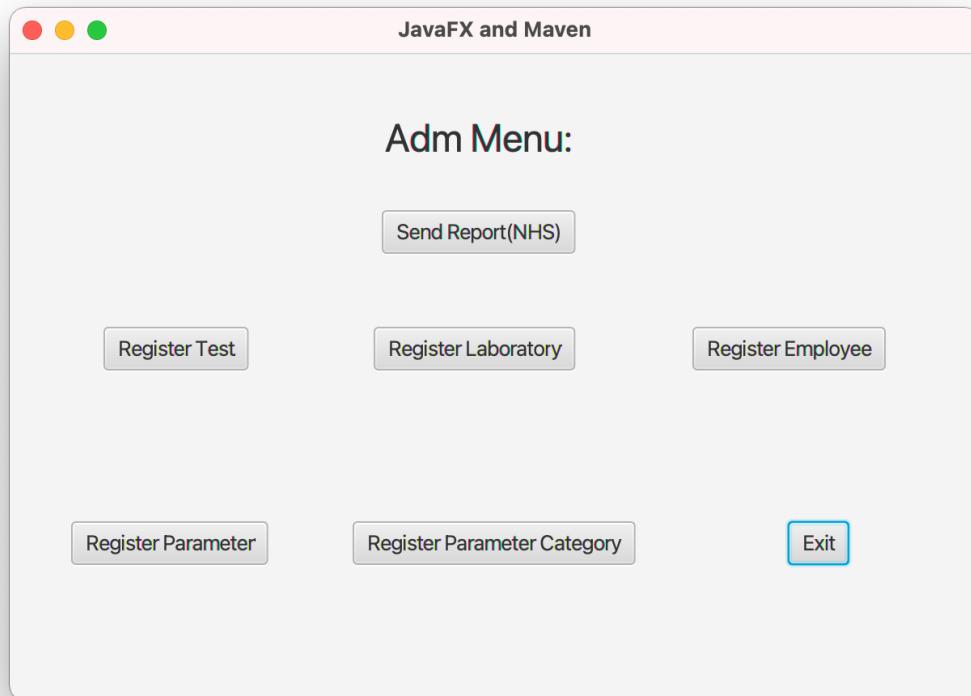
1)
Parameter Category #pc002
Hemogram
NHS id:nhs002

0
1
-1
Save the new Test Type?(1 to confirm 0 to delete)
1
```

User Story 10: As an administrator, I want to specify a new parameter and categorize it

This functionality can only be accessed by the Administrator, it allows the creation of a new parameter and categorizes it.

After signing in, this window will show up.



To specify a new parameter, you must click on “Register Parameter”. Then, you’ll need to answer a few questions for the parameter creation to complete successfully.

The first one is the code that will identify the parameter:

```
Please introduce the following data in order to create a new parameter
Please introduce the code that will identify this parameter
1313
```

The second one is a short description:

```
Parameter's description must be composed by 1 to 40 chars
Test
```

And, the last one is the one that allows you to categorized your new parameter.

```
Choose which category will be given to the parameter created
Category: Covid      Code      pc001
Category: Hemogram   Code      pc002
Enter the code correspondent to the category you want
pc001
```

After that, you'll be able to see the information displayed as shown below. If it's everything ok then you write 1 (one) to save or 0 (zero) to delete and start again a new one.

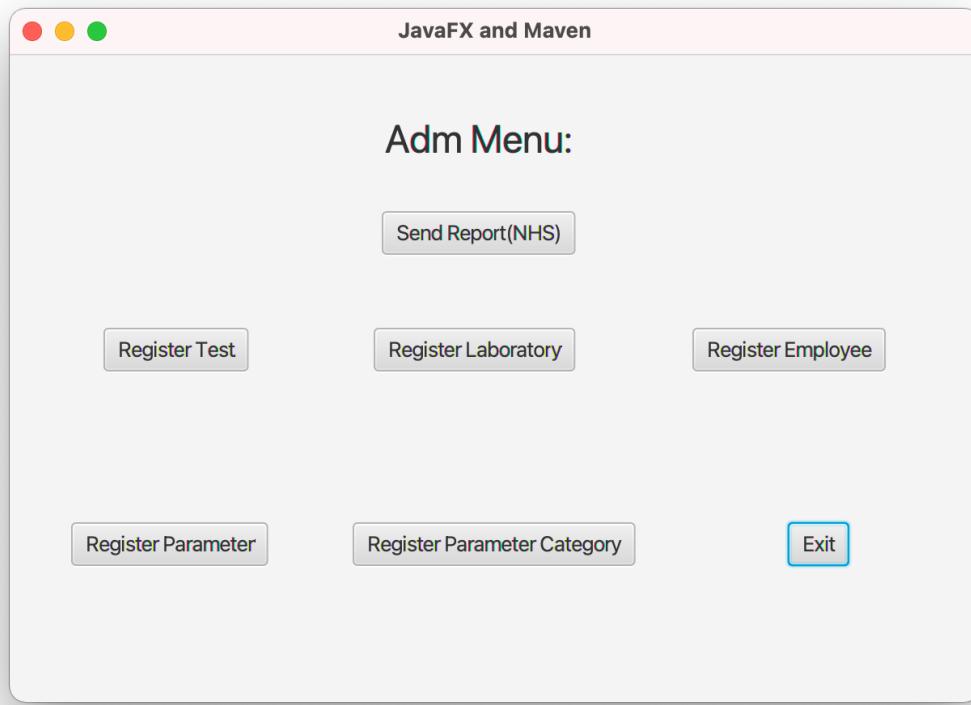
```
### Parameter ####
Code: 1313Description:
Test
Category: Parameter Category #pc001
Covid
NHS id:nhs001

Save?(1 to confirm 0 to delete)
1
```

User Story 11: As an administrator, I want to specify a new parameter category

This functionality can only be accessed by the Administrator, it allows the creation of a new parameter category.

After signing in, this window will show up.



To specify a new parameter category, you must click on “Register Parameter Category”.

Then, you'll need to answer a few questions for the parameter category creation to complete successfully.

The first one is the code that will identify the parameter category:

Please introduce the following data

Parameter category's code(must be composed of 4 to 8 alphanumeric chars)

pc013

The second one is a short description:

Parameter category's description(must have 1 to 40 chars)

PC

And the last one is the NHS ID:

Parameter category's NHS id(must have 4 to 8 chars)

12345

After that, you'll be able to see the information displayed as shown below.

ParameterCategory Code: pc013

ParameterCategory Description: PC

ParameterCategory NHS id: Test

Once you are creating a new parameter category, it'll ask you if you want to add any parameters to this category. If yes, you enter the number but, in this case, we choose “-1” to complete the creation without any parameter associated.

Choose which parameters will be given to the new parameter category:

-1) Done

0)

Parameter

Code: IgGAN Description: CovidPositive Category id: pc001

1)

Parameter

Code: RBC00 Description: rbc Category id: pc002

2)

Parameter

Code: WBC00 Description: wbc Category id: pc002

3)

Parameter

Code: PLT00 Description: Platelets Category id: pc002

4)

Parameter

Code: 1313 Description: Test Category id: pc001

-1

If it's everything ok, then you write 1 (one) to save or 0 (zero) to delete and start again a new one.

```
Save the new Parameter Category?(1 to confirm 0 to delete)
```

```
1
```

```
Success
```

In the end, will be displayed every parameter category that exists in our system.

```
Parameter Category #pc001
Covid
NHS id:nhs001
[Parameter
Code: IgGAN    Description: CovidPositive    Category id: pc001]

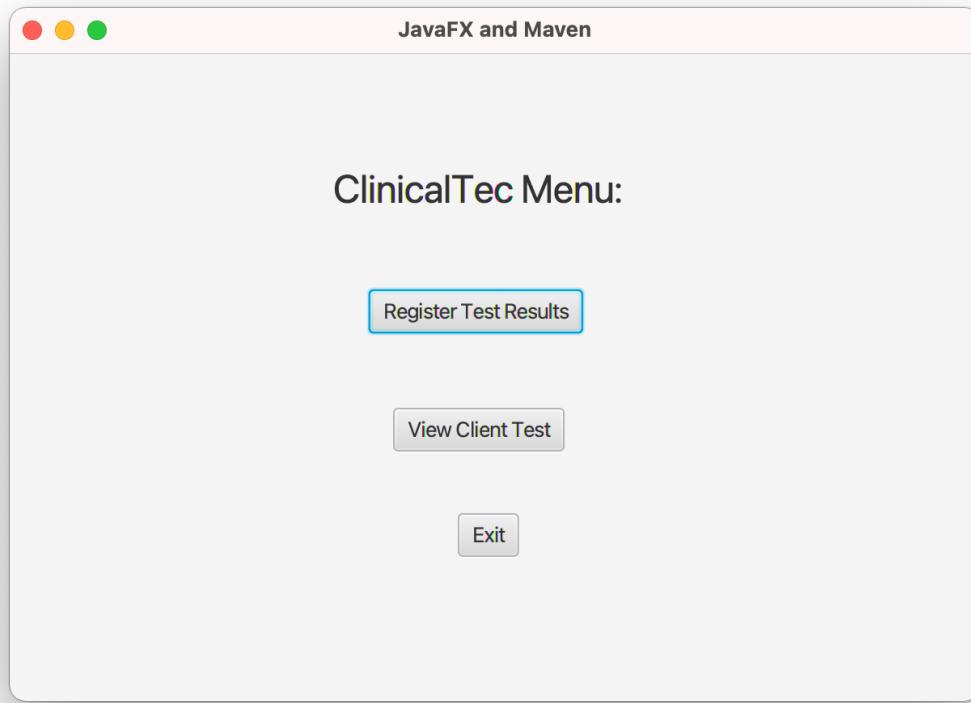
Parameter Category #pc002
Hemogram
NHS id:nhs002
[Parameter
Code: RBC00    Description: rbc    Category id: pc002, Parameter
Code: WBC00    Description: wbc    Category id: pc002, Parameter
Code: PLT00    Description: Platelets    Category id: pc002]

