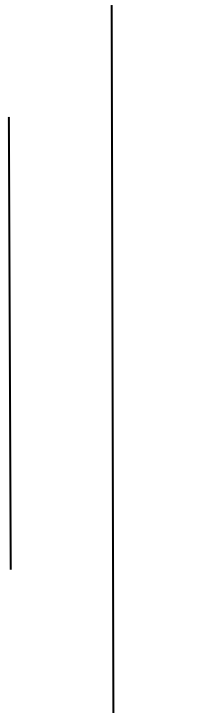# A Report on

Identity Management System

(Java Project - Fundamental Semester)

Submitted by :

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(Information System Management)

Acknowledgement

I owe 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.

Table of Contents

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) .

- Search Feature can be implemented.

- multiple admin users can be added and implement in database.

2.3 Data Description

It includes uid, displayname, email and dob 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 users 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 administrators 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
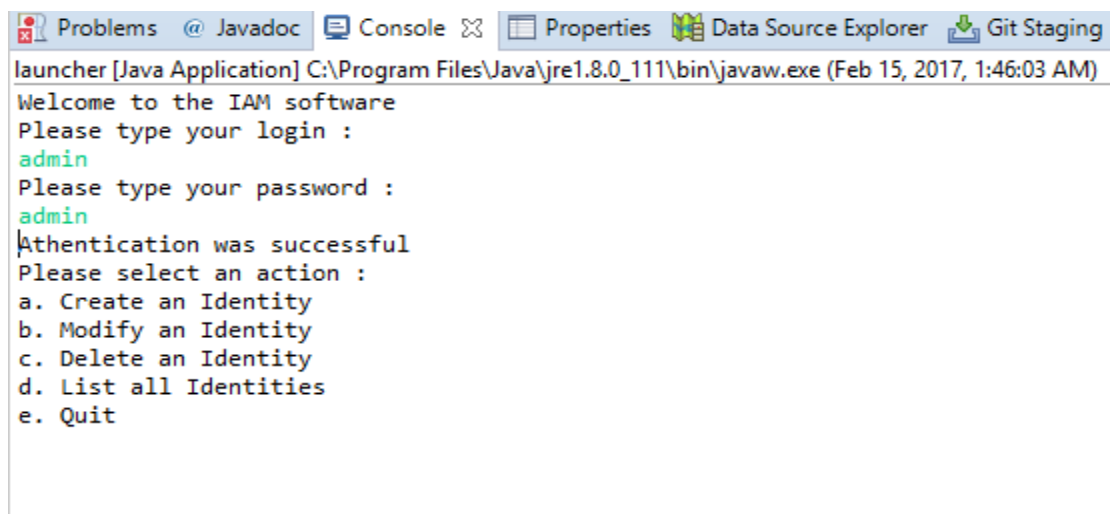
- Class
- Lists

