

A Report on

Identity Management System

(Java Project - Fundamental Semester)

Submitted by :

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## **Acknowledgement**

I want to give many thanks to a people who helped and supported me during various phase for the preparation of this report.

My special appreciation goes to my respected teacher , Mr. Thomas Boussard for his support and knowledge for the project and preparation of this report.

I also extend my heartfelt thanks to my family and well wishers.

## **Abstract**

The main focus of this report is on the Simple Java Application called Identity Management System using java in front end and Apache Derby as a backend. This system provides a simple interface for storing , retrieval and modification of the user information.

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## **1) Subject Description**

Identity Management System is a simple system to allow admin of any particular organisation for storing the user informations like name , email address, date of birth etc. One can also modify and delete the existing information of the users. This type of system is particularly useful for organization that requires to store and maintain large amount of user informations.

## **2) Subject Analysis**

### **2.1 Major Feature**

The major feature included in this system is add , update and delete user information.

### **2.2 Application Feasibility**

#### **a) Strengths -**

Database Driven application and faster to access than manual file system record.

#### **b) Weakness -**

Not much user information attributes included for now. - User information storing may be time consuming at first.

#### **c) Threats**

- Some Information may be confidential and can be stolen.
- System may hang if run on low hardware configuration system.

#### **d) In Future**

- Many user attributes can be added to store more user information.
- Can be implemented with Graphical User Interface (GUI) .
- multiple admin users can be added and implement in database.

### **2.3 Data Description**

It includes identity\_id, displayname and email as users data with the add, update ,delete and user listing features for the system administrators.

## **2.4) Expected Results**

Administrators of system will be able to view ,add, modify and update the user information easily.

## **2.5) Algorithm Study**

For this system a simple and basic algorithm is used for the insertion, manipulation, deletion and listing of the user's information.

## **2.6) Scope of Application**

Only the users with the administrator rights are able to add, update, delete and list the information