Parameter Category #pc013
PC
NHS id:Test
[]
```

User Story 12: As a clinical chemistry technologist, I intend to record the results of a given test

This functionality can only be accessed by a Clinical Chemistry Technologist, it allows the user to record the results of a test.

After signing in, this window will show up.



Now, the first option “Register Test Results” must be selected to be able to record the results of a given test.

Then, you'll need to answer a few questions for the parameter category creation to complete successfully.

The first one is the barcode number that will identify the sample:

Please introduce the sample barcode number
10000000000

Will be displayed the information about the sample and asked for the result and the metric as shown below.

Parameter Code: IgGAN
Description: CovidPositive
Category Description: Covid
Result:
0
Metric:
ml

To finish, the information will be displayed with the minimum and maximum reference values, and you must choose to save (1) or delete (0) the results.

TEST RESULTS

Parameter: CovidPositive

Parameter Test Results:

Result: 0

Metric: ml

Reference Value: Parameter Code: IgGAN

Min reference value: 0.000000

Max reference value: 1.400000

Used Metric: Index (S/C) Value

Date: 19 6 2021

Save this Test?

1) Yes

-1) No

1

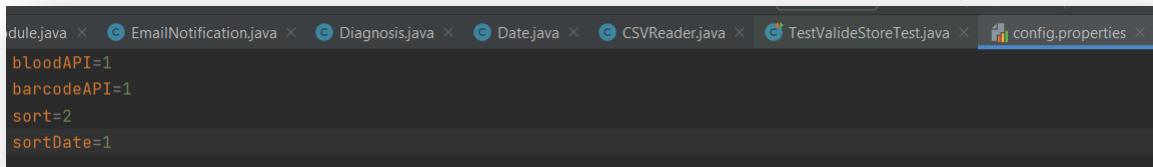
Results registered

User Story 13: As a clinical chemistry technologist, I intend to check the test results of the clients

This functionality can only be accessed by a Clinical Chemistry Technologist, it allows the user to check the test results of a given client, he also can order the clients by Name or Tin by using the configuration file.

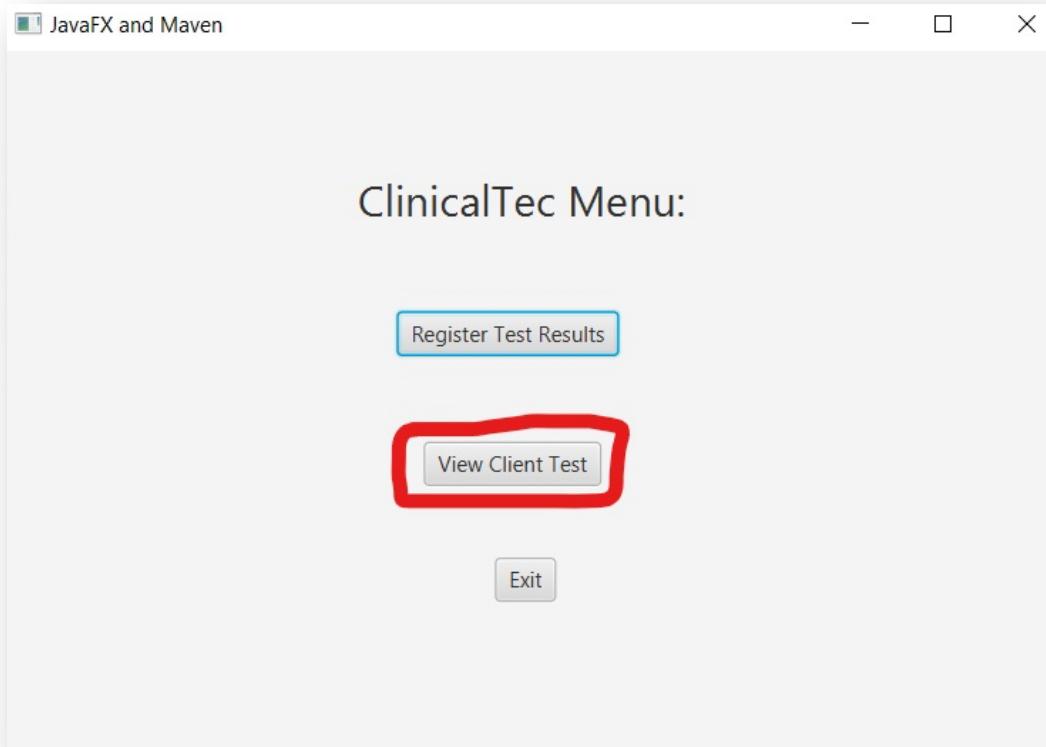
“sort=2” ordering by TIN

“sort=1” ordering by Name