3.3) Global Data Flow
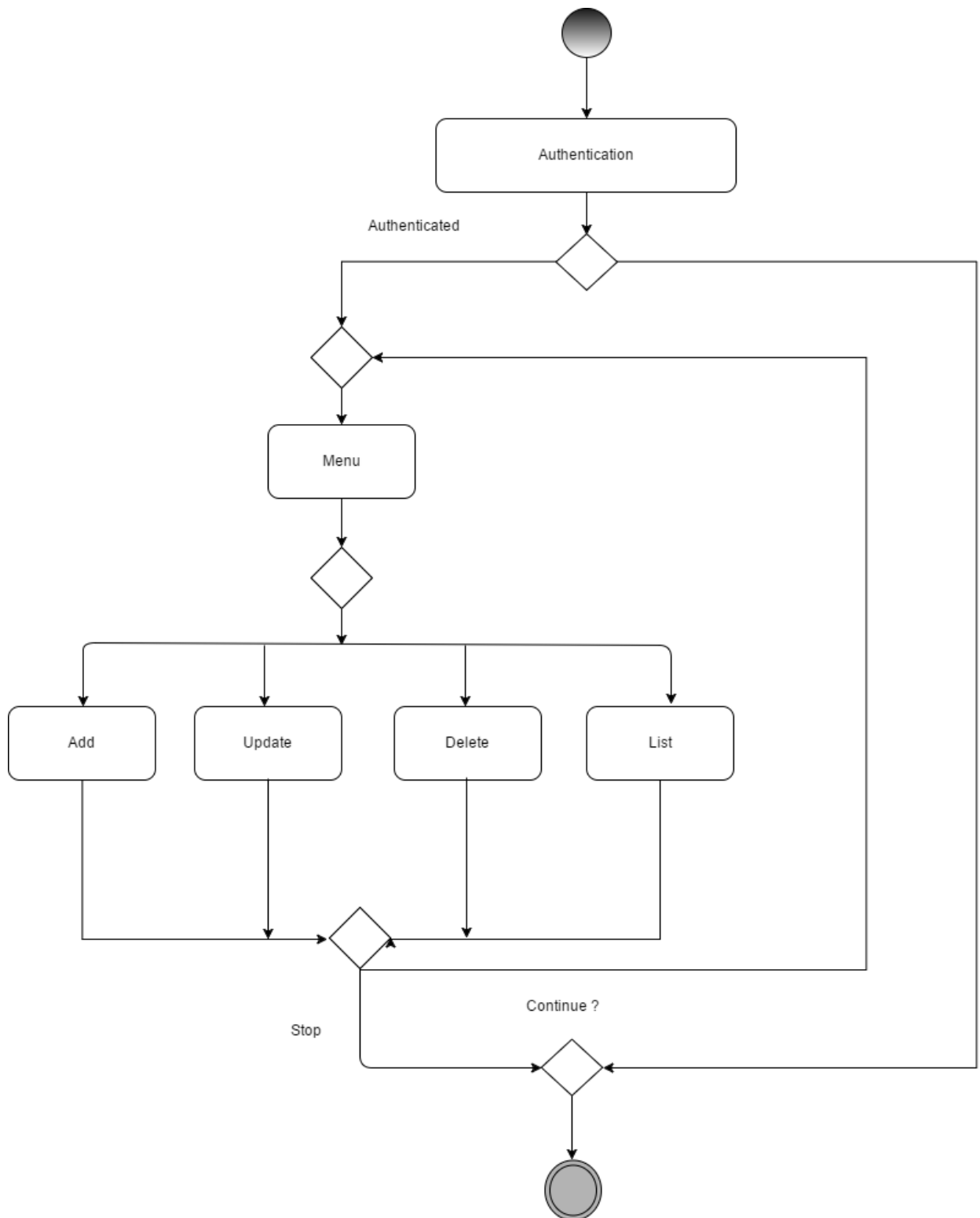
3.4) Global Schema

IDENTITIES
String IDENTITY_ID
String IDENTITY_DISPLAYNAME
String IDENTITY_EMAIL
String IDENTITY_BIRTHDATE
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.

```
Problems  @ Javadoc  Console  Properties  Data Source Explorer  Git Staging
launcher [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (Feb 15, 2017, 1:46:03 AM)
Welcome to the IAM software
Please type your login :
admin
Please type your password :
admin
Athentication was successful
Please select an action :
a. Create an Identity
b. Modify an Identity
c. Delete an Identity
d. List all Identities
e. Quit
```
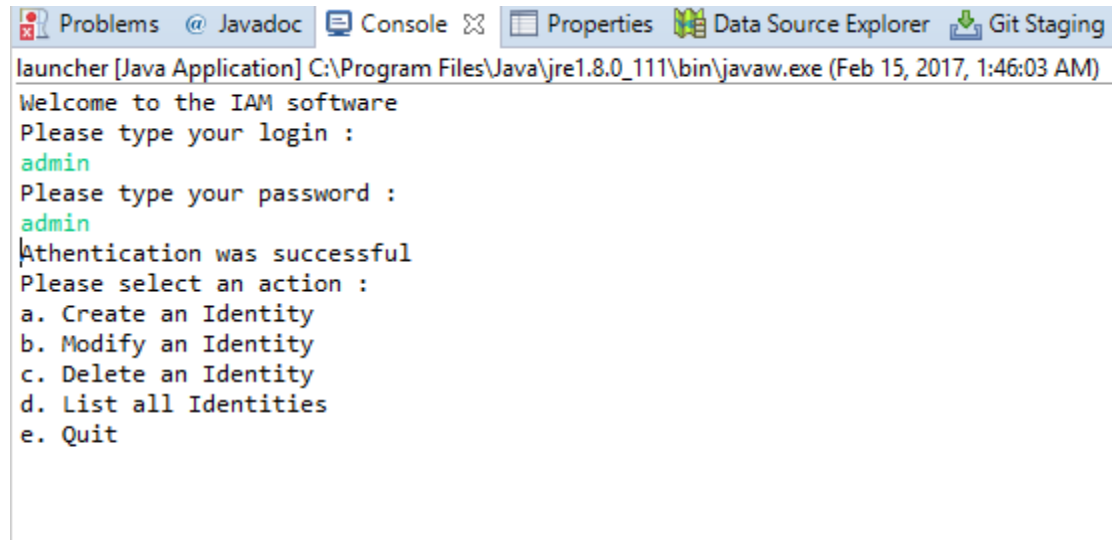
5) Configuration Instruction