# **3) Conception**

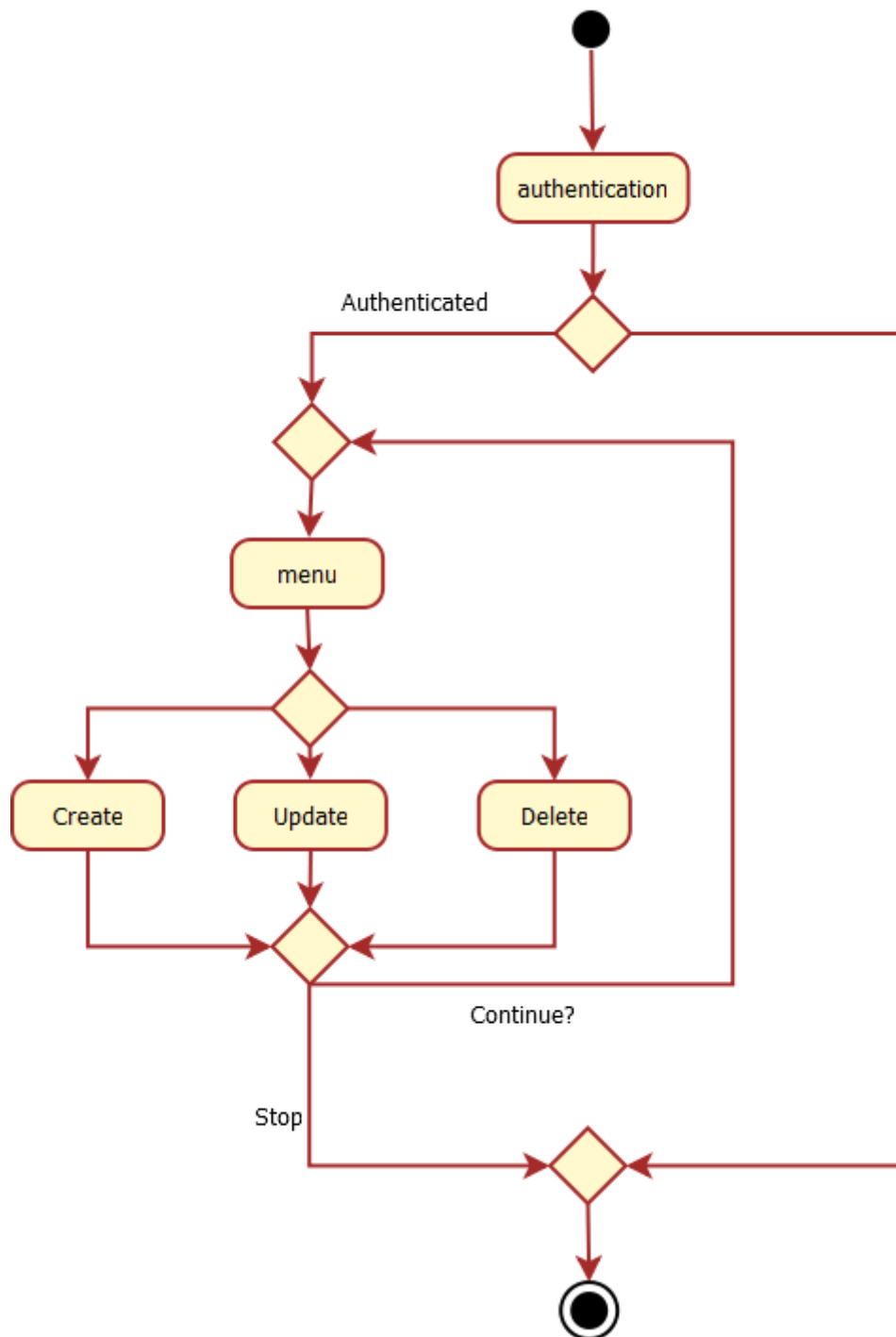
## **3.1 Chosen Algorithm**

The user with administrator's right have to login first with credentials (username = admin and password = admin). If authentication is approved the menu for add, update, delete and list users will appear. Then they will be able to perform the actions specified. The application is halted if admin choses quit option.