```
bloodAPI=1
barcodeAPI=1
sort=2
sortDate=1
```

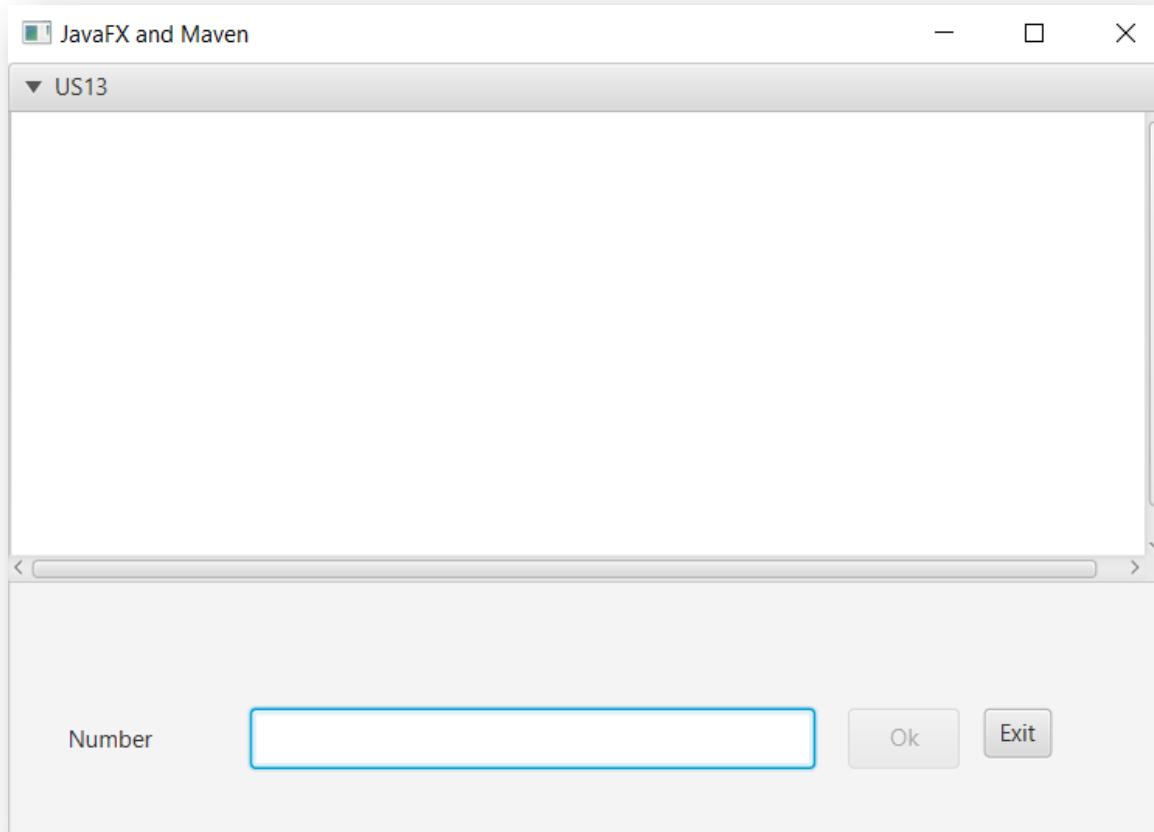
After signing in, this window will show up.



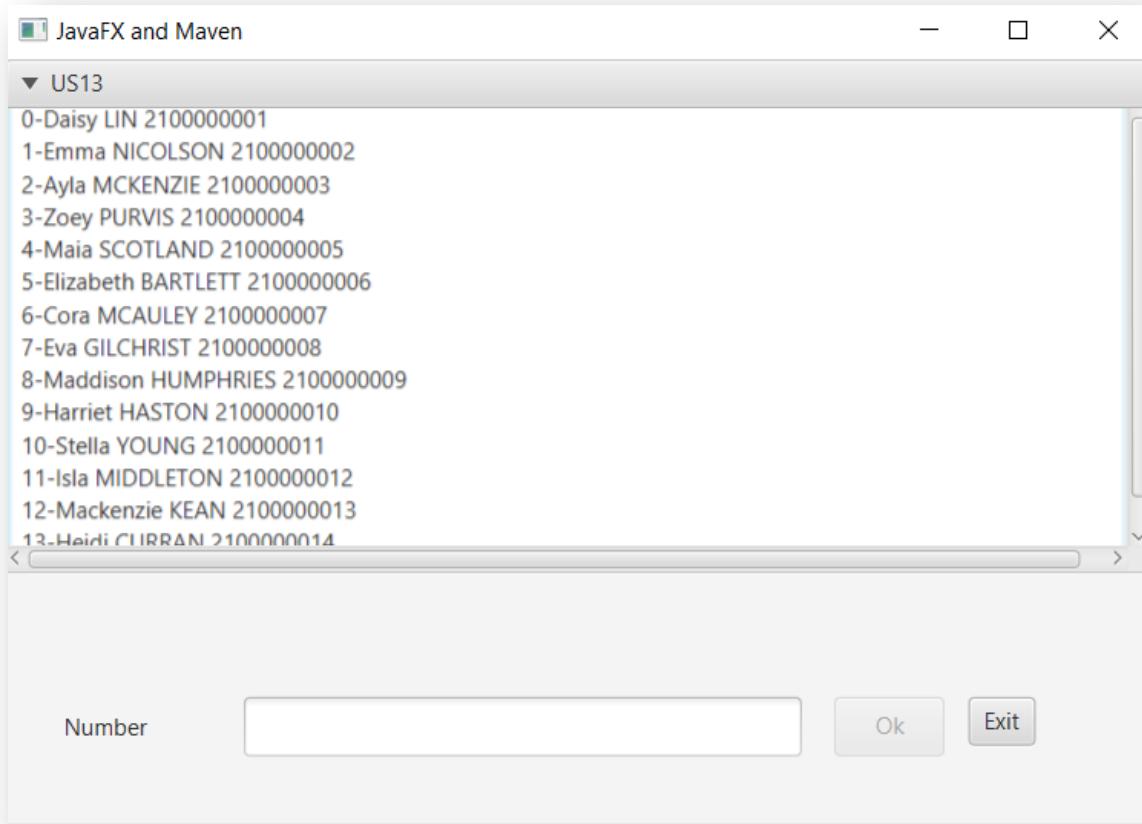
To see the client's test result, you will need to select the “View Client Test” button.

The “Exit” button is to go back.

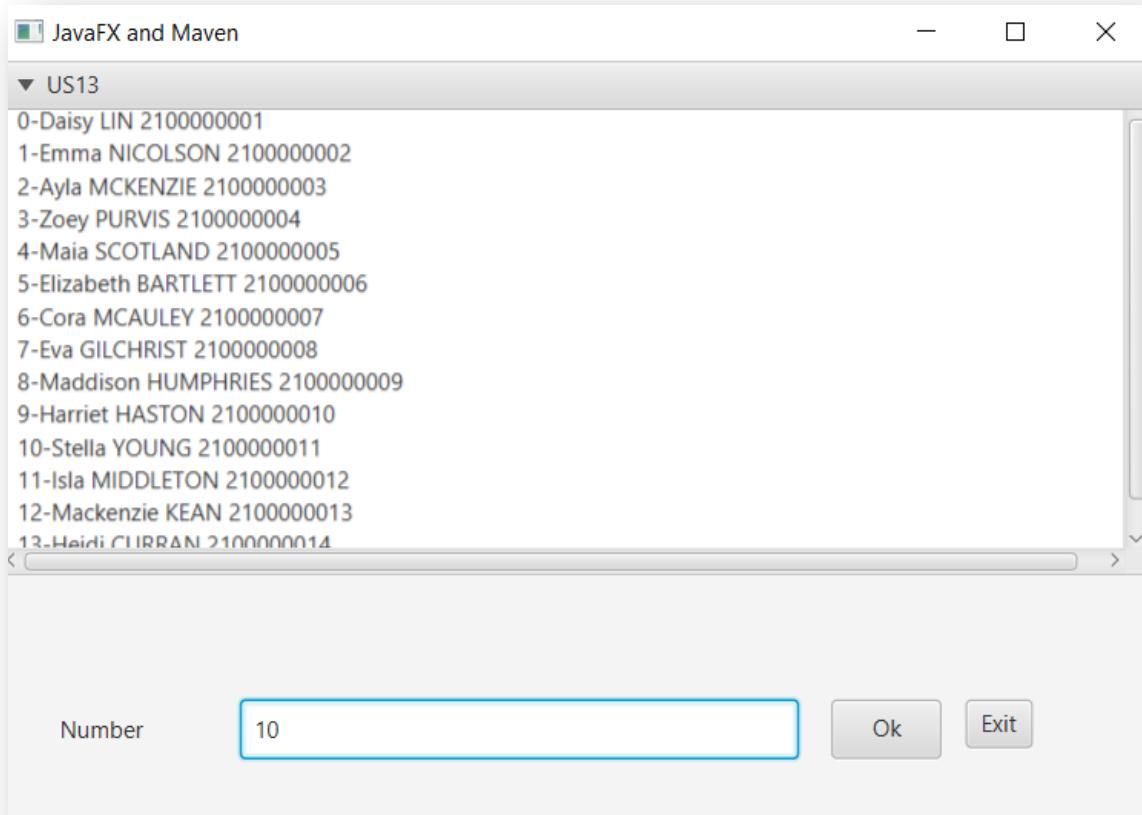
This is what you will see after pushing the button:



In this page you will see a blank text field where all the Clients that have validated Tests be shown in order or by Name or by TIN, to see the clients you need to click the blank area.

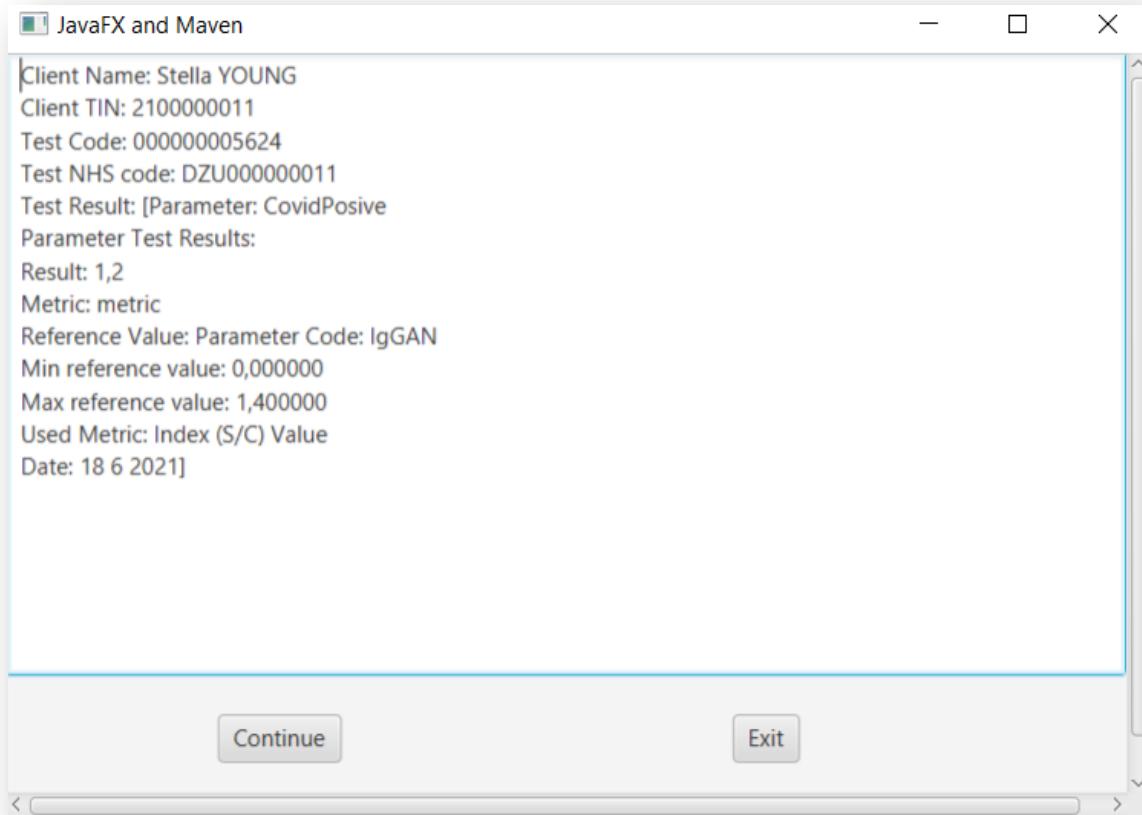


After the clients are displayed, you will need to select 1 client to see his or hers test result, to do that you need to write the number, before the name of every client in the text field below as shown in the image:



After writing the number of your choice, there is 1 last step to click the “Ok” button that is after writing a number you need to press the “enter” key on the keyboard. And finally click the “Ok” button to see the test results.

The “Exit” button is to go back.



Finally, you can see the client's test results, if you want to see more just push the "Continue" button that will go back to the page where all the clients are displayed.

The "Exit" button is to the Menu Page.

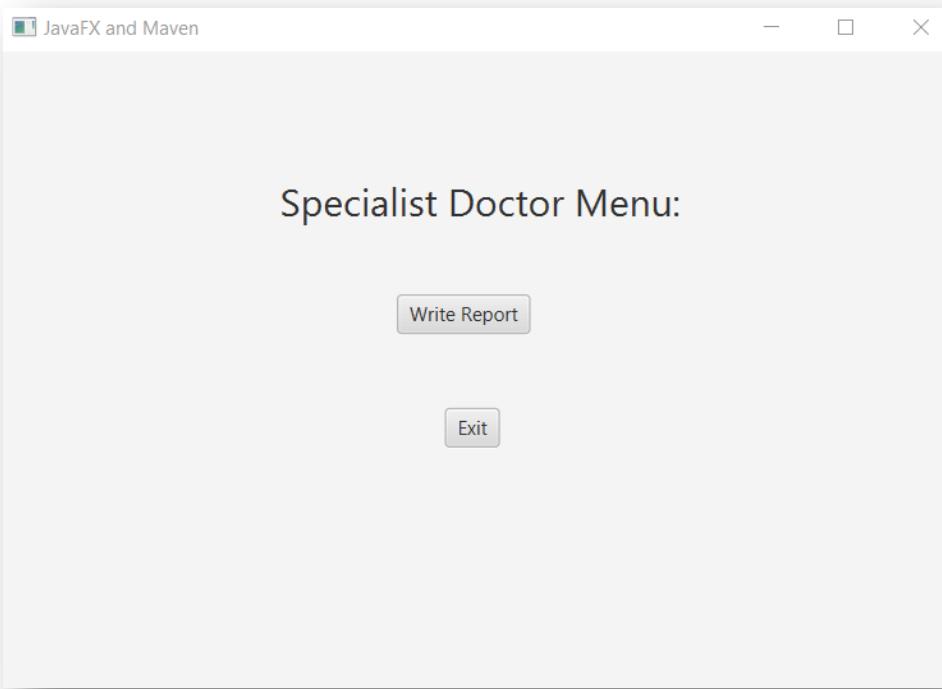
User Story 14: Make a diagnostic and write a report

This functionality can only be accessed by a specialist doctor, it allows the user to make a diagnostic and write a report.

For the creation the report has the following attributes:

- Text- must have until 400 words.

To start registering a test, press “Write Report”.



After choosing the option to write the report, you will be presented with a list of tests available for you to make the report. If no tests appear, then you don't have tests available.

After choosing the test you will be able to write the report. After that, you will be presented with the diagnosis data and the text written by you.

Possible errors:

- If text introduce pass 400 word.

User Story 15: Validating the work done by the clinical chemistry technologist and specialist doctor

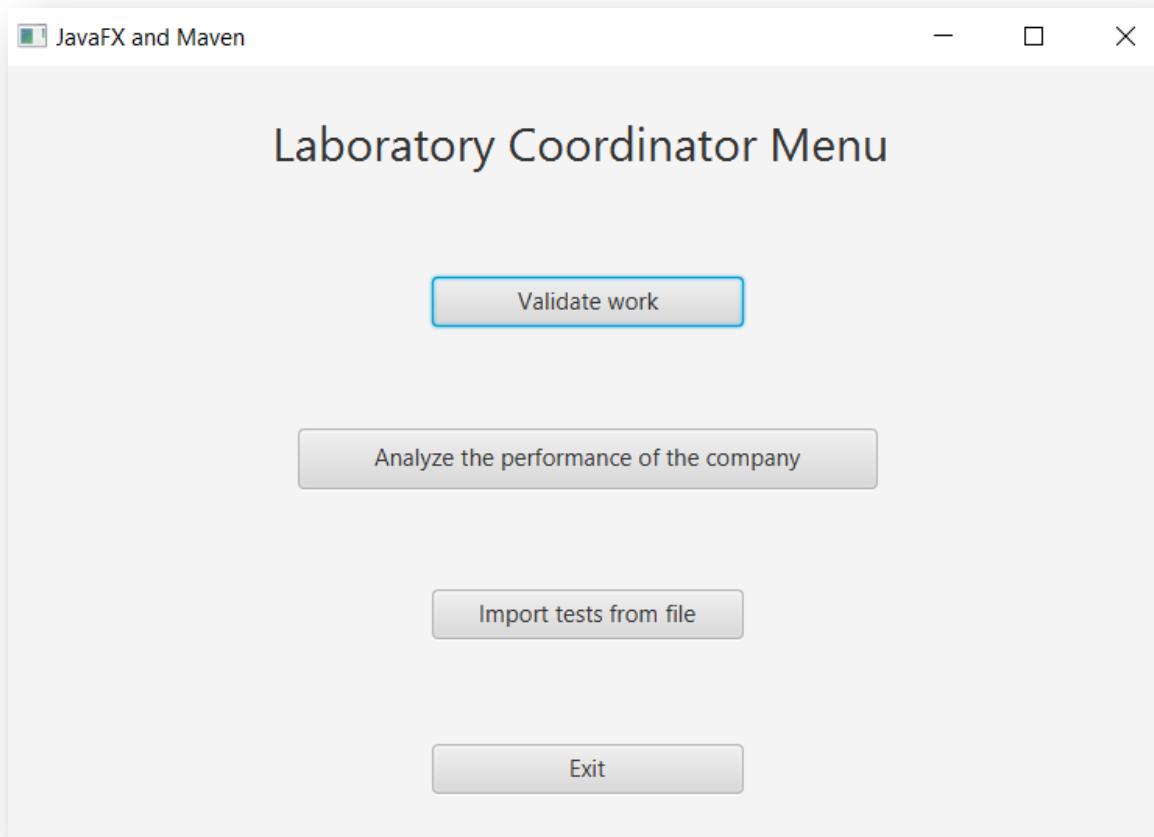
This functionality can only be accessed by a Laboratory Coordinator, it allows the user to validate the work done by the clinical chemistry technologist and specialist doctor.

For the validation there needs to have 2 attributes that are automatically added:

-DateValidation: must be in the conventional date format.

-TimeValidation: must be in the conventional time format

To start validation, press “Validate Work”.



Then the system will require you to choose 1 test to be validated.

```
Type your option:  
1  
Choose which Tests will be Validated:(-1 is to leave)  
0) TestDateDTO{testCode='000000003201', dateDiagnosis='2021/06/20', dateChemAnalysis='2021/06/20', dateSample='2021/06/20', timeSample='16:05:47', timeDiagnosis='16:06:49', timeC
```

To choose 1 test you need to type the first number of the line and you can't type numbers that does not match the first number of the line.

```
0) TestDateDTO{testCode='000000003201'  
0|
```

After finishing this part, the system will ask you to save. To save just type "1" or "0" to delete then if you wish to continue to validate just type "1" or "0" to finish.