a. You need to startServet 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:

Connection name: MyDB

Database name: project

User name: admin

User password: admin

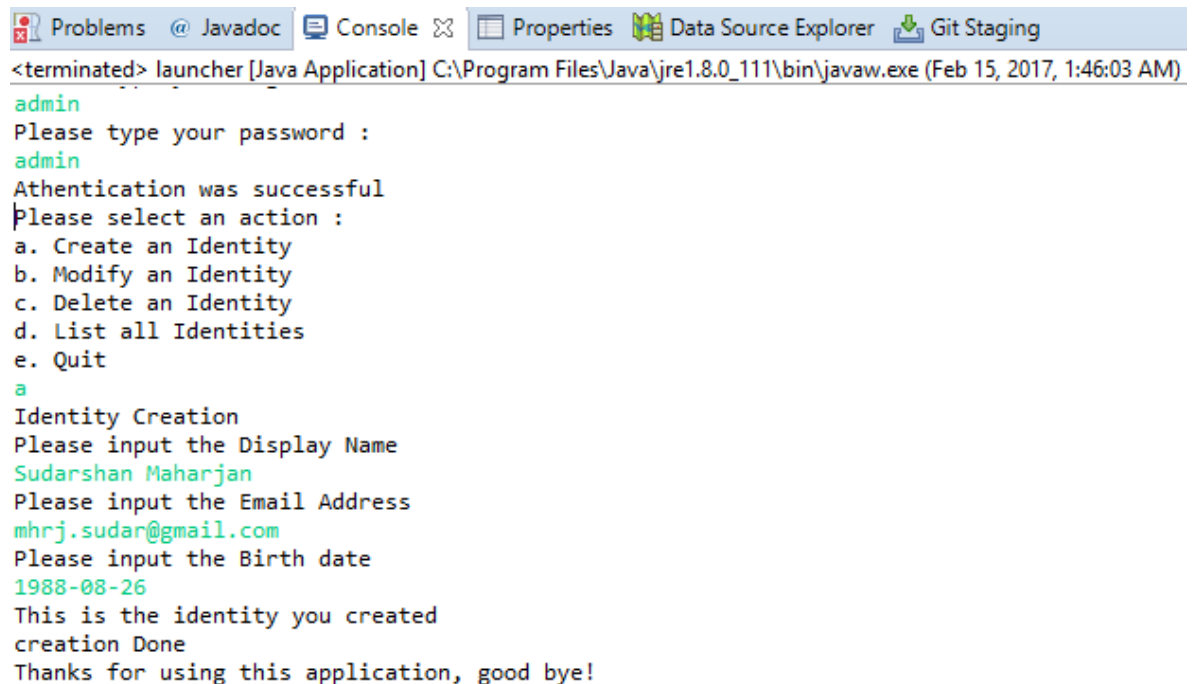## 6) Console Operation Description

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, Modify, Delete , List an Identity and Quit.