## **3.2) Data Structures**

- Class
- Lists

### 3.3) Global Data Flow

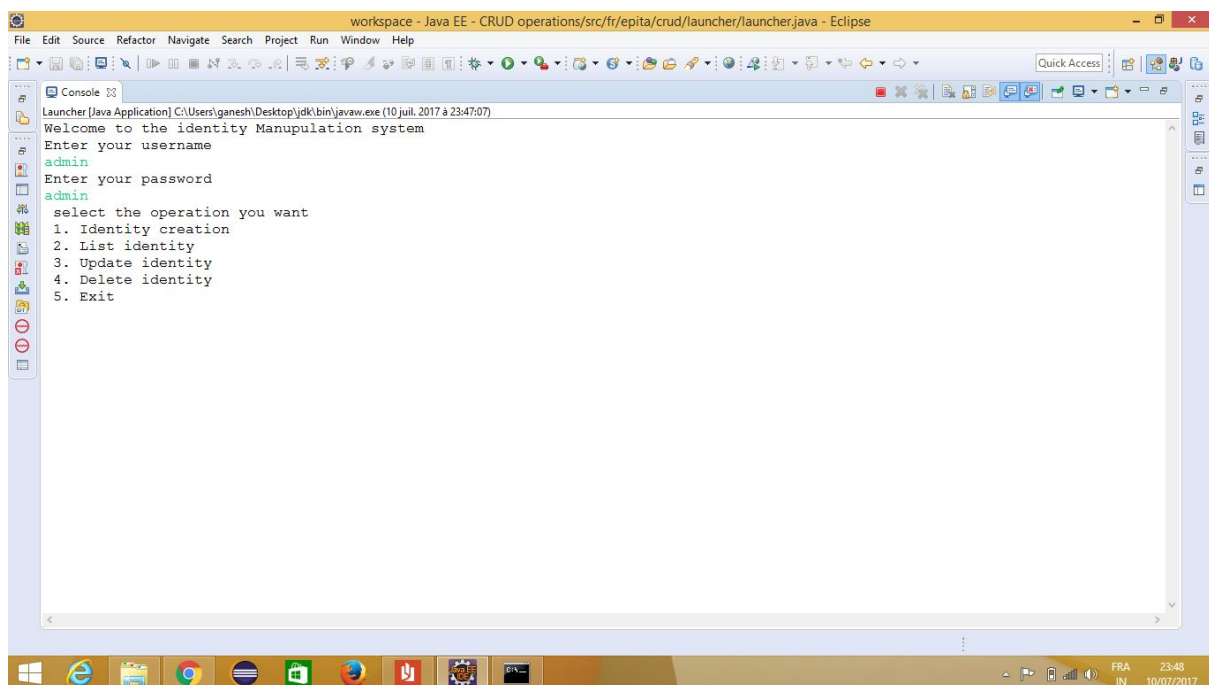


### 3.4) Global Schema

IDENTITIES
STRING IDENTITY_ID
STRING IDENTITY_NAME
STRING IDENTITY_EMAIL
METHODS()...

### 4) Console Operation Description

The user enters the login name admin and password admin and the menu appears as follows if authenticated a menu will pop out with actions Create, Modify, Delete , List an Identity and Quit.



```
workspace - Java EE - CRUD operations/src/fr/epita/crud/launcher/launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Launcher [Java Application] C:\Users\ganesh\Desktop\jdk\bin\javaw.exe (10 juil. 2017 à 23:47:07)
Welcome to the identity Manipulation system
Enter your username
admin
Enter your password
admin
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
```

### 5) Configuration Instruction

- a. You need to start Server for derbyclient database.

b. After you start the Server connection, you can start running from launcher.java

c. If there is a database error. You need to open Data Source Explorer and create new Derby Database connection which has:

Database name: **ganesh**

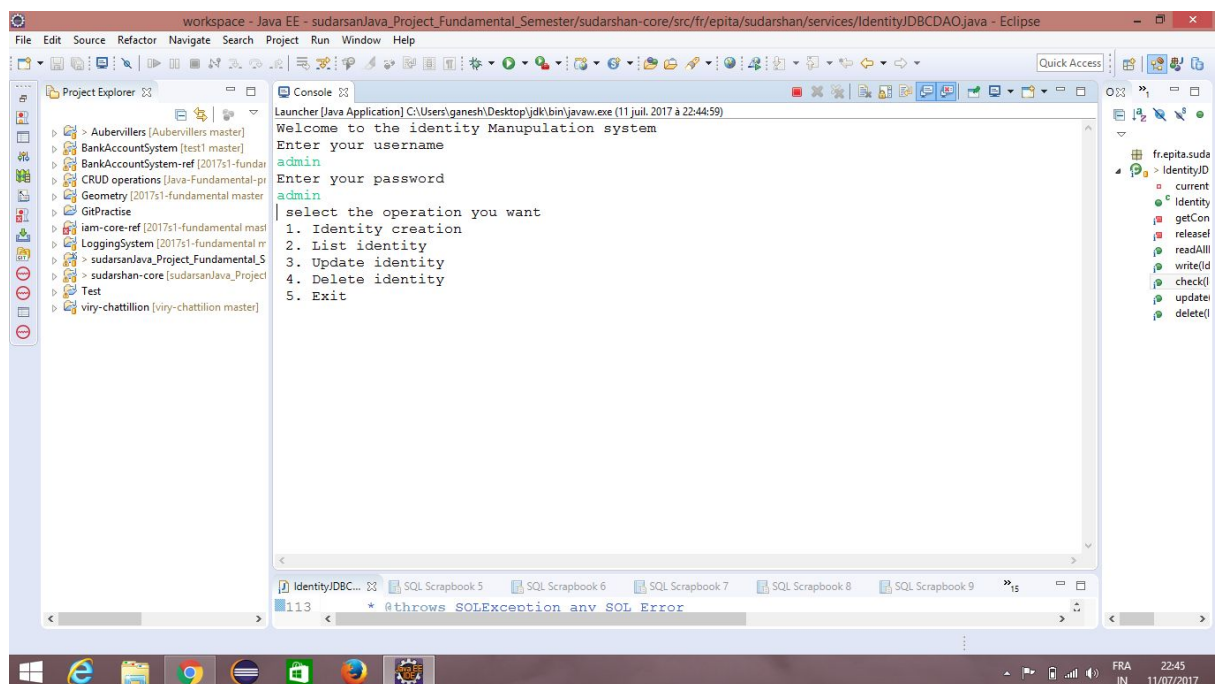
User name: **ganesh1**

User password: **ganesh1**

## 6) Console Operation Description

### 6.1) Login

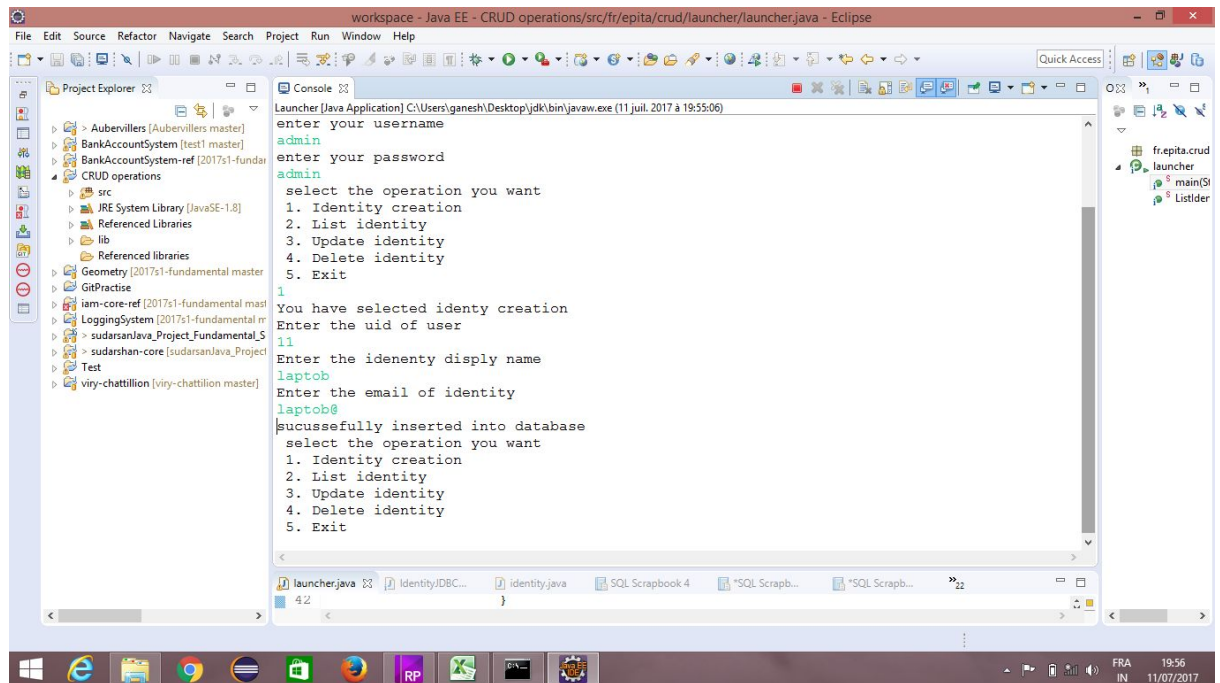
The user enters the login name admin and password admin and the menu appears as follows if authenticated a menu will pop out with actions Create, List, Update, Delete an Identity and Exit. Admin can enter the username and password for four times initially the warning message appears, after that warning message admin can only enter username and password for only two times.