```
Choose which Tests will be Validated:(-1  
0) TestDateDTO{testCode='000000003201',  
0  
Save?(1 to confirm 0 to delete)  
1  
Email sent  
Test Code: 000000003201  
NHS code: TT1234567890  
Validation date: 20 6 2021  
Validation time: 16:07:21  
success  
Continue?(1 to confirm 0 to leave)  
|
```

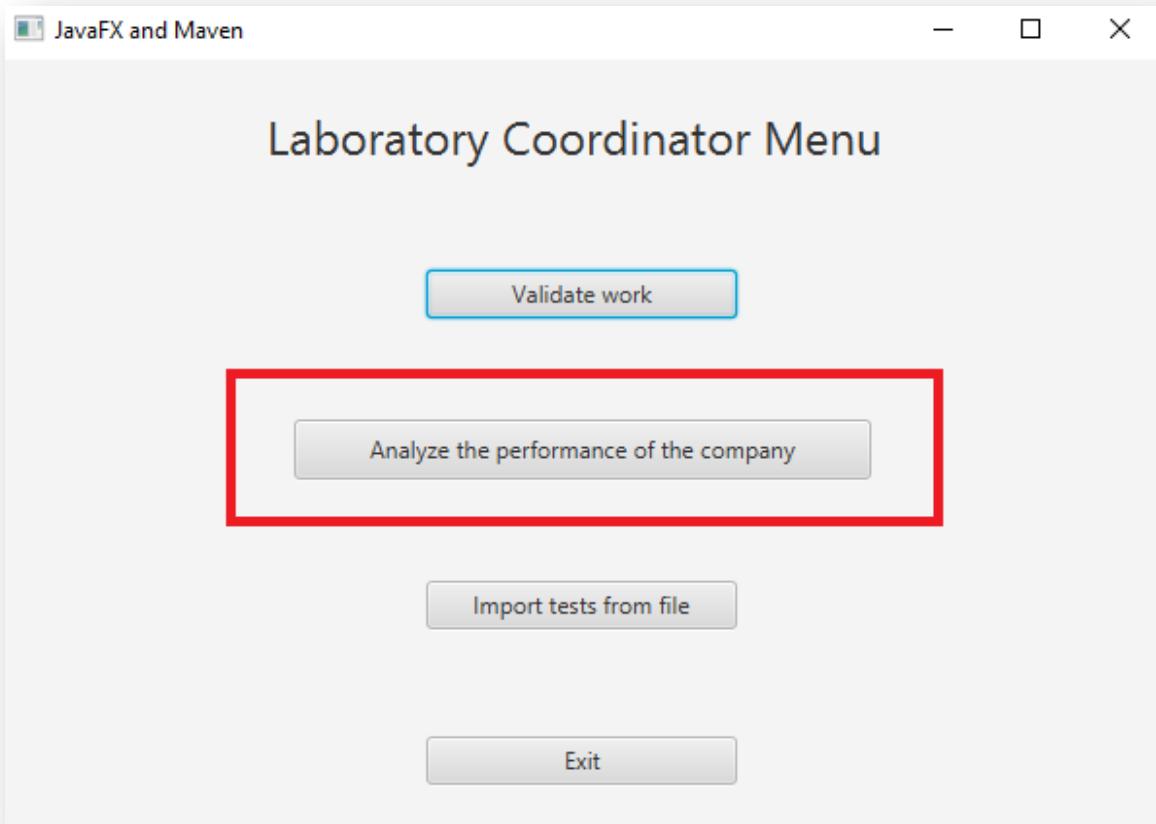
An email will be sent to the client to tell them that they can see the results.