6.2) Create an Identity
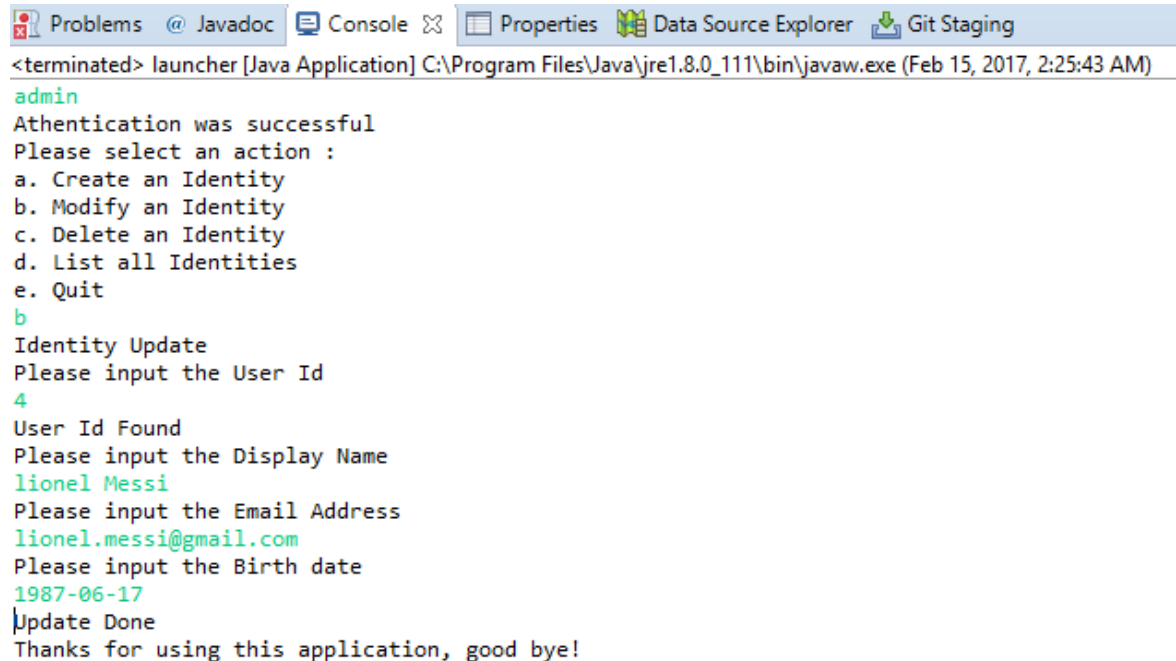
When the user choose the option 'a' , then it will ask to enter the user details as in screen shot.
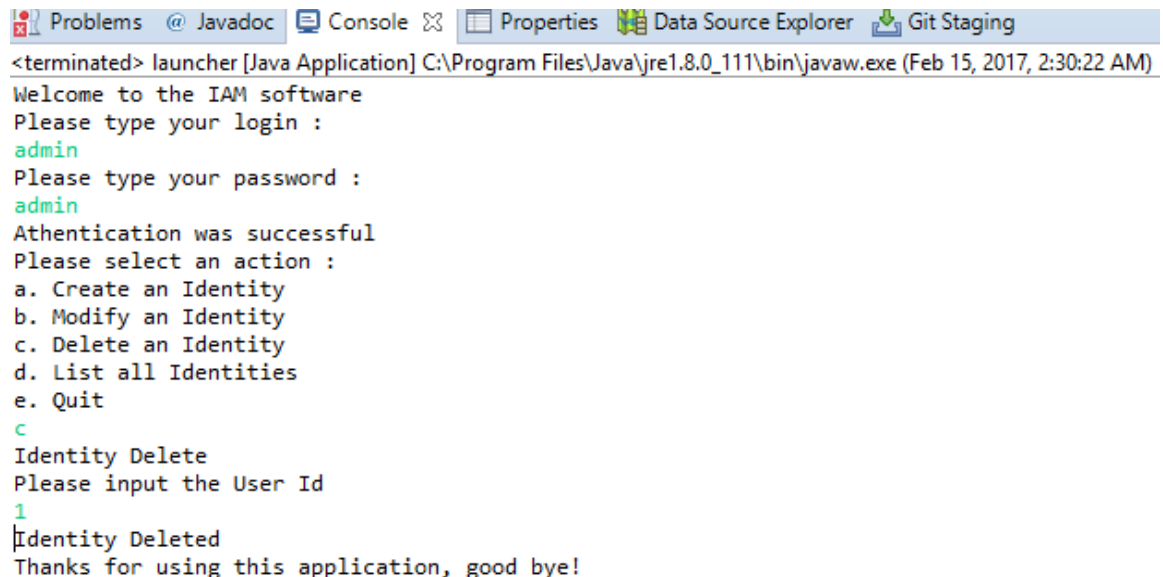
6.3) Modify an Identity