## 6.2) Create an Identity

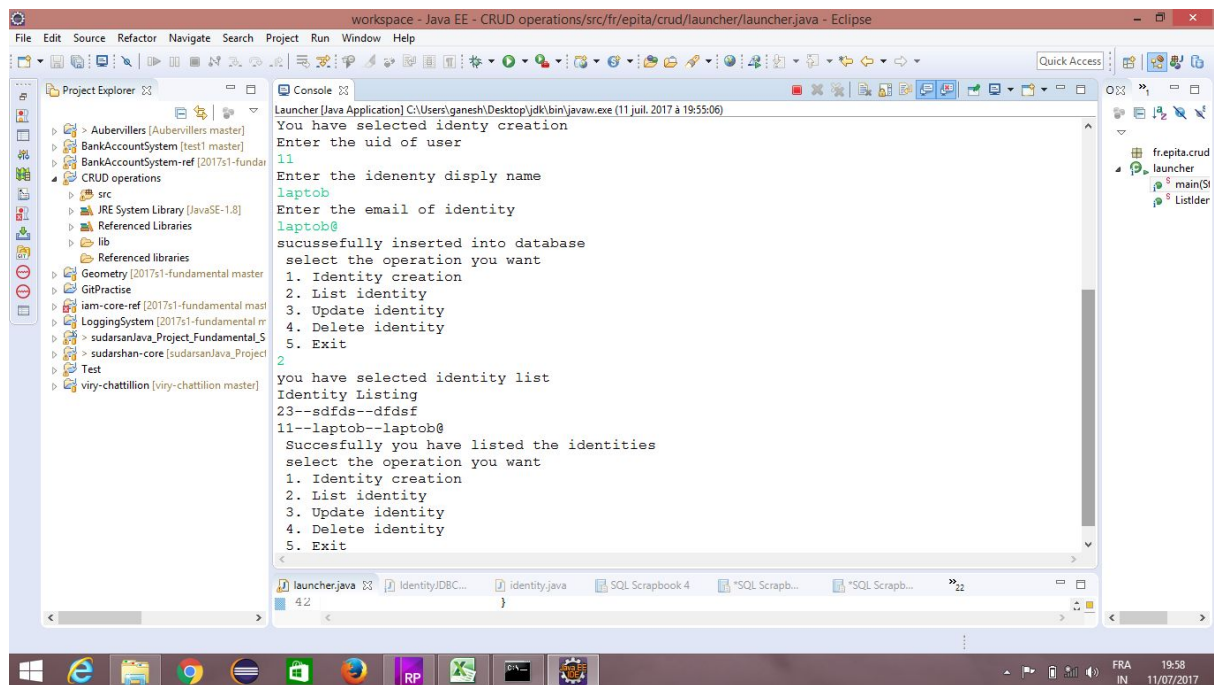
When the user choose the option '1' , then it will ask to enter the user details as in screenshot.



```
workspace - Java EE - CRUD operations/src/fr/epita/crud/launcher/launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer Console
Aubervillers [Aubervillers master]
BankAccountSystem [test1 master]
BankAccountSystem-ref [2017s1-fundam
CRUD operations
src
JRE System Library [JavaSE-1.8]
Referenced Libraries
lib
Referenced libraries
Geometry [2017s1-fundamental master]
GitPractise
iam-core-ref [2017s1-fundamental mast
LoggingSystem [2017s1-fundamental re
sudarshanJava_Project_Fundamental_S
sudarshan-core [sudarshanJava_Proje
Test
viry-chattillion [viry-chattillion master]
Launcher [Java Application] C:\Users\ganesh\Desktop\jdk\bin\javaw.exe (11 juil. 2017 à 19:55:06)
enter your username
admin
enter your password
admin
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
1
You have selected identity creation
Enter the uid of user
11
Enter the idenenty dispaly name
laptop
Enter the email of identity
laptop@
sucussefully inserted into database
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
launcher.java Identity/DBC... identity.java SQL Scrapbook 4 *SQL Scrapb... *SQL Scrapb... 22
42 }
```