```
Hello. Daisy LIN your results are out you can check them in our website
```

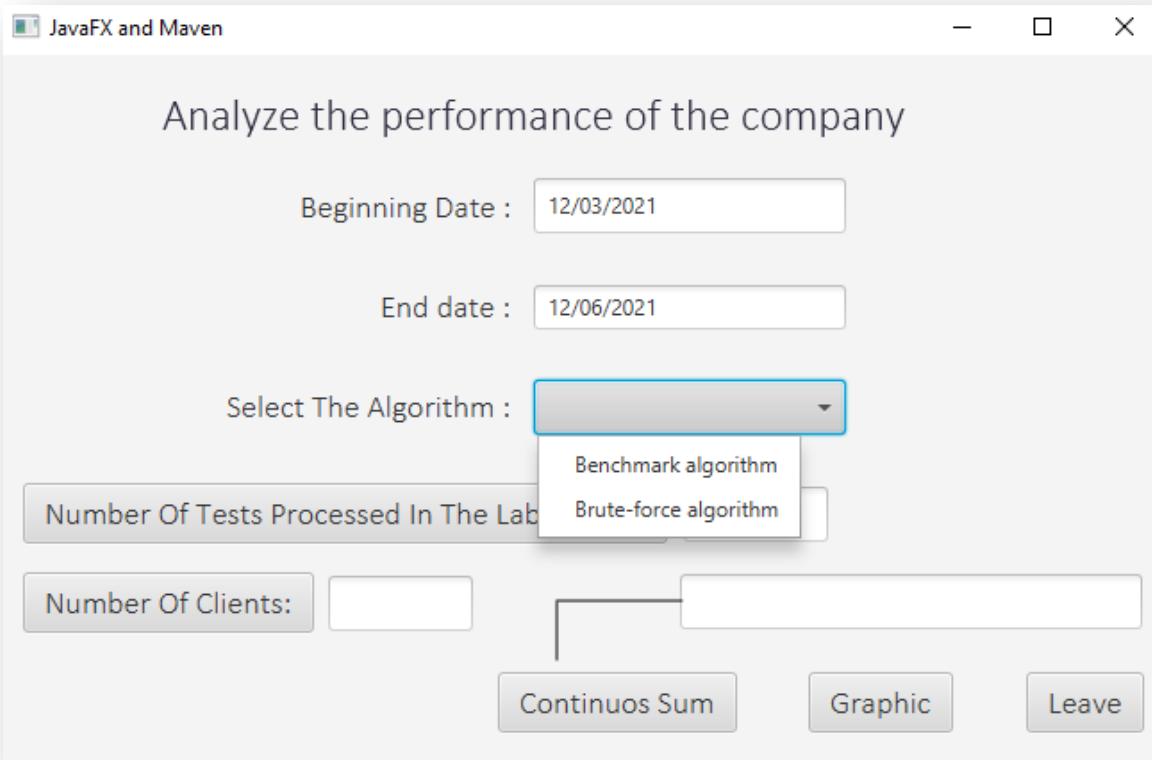
User Story 16: Overview the company's performance

This functionality can only be accessed by a Laboratory Coordinator, it allows the user to check the sub-intervals in which there were more samples waiting for the result. To facilitate overall analysis, the application also displays statistics and graphs. It is possible to check tests in daily, weekly, monthly, and yearly intervals.

To check the performance press “Analyse the performance of the company”.



Once selected the user must select the beginning date, end date and algorithm, if any of this value is invalid an error will occur. The beginning date must be past to the end date.

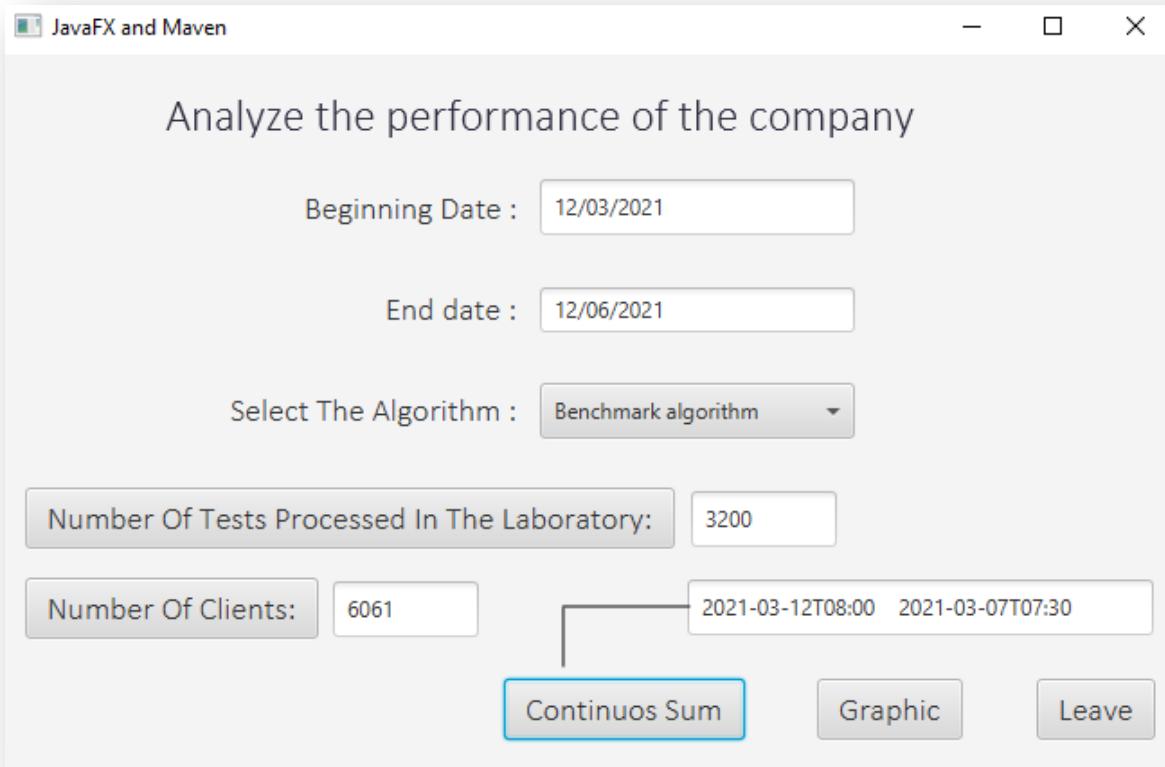


Next press:

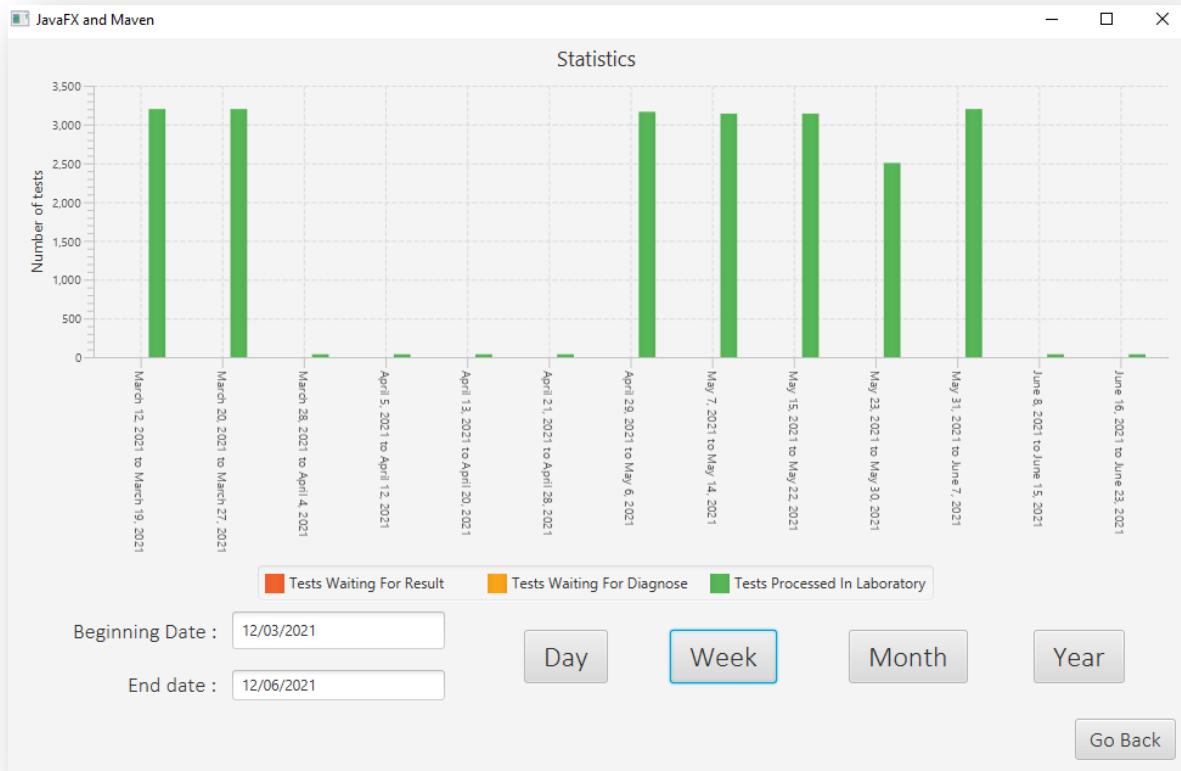
“Number of Tests Processed in the laboratory” to display number of tests.

“Number of Clients” to display the number of clients.

“Continuous Sum” to display the interval of time being analysed.



In order to check the graphic information press “Graphic”, next select the beginning and end dates followed by which interval to see, if “week” is pressed for example the following graphic will be displayed.



User Story 17: Imports tests from a CSV file

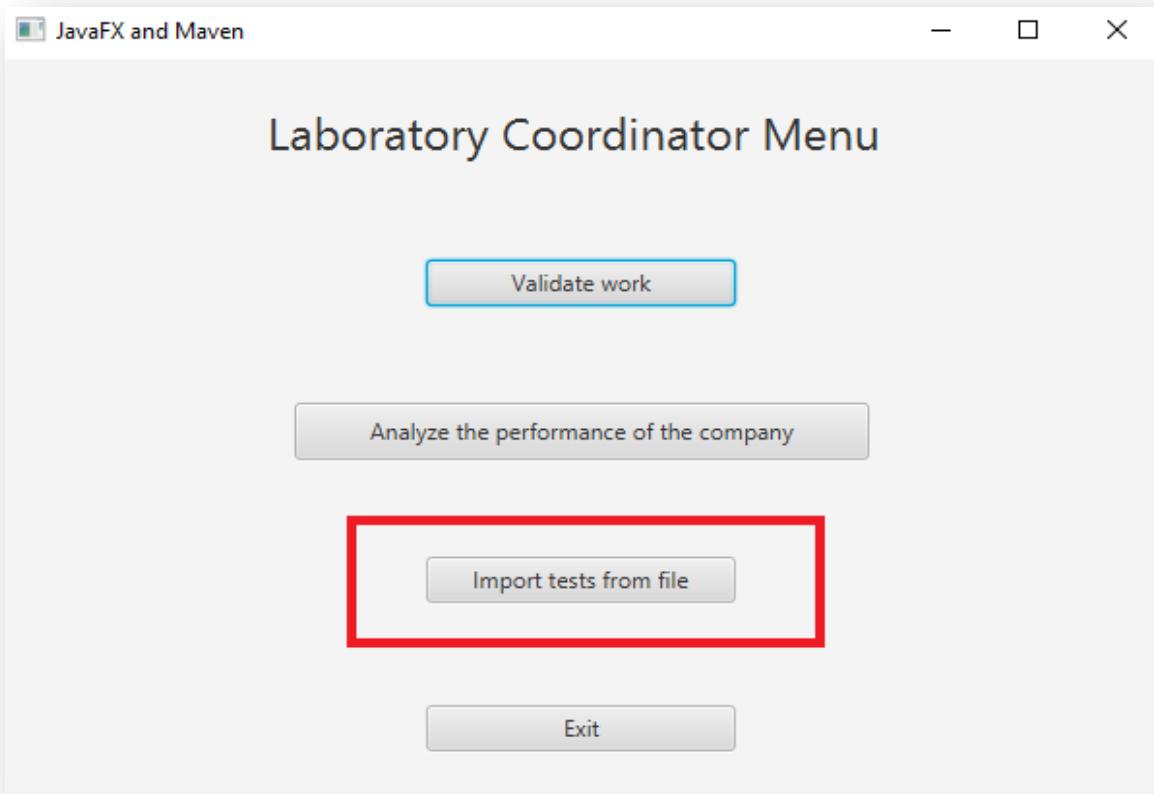
This functionality can only be accessed by a Laboratory Coordinator, it allows the user to import multiple tests from a CSV file.

The line from the file contains the following information, NA if the information does not exist:

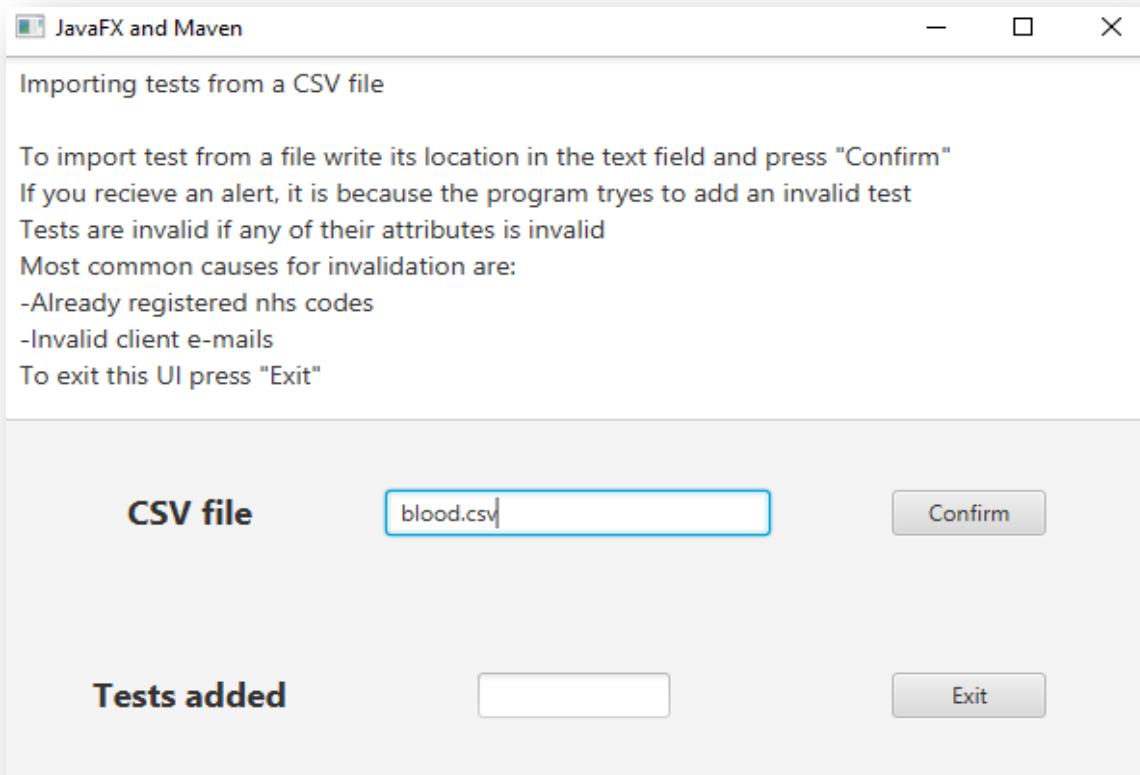
- Test code. Test will not be loaded if this is invalid;
- NHS code: Test will not be loaded if this is invalid;
- Lab id: Test will not be loaded if this is invalid;
- Client CC;
- Client's NHS number;
- Client tin: If client does not exist it will be created using the information from the file;
- Client birth;
- Client phone;
- Client name;
- Client email;
- Client address;
- Test type;
- Category (blood);
- HBO result;
- WBC result;
- PLT result;
- RBC result;
