JAVA Project I-AM-CORE EPITA 2018

Group Members: Shoaib Inayat Rana Ahmad Tariq

Supervisor: Thomas Broussard

Table Of Contents

- 1. Subject Analysis
 - a) Major Features
 - b) Application Feasibility
 - c) Data Description
 - d) Expected Results
 - e) Algorithms Study
 - f) Scope of the Application
- 2. Conception
 - a) Chosen Algorithm
 - b) Data Structures
 - c) Global Application Flow
 - d) Global schema and major features schema
- 3. Console Operations Description
 - a) Authentication
 - b) Create Operation
 - c) Update Operation
 - d) Delete Operation
 - e) Search Operation
- 4. Configuration Instructions
 - a) Setup the database
 - b) Run the Application
 - c) Developers
- 5. Screenshots
- 6.Bibliography

1. Subject Analysis

a) Major Features:

User have the privileges to create an identity, update an identity, delete an identity and search desired identity. It is a console based application.

b) Application feasibility:

This application is useful for every kind of application which need record maintenance procedure in it.It can be used as an API with other systems.

c) Data Description:

User has three basic data fields on which all operations will be performed which include

Displayname

Email

Uid.

d) Expected Results:

User can insert, update, delete and search for identities and all the records will be shown to user.

e) Algorithms Study:

Application uses simple and upto date algorithms with latest coding techniques and handling exceptions during the running of application.

f) Scope of Application:

For now the application is very basic as further implementation can be done by using GUI tools as it is console based application.

With regard to security perspective further work can be done.

2. Conception:

Following packages are part of application:

Launcher Package

Data Model Package

Exceptions Package

Service Package

a) Chosen Algorithm:

Simple and basic level algorithm have been chosen based on the lectures given by professor.

b) Data Structures:

Mostly built in data structures have been used.

c) Global Application Flow:

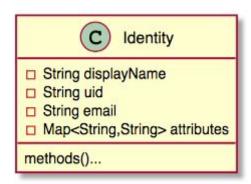
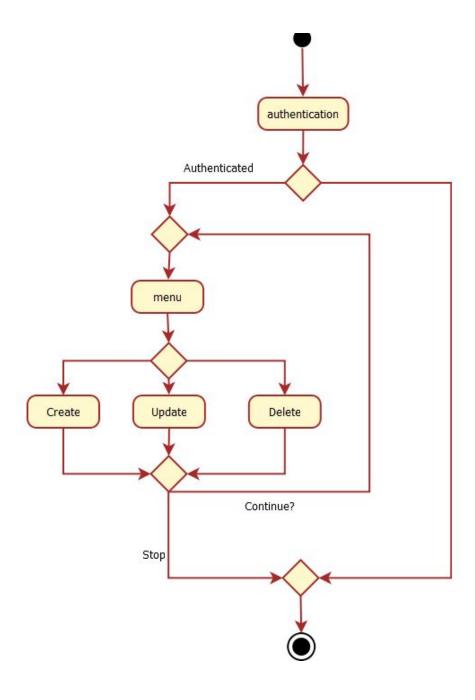


fig. An identity object



- d) Global schema and major features schema:
- 3. Console Operations Description:
 - a) Authentication:

User runs the application

Application displays welcome message and asks for user name for log in

User enters user name

Application asks for password

User enters password

Application displays authentication status

b) Create Identity:

Application asks for user to enter the choice of operation

User enters 1

Application asks for display name

User enters display name

Application asks for email

User enters email

Application asks for Uid

User enters Uid

Application displays identity creation message

c) Update Identity:

Application asks for user to enter the choice of operation

User enters 2

Application asks for enter Uid to modify

User enters Uid

Application asks for display name to change

User enters display name

Application asks for email to change

User enters email

Application displays identity updation message

d) Delete Identity:

Application asks for user to enter the choice of operation

User enters 3

Application asks for enter Uid to delete

User enters Uid

Application displays identity deletion message

e) Search Identity:

Application asks for user enter the choice of operation

User enters 2

Application asks for enter Uid to modify

User enters Uid

Application asks for display name to change

User enters display name

Application asks for email to change

User enters email

Application displays identity updation message

- 5. Configuration Instructions:
 - a) Setup the database:

Download apache derby client

Create an instance of derby name it instance name =ROOT with username="root" and password="root" and table name is Identities. run /db-derby-10.13.1.1-bin/bin/startNetworkServer

Edit user value with the user name you used to create your derby schema Do the same with password, the name of instance if you used your own values