### 6.3) List identities

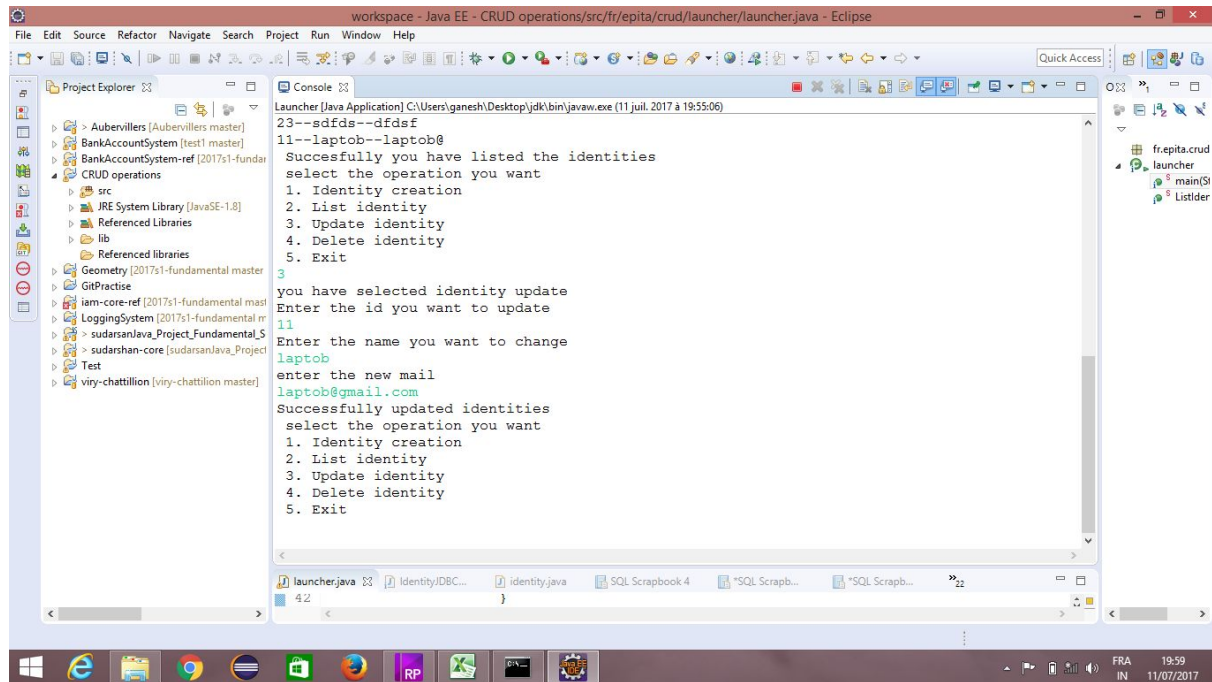
When the user choose the option '2' , then it will display all the identities as in screenshot.



```
workspace - Java EE - CRUD operations/src/fr/epita/crud/launcher/launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer Console
Aubervillers [Aubervillers master]
BankAccountSystem [test1 master]
BankAccountSystem-ref [2017s1-fundamental master]
CRUD operations
  src
  JRE System Library [JavaSE-1.8]
  Referenced Libraries
  lib
  Referenced libraries
Geometry [2017s1-fundamental master]
GitPractise
iam-core-ref [2017s1-fundamental master]
LoggingSystem [2017s1-fundamental master]
sudarsanJava_Project_Fundamental_5
sudarsan-core [sudarsanJava_Project_Fundamental_5 master]
Test
viry-chattillion [viry-chattillion master]
Launcher [Java Application] C:\Users\ganesh\Desktop\jdk\bin\javaw.exe (11 juil. 2017 à 19:55:06)
You have selected identity creation
Enter the uid of user
11
Enter the idenity disply name
laptob
Enter the email of identity
laptob@
sucussefully inserted into database
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
2
you have selected identity list
Identity Listing
23--sdfds--dfdsf
11--laptob--laptob@
Succesfully you have listed the identities
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
launcher.java IdentityIDBC... Identity.java SQL Scrapbook 4 *SQL Scrapb... *SQL Scrapb... 22
42 }
```