When the user choose the option 'b' , then it will ask to enter the user id to modify and if that id is found in database it will prompt to enter the user detail again as in screen shot.
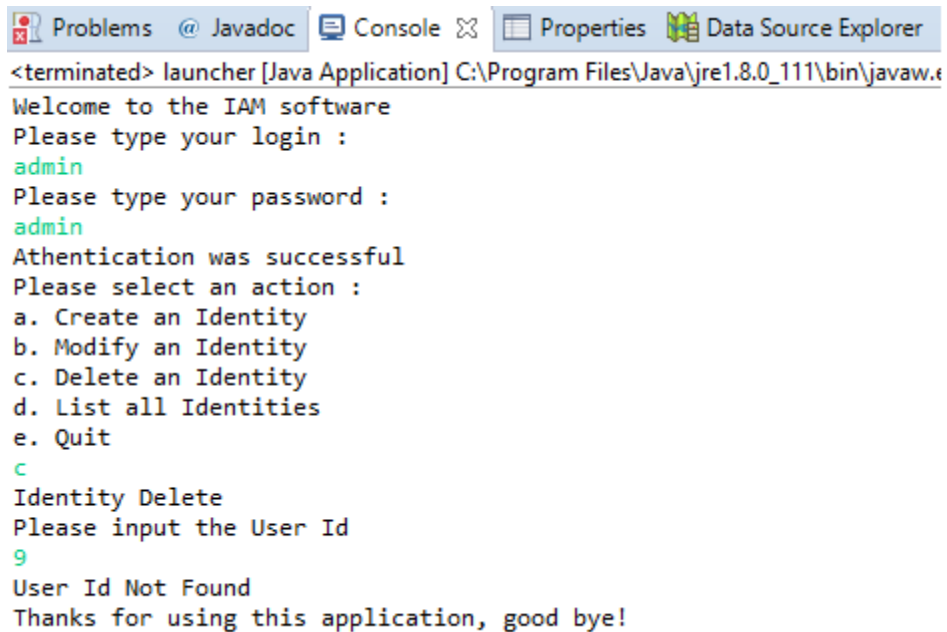
```
Problems  @ Javadoc  Console ⊠  Properties  Data Source Explorer  Git Staging
<terminated> launcher [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (Feb 15, 2017, 2:25:43 AM)
admin
Athentication was successful
Please select an action :
a. Create an Identity
b. Modify an Identity
c. Delete an Identity
d. List all Identities
e. Quit
b
Identity Update
Please input the User Id
4
User Id Found
Please input the Display Name
lionel Messi
Please input the Email Address
lionel.messi@gmail.com
Please input the Birth date
1987-06-17
Update Done
Thanks for using this application, good bye!
```