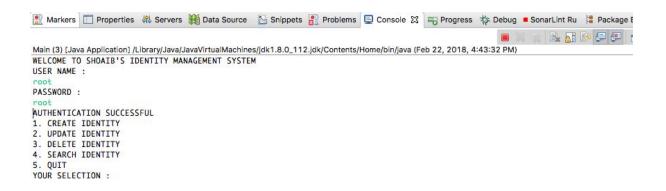
b) Run the Application

Go to I-AM-CORE/fr/epita/I-AM/launcher execute Main

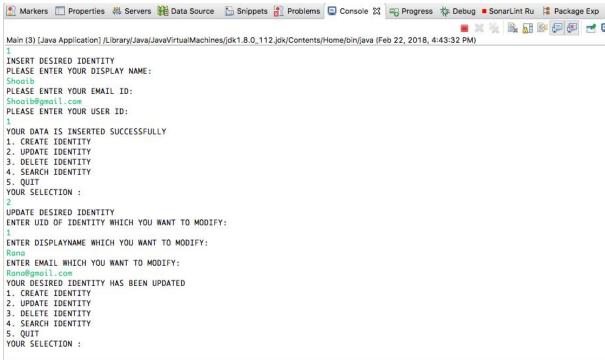
c) Developers

Javadoc folder is available for further information.

5. Screenshots:



```
🖺 Markers 🗔 Properties 🚜 Servers 🙀 Data Source 🚡 Snippets 📳 Problems 📮 Console 🛭 🦏 Progress 🎋 Debug 💻 SonarLint Ru 📜 Package Exp
                                                                                                                            🔳 💥 💃 🔓 🗗 🗗 🗗 🗗
Main (3) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_112.jdk/Contents/Home/bin/java (Feb 22, 2018, 4:43:32 PM) WELCOME TO SHOAIB'S IDENTITY MANAGEMENT SYSTEM
USER NAME :
PASSWORD :
AUTHENTICATION SUCCESSFUL
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
INSERT DESIRED IDENTITY
PLEASE ENTER YOUR DISPLAY NAME:
PLEASE ENTER YOUR EMAIL ID:
PLEASE ENTER YOUR USER ID:
YOUR DATA IS INSERTED SUCCESSFULLY
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
Markers ☐ Properties ♣ Servers ☐ Data Source ☐ Snippets ₽ Problems ☐ Console ♥ ☐ Progress ♣ Debug ■ SonarLint Ru ☐ Package Exp
                                                                                                                              Main (3) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_112.jdk/Contents/Home/bin/java (Feb 22, 2018, 4:43:32 PM)
```



```
🏽 Markers 🛅 Properties 🚜 Servers 🏙 Data Source 🚡 Snippets 🚼 Problems 📮 Console 🔀 🤫 Progress 🎋 Debug 💻 SonarLint Ru 📜 Package
                                                                                                                       Main (3) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_112.jdk/Contents/Home/bin/java (Feb 22, 2018, 4:47:06 PM)
WELCOME TO SHOAIB'S IDENTITY MANAGEMENT SYSTEM
USER NAME :
PASSWORD :
AUTHENTICATION SUCCESSFUL
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
SEARCH FOR YOUR DESIRED IDENTITY
PLEASE ENTER UID OF IDENTITY TO BE SEARCHED:
Desired Identity=[Identity [displayName=shoaib, email=shoaib@shoaib, uid=1123]]
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
```

```
📳 Markers 🗔 Properties 🦚 Servers 🛍 Data Source 🕒 Snippets 📳 Problems 📮 Console 🛭 😜 Progress 🔅 Debug 🛚 SonarLint Ru 📜 Package f
                                                                                                    Main (3) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_112.jdk/Contents/Home/bin/java (Feb 22, 2018, 4:47:06 PM)
AUTHENTICATION SUCCESSFUL
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
SEARCH FOR YOUR DESIRED IDENTITY
PLEASE ENTER UID OF IDENTITY TO BE SEARCHED:
Desired Identity=[Identity [displayName=shoaib, email=shoaib@shoaib, uid=1123]]
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
DELETE DESIRED IDENTITY
PLEASE ENTER THE IDENTITY UID TO DELETE:
YOUR SELECTED IDENTITY HAS BEEN DELETED
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
```

```
🔝 Markers 🗔 Properties 🦚 Servers 🎉 Data Source 🚡 Snippets 🔐 Problems 📮 Console 🗯 🔫 Progress 🔅 Debug 🗷 SonarLint Ru 📮 Package Ex
                                                                                                                        - X 💸 🗟 🚮 🗗 🗗 🖻
<terminated> Main (3) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_112.jdk/Contents/Home/bin/java (Feb 22, 2018, 4:47:06 PM)
1. CREATE IDENTITY
2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
SEARCH FOR YOUR DESIRED IDENTITY
PLEASE ENTER UID OF IDENTITY TO BE SEARCHED:
Desired Identity-[Identity [displayName-shoaib, email-shoaib@shoaib, uid-1123]]

1. CREATE IDENTITY

2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
DELETE DESIRED IDENTITY
PLEASE ENTER THE IDENTITY UID TO DELETE:
YOUR SELECTED IDENTITY HAS BEEN DELETED

1. CREATE IDENTITY

2. UPDATE IDENTITY
3. DELETE IDENTITY
4. SEARCH IDENTITY
5. QUIT
YOUR SELECTION :
SEE YOU NEXT TIME.AU REVOIR
```

6.Bibliography:

http://thomas-broussard.fr