## 6.4) Update an Identity

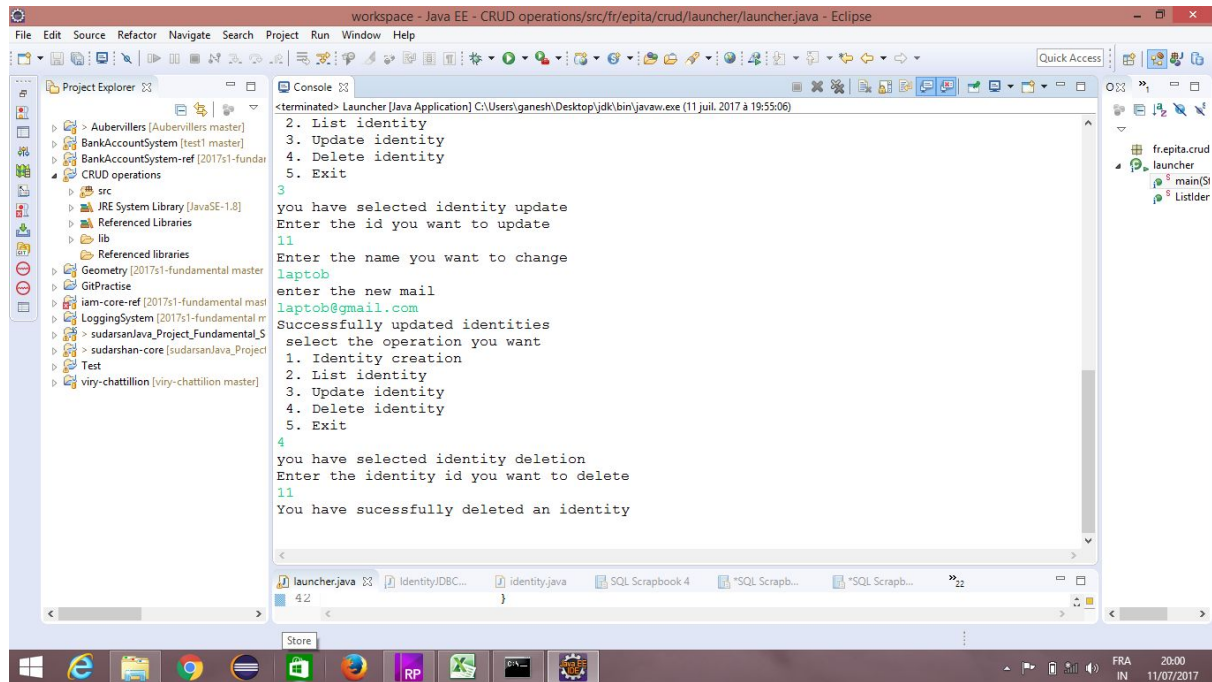
When the user choose the option '3', then it will ask to enter the user details as in screenshot.



```
workspace - Java EE - CRUD operations/src/fr/epita/crud/launcher/launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer Console
Launcher [Java Application] C:\Users\ganesh\Desktop\jdk\bin\javaw.exe (11 juil. 2017 à 19:55:06)
23--sdfds--dfdsf
11--laptopb--laptopb@
Successfully you have listed the identities
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
3
you have selected identity update
Enter the id you want to update
11
Enter the name you want to change
laptopb
enter the new mail
laptopb@gmail.com
Successfully updated identities
select the operation you want
1. Identity creation
2. List identity
3. Update identity
4. Delete identity
5. Exit
}
```

## 6.5) Delete an Identity

When the user choose the option '4' , then it will ask to enter the user details as in screenshot.



## 7) Bibliography

- <http://stackoverflow.com/>
- <https://www.youtube.com/>