6.4 Delete an Identity.

When the user choose the option 'c' , then it will ask to enter the user id to delete and if that id is found in database it will remove that uid record from database.

```
Problems  @ Javadoc  Console ⊠  Properties  Data Source Explorer  Git Staging
<terminated> launcher [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (Feb 15, 2017, 2:30:22 AM)
Welcome to the IAM software
Please type your login :
admin
Please type your password :
admin
Athentication was successful
Please select an action :
a. Create an Identity
b. Modify an Identity
c. Delete an Identity
d. List all Identities
e. Quit
c
Identity Delete
Please input the User Id
1
Identity Deleted
Thanks for using this application, good bye!
```
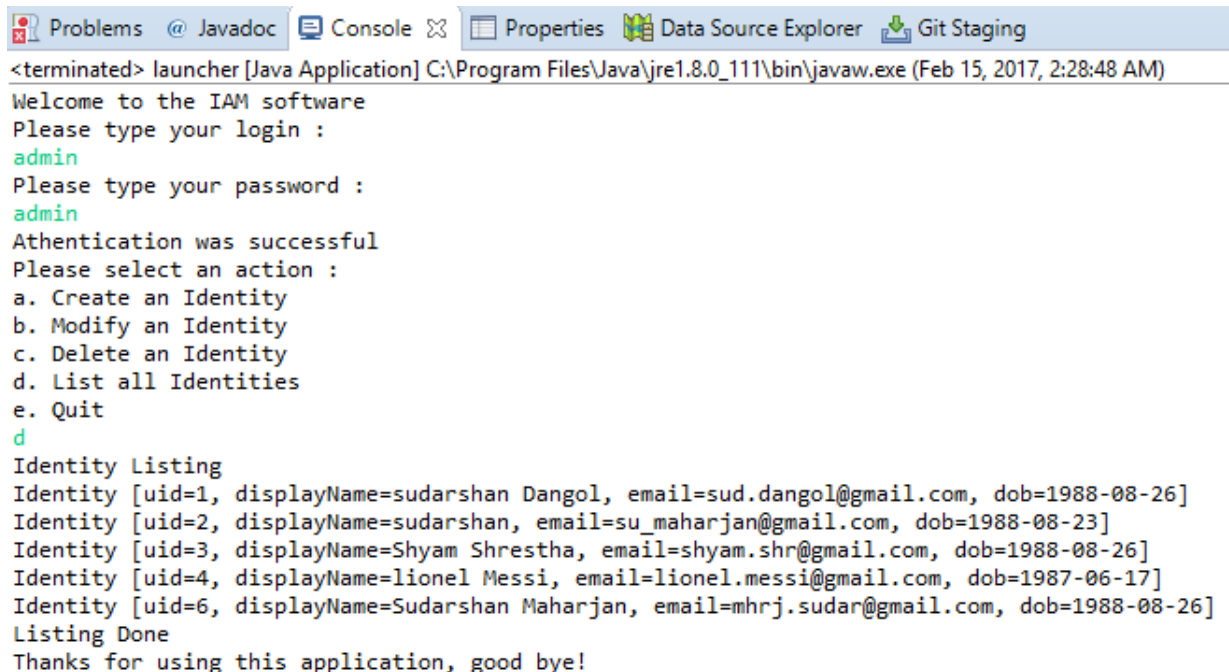
```
Problems  @ Javadoc  Console ⊠  Properties  Data Source Explorer

<terminated> launcher [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.e
Welcome to the IAM software
Please type your login :
admin
Please type your password :
admin
Athentication was successful
Please select an action :
a. Create an Identity
b. Modify an Identity
c. Delete an Identity
d. List all Identities
e. Quit
c
Identity Delete
Please input the User Id
9
User Id Not Found
Thanks for using this application, good bye!
```

6.5 List all Identity

When the user choose the option 'd' , then it will list all the identities in the database as in screenshot.


```
Problems  @ Javadoc  Console ⊠  Properties  Data Source Explorer  Git Staging

<terminated> launcher [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (Feb 15, 2017, 2:28:48 AM)
Welcome to the IAM software
Please type your login :
admin
Please type your password :
admin
Athentication was successful
Please select an action :
a. Create an Identity
b. Modify an Identity
c. Delete an Identity
d. List all Identities
e. Quit
d
Identity Listing
Identity [uid=1, displayName=sudarshan Dangol, email=sud.dangol@gmail.com, dob=1988-08-26]
Identity [uid=2, displayName=sudarshan, email=su_maharjan@gmail.com, dob=1988-08-23]
Identity [uid=3, displayName=Shyam Shrestha, email=shyam.shr@gmail.com, dob=1988-08-26]
Identity [uid=4, displayName=lionel Messi, email=lionel.messi@gmail.com, dob=1987-06-17]
Identity [uid=6, displayName=Sudarshan Maharjan, email=mhrj.sudar@gmail.com, dob=1988-08-26]
Listing Done
Thanks for using this application, good bye!
```

7) Bibliography

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