- Category (cholesterol);
- HDL result;
- Category (covid);

- IgGAN result;
- Date/hour of sample collection: If valid barcodes are generated;
- Date/hour of analysis: If valid the results are loaded;
- Date/hour of diagnosis: If valid a diagnosis is generated;
- Date/hour of validation: If valid the test will be added to valid test list.

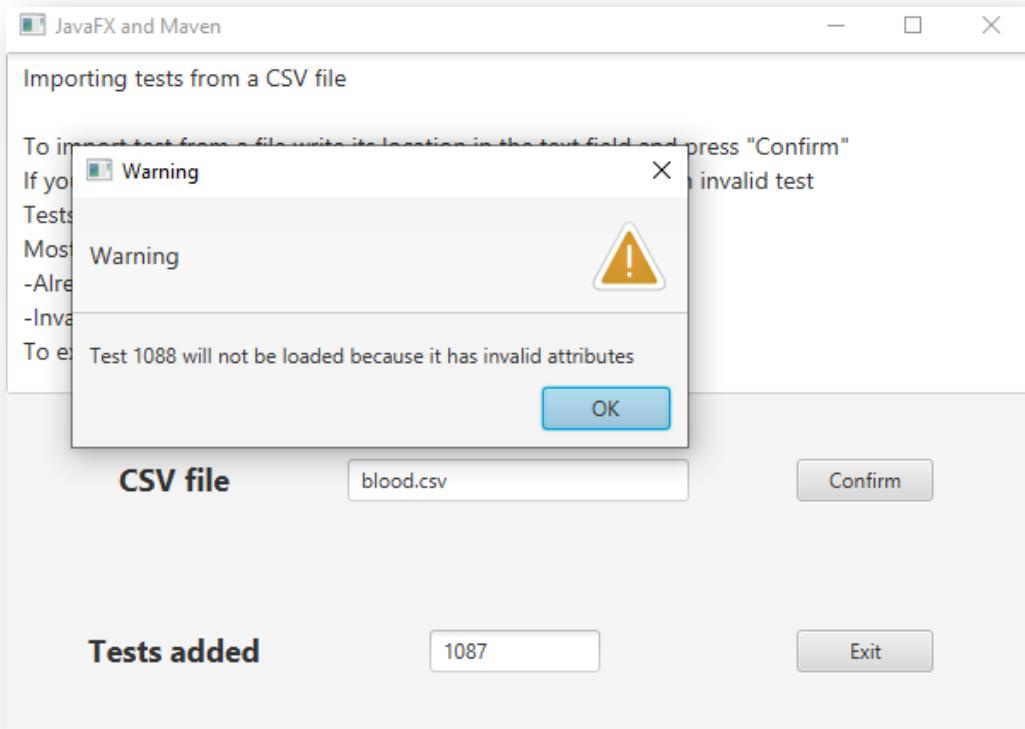
To start importing tests, press “Import tests from file”.



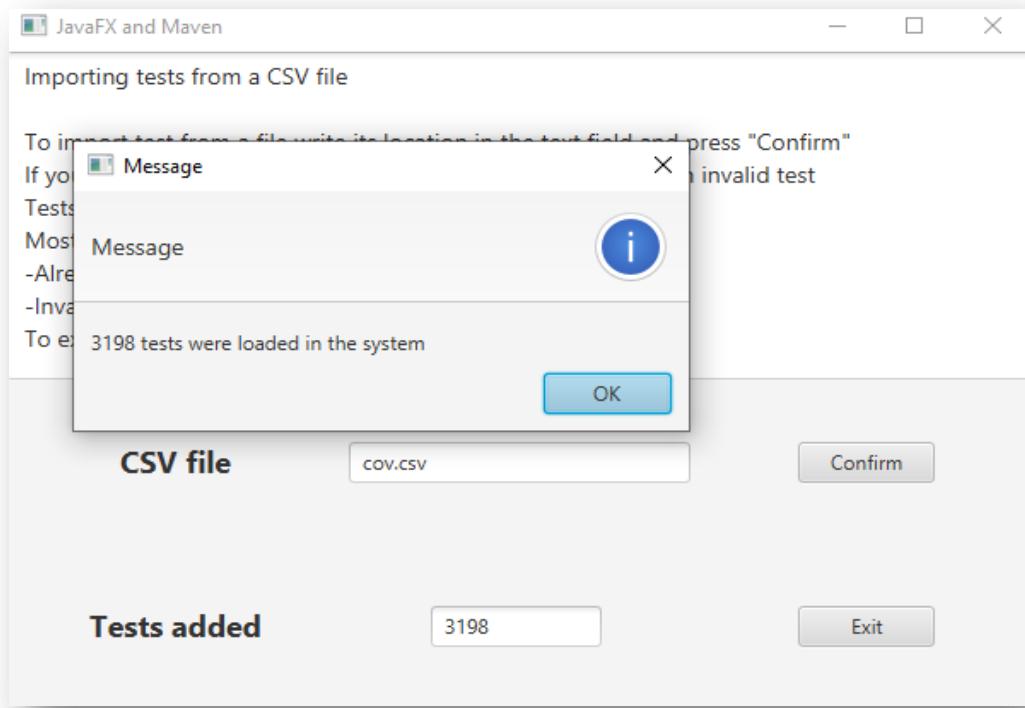
Next the user must choose which file to import the tests from.”. Once the file’s path is written, press “Confirm”.



Now the app will start reading the lines from the file and creating tests with the information given, if the client is not found then it will be created with the file's information.



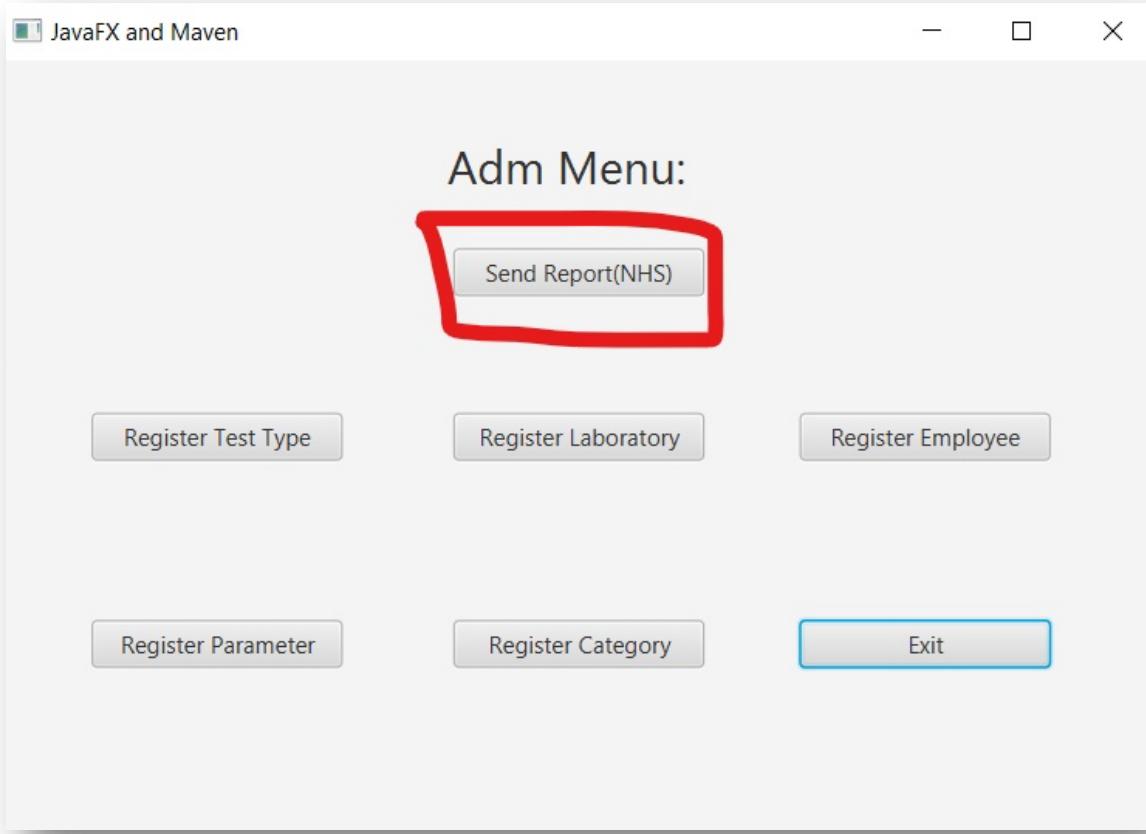
Once all lines were read the app will inform how many of the tests were added.



User Story 18: Sending report of covid cases to the NHS at anytime

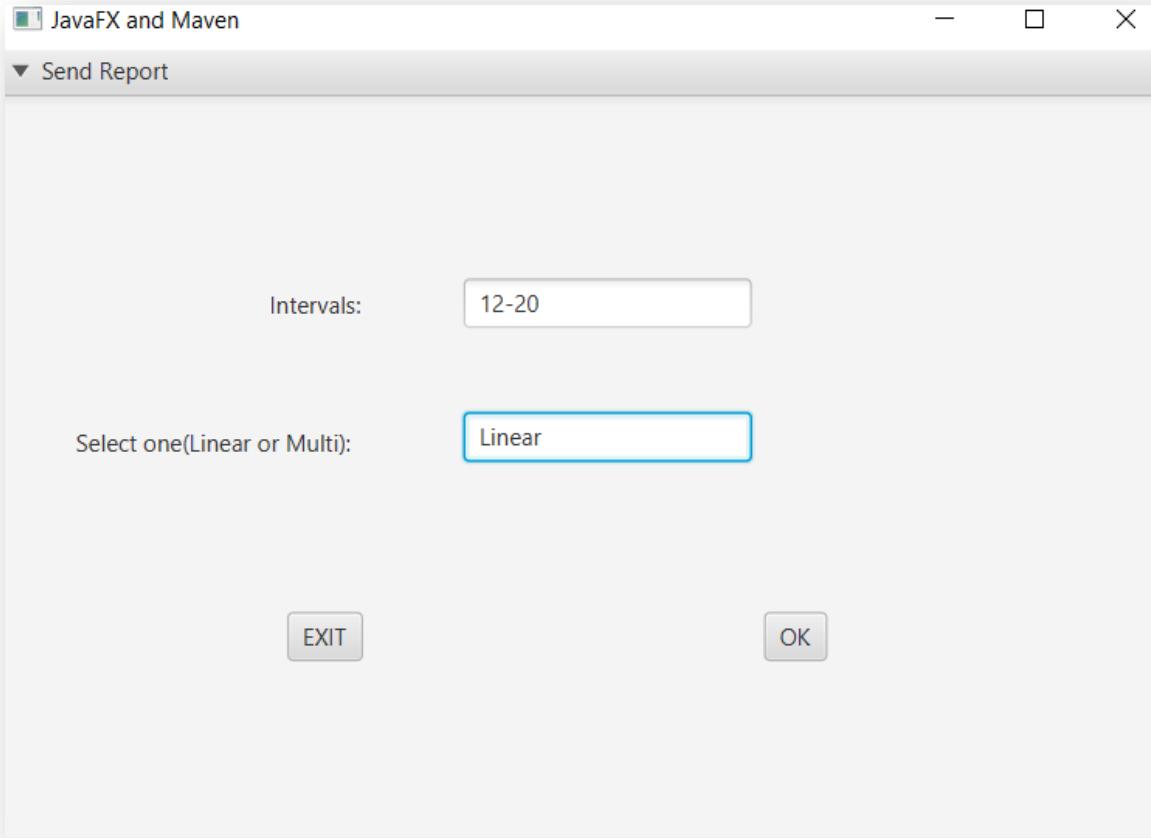
This functionality can only be accessed by an Administrator, it allows the user to send a Covid Report to the NHS at any time.

After signing in, this window will show up.



To send the report manually to the NHS you need to choose the “Send Report (NHS)” box.

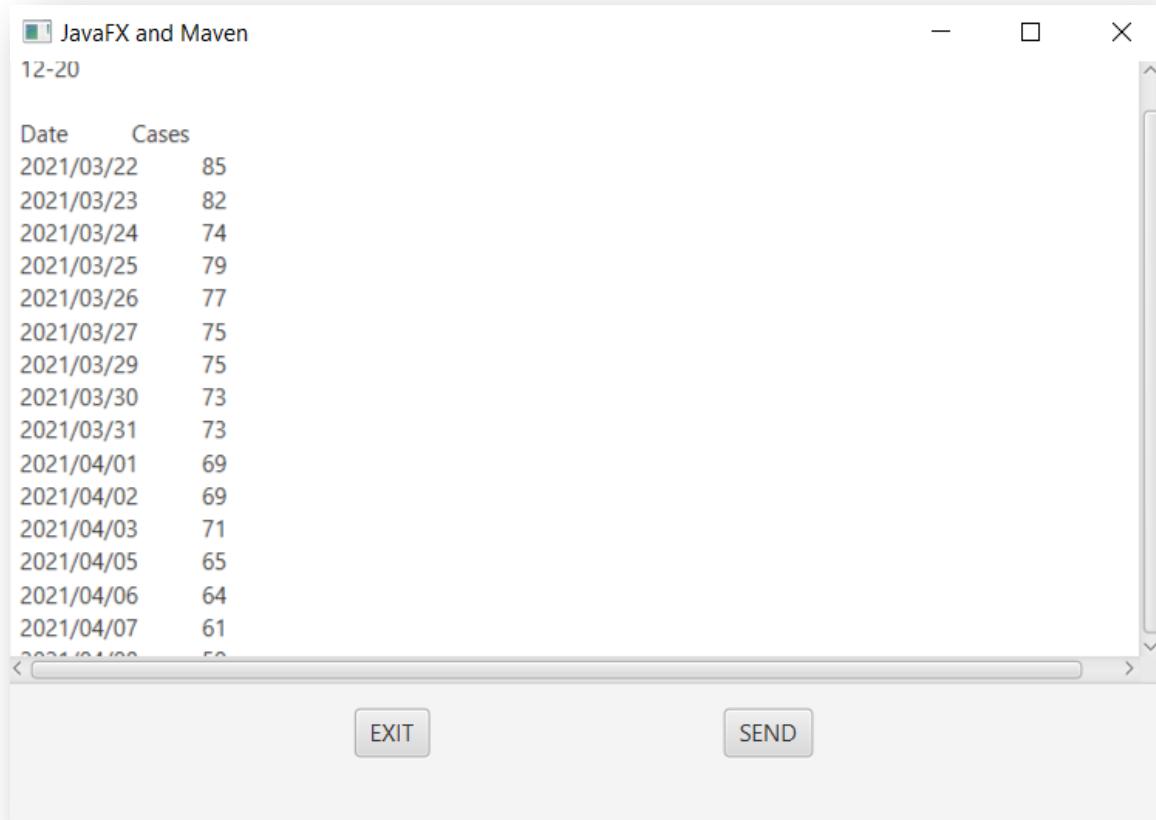
This is what you will see:



In this page you will need to write a time Interval and select 1 algorithm by writing their name “Linear” or “Multi”. Then you need to press the “OK” button to proceed.

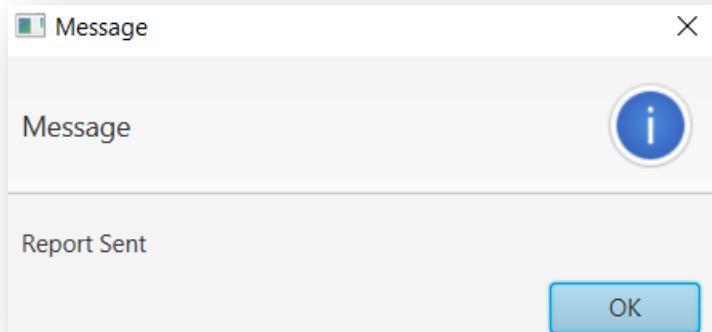
The “Exit” button is to go back.

After pressing “OK” this will show:



In this page you will see the report to be sent to the NHS, to send it you need to press the “SEND” button, after pressing it, the report will be sent, after that an alert will be shown to the user to tell them that the report was sent successfully.

The “Exit” button is to go back.



The report sent will be in this format:

Linear

12-20

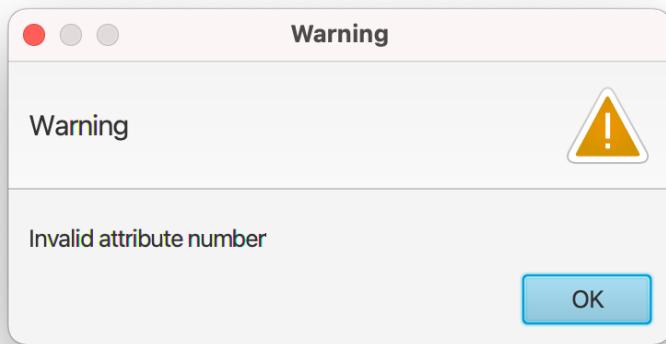
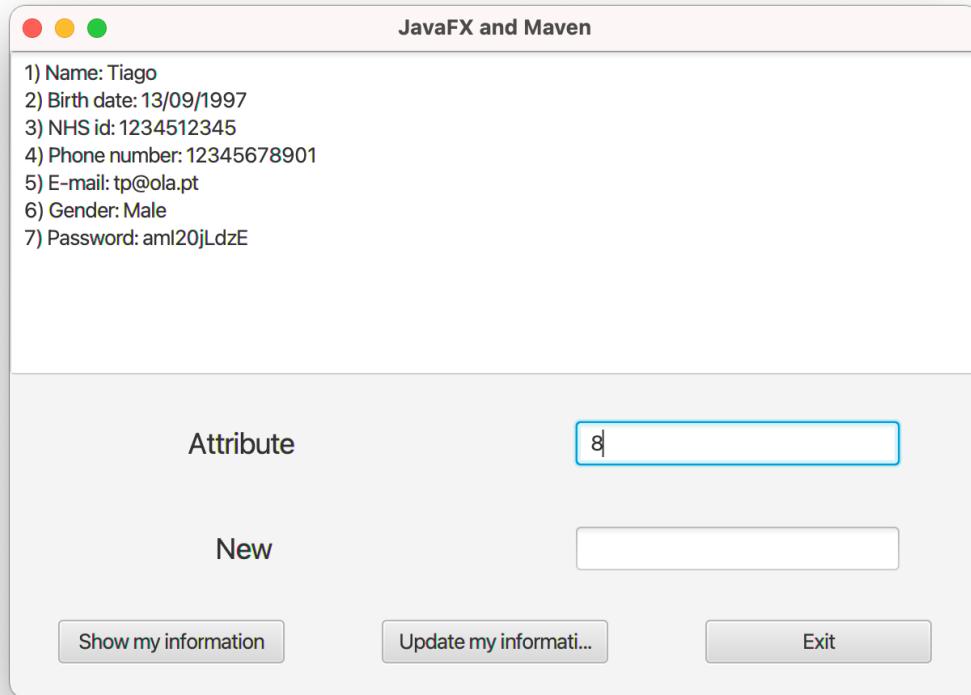
Date	Cases
2021/03/22	85
2021/03/23	82
2021/03/24	74
2021/03/25	79
2021/03/26	77
2021/03/27	75
2021/03/29	75
2021/03/30	73
2021/03/31	73
2021/04/01	69
2021/04/02	69
2021/04/03	71
2021/04/05	65
2021/04/06	64
2021/04/07	61
2021/04/08	59
2021/04/09	62
2021/04/10	57
2021/04/12	62
2021/04/13	57
2021/04/14	57
2021/04/15	56
2021/04/16	51
2021/04/17	52
2021/04/19	49
2021/04/20	51
2021/04/21	47
2021/04/22	47

Automatic Reports

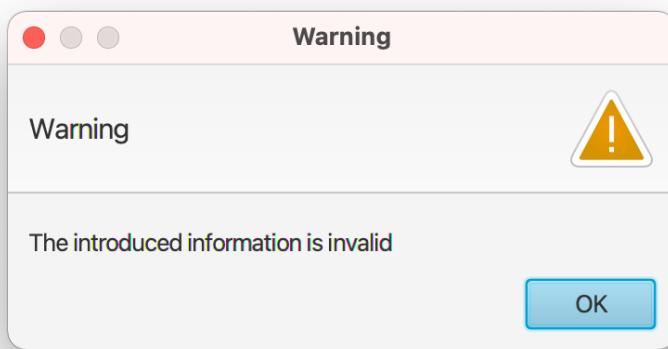
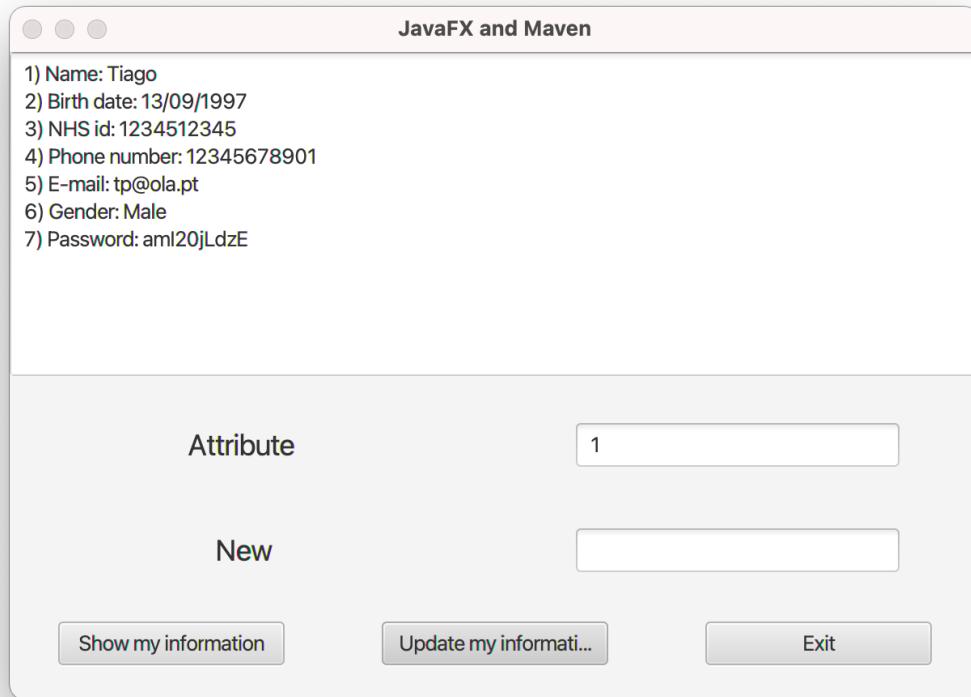
Every day at 6 am the application will send a report containing the number of covid-19 cases until that date.

Troubleshooting

US2: The user may have to deal with the warning “Invalid attribute number” if a non-existing attribute was introduced in the field “Attribute”.



It's possible that the user encounters another common warning such as "The introduced information is invalid". In this case, you need to ensure that you won't leave any field blank.



US8: The user will be warned if one or more of the following options happen:

- Empty fields;
- LabID doesn't have 5 alphanumerics characters;
- Name has more than 20 characters;
- Address has more than 30 characters;
- Doesn't choose a TestType.
- PhoneNumber does not have 11 digits
- TIN does not have 10 digits

US10: The user will be warned if one or more of the following options happen:

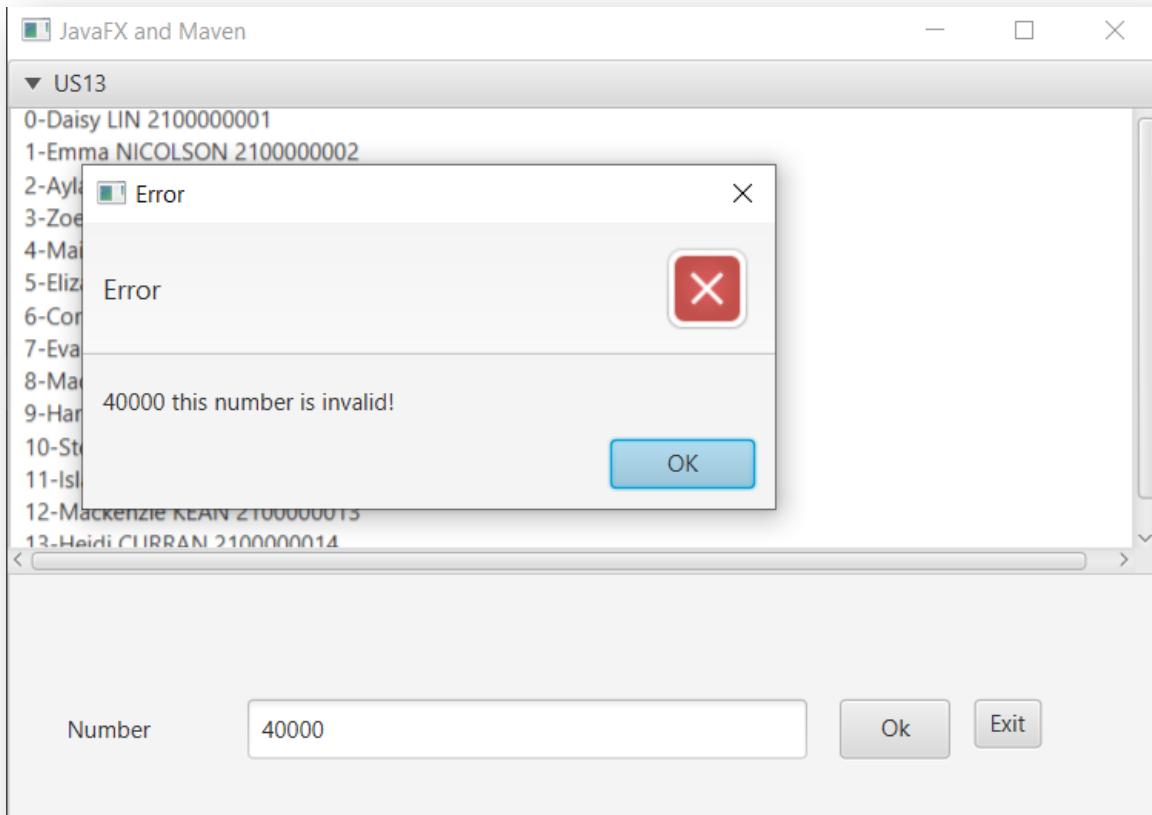
- Empty fields;
- Code doesn't have 5 alphanumerics characters;
- Short name has more than 8 characters;
- Descriptions has more than 20 characters;
- Doesn't choose a category.

US 11: In this situation, to obtain the warning message you may have done something such as:

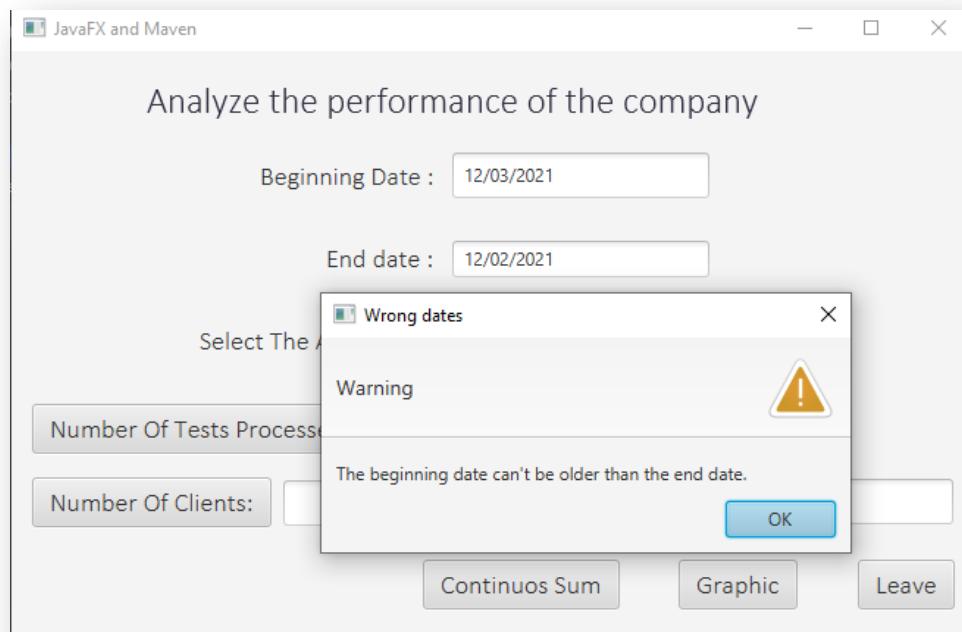
- Code doesn't have between 4 and 8 characters;
- Description is empty;
- Description has more than 40 characters.

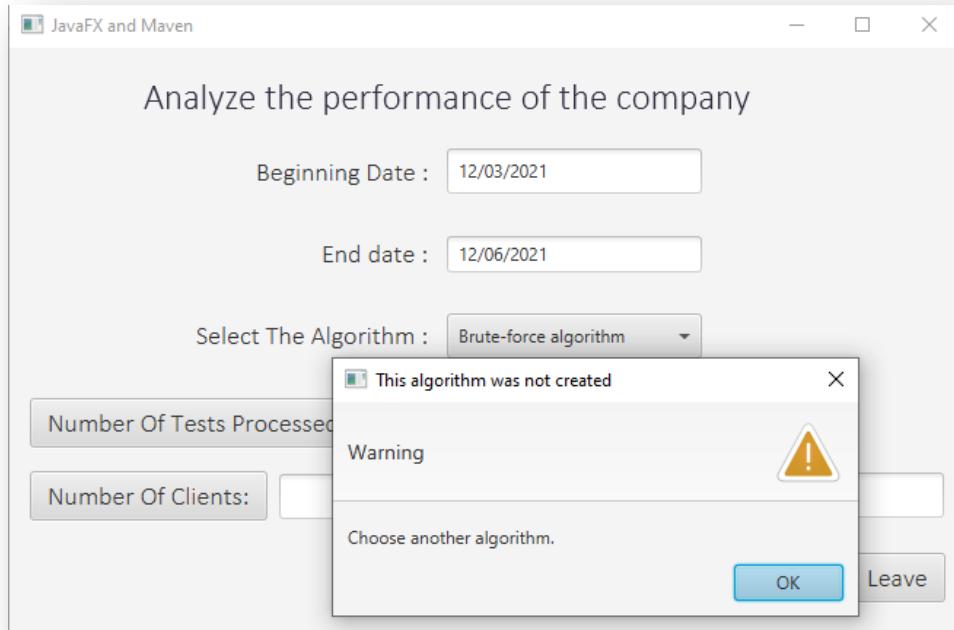
US 12: The warning is shown when the “result” field is empty.

US13: The user can encounter problems when interacting with this US, such as inputting a wrong number (negative or a number greater than the number of the Clients), when inputting wrong numbers, an alert will appear to inform you that the number introduced is invalid:

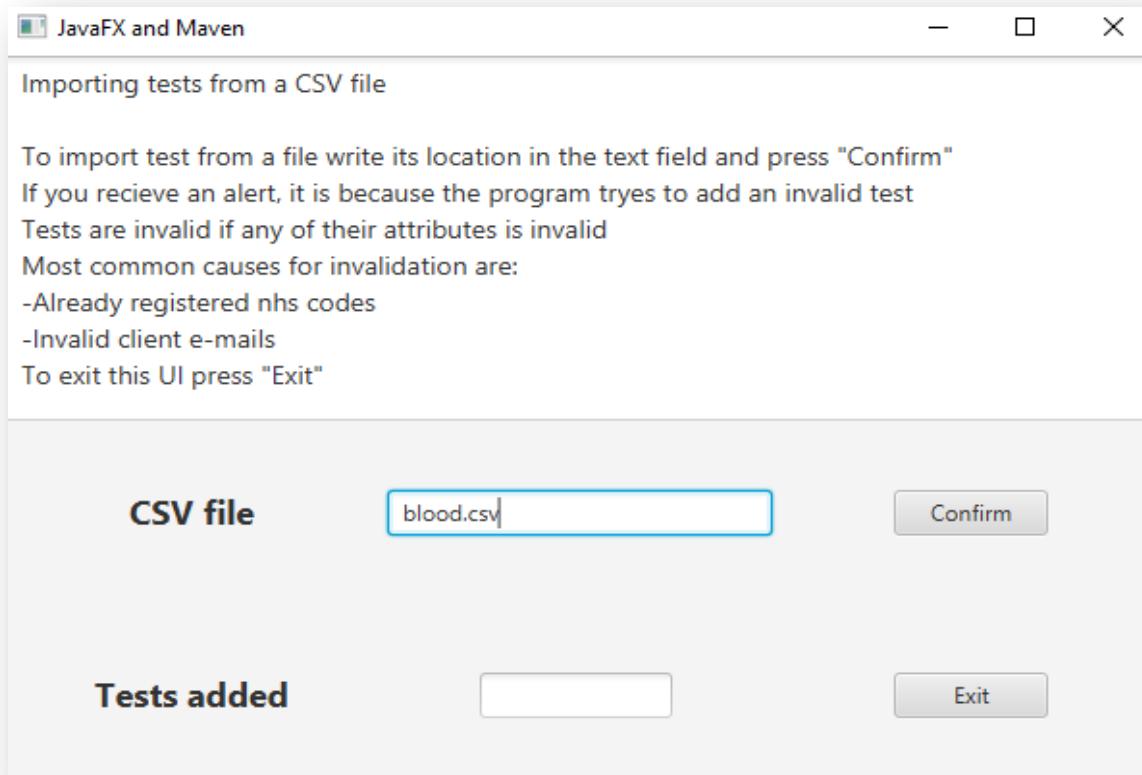


US16: The user will receive warning when the beginning date is bigger than the end date or when the chosen algorithm is not the benchmark one.

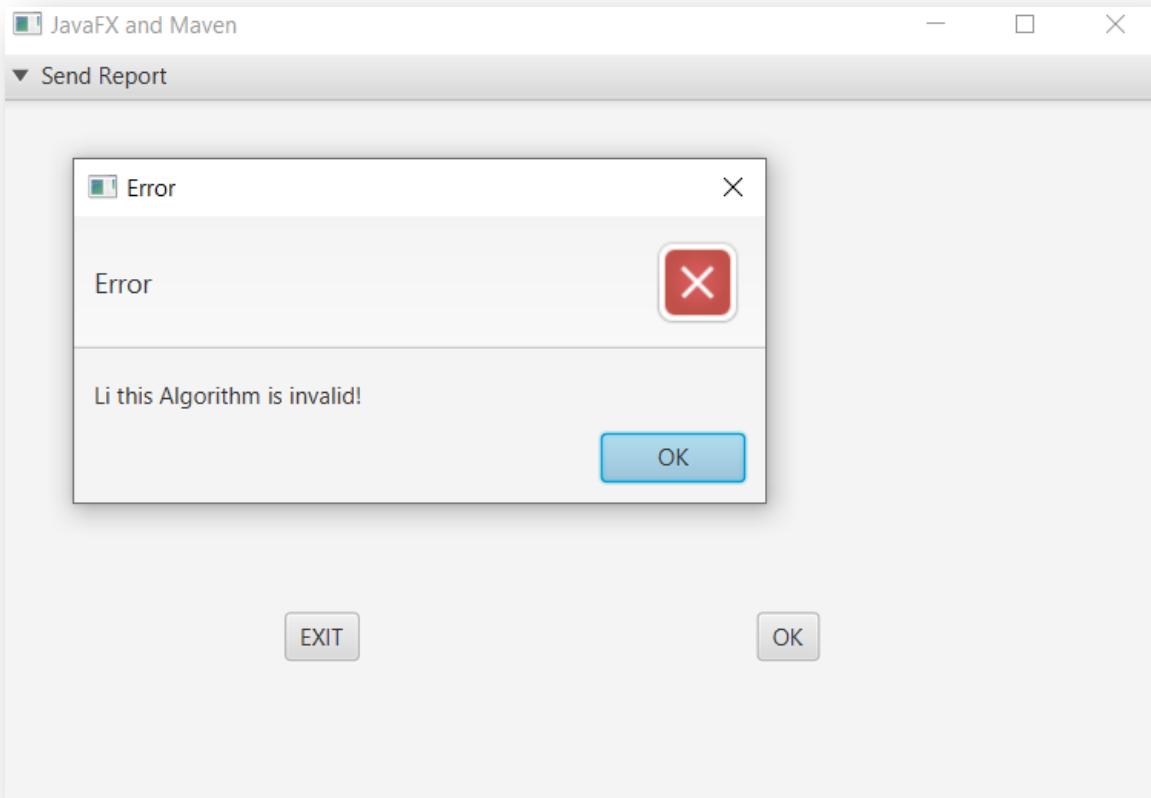




US17: The user may receive a warning concerning a test that was not added, this happens when the test has no valid parameters, has not test type/category, the clinic id does not exist, the client does not exist and cannot be created due to invalid attributes.



US18: The user can encounter problems when interacting with this US, such as inputting a wrong Algorithm (Algorithm that does not match the 2 Algorithms (Linear or Multi)), when inputting wrong Algorithm, an alert will appear to inform you that the Algorithm introduced is invalid:



FAQs

Q: What to do and what happens if I get a warning?

A: Warnings appear when some invalid data is introduced, some errors are explained in their current sections of the manual and a few others are in Troubleshooting. Nothing happens when these errors occur, for same functionalities such as “Register Client” all data must be re-introduced, while other will wait for a valid input.

Q: How do I know my password? Can I change it?

A: Passwords are generated with random characters and sent to the e-mail you are registered with. To change them use the second functionality “Change personal information”, password is the attribute with number 7. Notice that if you alter your e-mail or password you must logout for security reasons.

Q: How do I know my test results are ready?

A: An e-mail is sent once your test has been validated by our doctors.

Q: How many tests can I perform at the same time? Do I need an account for each test?

A: You can perform as many tests as you please. No, all tests are linked to a single account, there is no need to have more than one.

Q: Is it possible to register an account from the app instead of having to go to the clinic?

A: No, in order to be registered you must go to the clinic and have a receptionist to do it for you.