



IAM APPLICATION

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Subject Description :

The main aim of the project is to develop a “Identity Management Application”. The key features of this application are to permit user to manage information on an information system.

- ❖ Identity can be created by the user
- ❖ Identity of an existing user can be removed
- ❖ Identity of an existing user can be updated
- ❖ Identity can be searched on existing criteria

Subject Analysis :

There are three major features. They are

- 1) Initialization
- 2) Operation
- 3) Display

1) Initialization :

This process is used to load and create the identity management application. The identities, uid (user id)

2) Operations :

A no of operations is done in this program. They are of the following order :

- ❖ User Authentication
- ❖ Using backend to create and delete an identity
- ❖ Using backend to update an identity

3) Display :

The result or conclusion from this project are to visualize the authentication of the user, updating an existing user and to delete the user which has already been created.

Application Feasibility :

The application has a front end and a back end. To access the menu at the front end, in order to perform other operations one must provide valid user name and password. A username and password is considered to be valid if it is present in the database. Authentication of the user takes place with the help of it. Once it is done successfully it takes you to the next steps

Data Description :

All the data created and used are stored in the database. It is safe to say that majority of the data are user data which included name, uid(user id) and email address. Using this data authentication, updating and displaying of results can be done. New user can be created, and they will be stored in the database. Existing users can also be updated. An existing user can also be deleted from the database.

Expected Results :

We are getting the results in backend by using all operations with the connectivity of the database without any errors.

Conception :

3.1 Algorithm :

- ❖ Step 1 : The user has to be authenticated and he has to type the credentials
- ❖ Step 2 : Once the authentication is done successfully. It takes the user to the menu section
- ❖ Step 3 : on the menu section the functionalities displayed are create, update and delete.
- ❖ Step 4 : Once the user is done with the functions it will be displayed as successful it takes you out
- ❖ Step 5 : if the authentication is failed it will ask you to try again and then forward you to exit.

3.2 Data Structures :

Users :

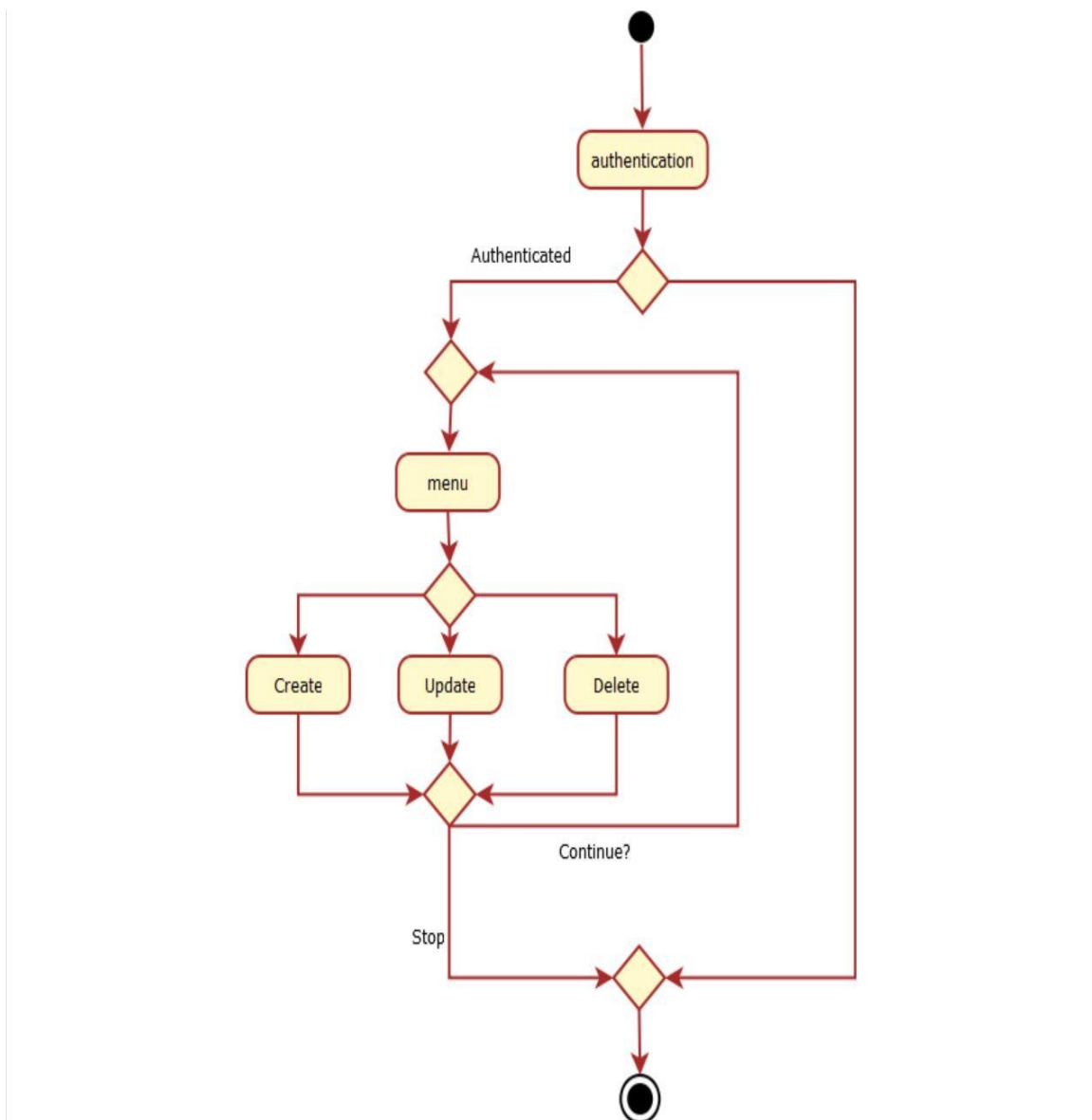
The user is given a username and password by which he is able to access the application. They are stored as string datatypes in the configuration file. For now, Only a single user is created to use the application.

Identities :

These are entities which are used to manage the system. In the application we would be able to create, update, search and delete them. All the identities will be stored in a derby database.

3.3 Global Application Flow :

The application flow of IAM project is being displayed below :



Global Schema and Major Features Schema :

<<Java Class>>	
Identity	
fr.epita.iam.datamodel	
uid: String	
displayName: String	
email: String	
joinday: String	
Identity(String,String,String,String)	
getId():String	
setId(String):void	
getDisplayName():String	
setDisplayName(String):void	
getEmail():String	
setEmail(String):void	
joinday():String	
setbirthday(String):void	
toString():String	

<<Java Class>>	
Launchercl	
fr.epita.iam.launcher	
Launchercl()	
main(String[]):void	
end(Scanner):void	
authenticate(Scanner):boolean	

<<Java Class>>	
DaoException	
fr.epita.iam.exceptions	
serialVersionUID: long	
DaoException()	

<<Java Class>>	
IdentityJDBCDAO	
fr.epita.iam.services	
LOGGER: Logger	
currentConnection: Connection	
IdentityJDBCDAO()	
getConnection():Connection	
releaseResources():void	
readAllIdentities():List<Identity>	
identityjoindate(String):String	
write(Identity):void	
updateiden(Identity):Boolean	
deleteiden(String):Boolean	

<<Java Class>>	
CreateIdent	
fr.epita.iam.functions	
LOGGER: Logger	
CreateIdent()	
execute(Scanner):void	

<<Java Class>>	
DeleteIdent	
fr.epita.iam.functions	
LOGGER: Logger	
DeleteIdent()	
execute(Scanner):void	

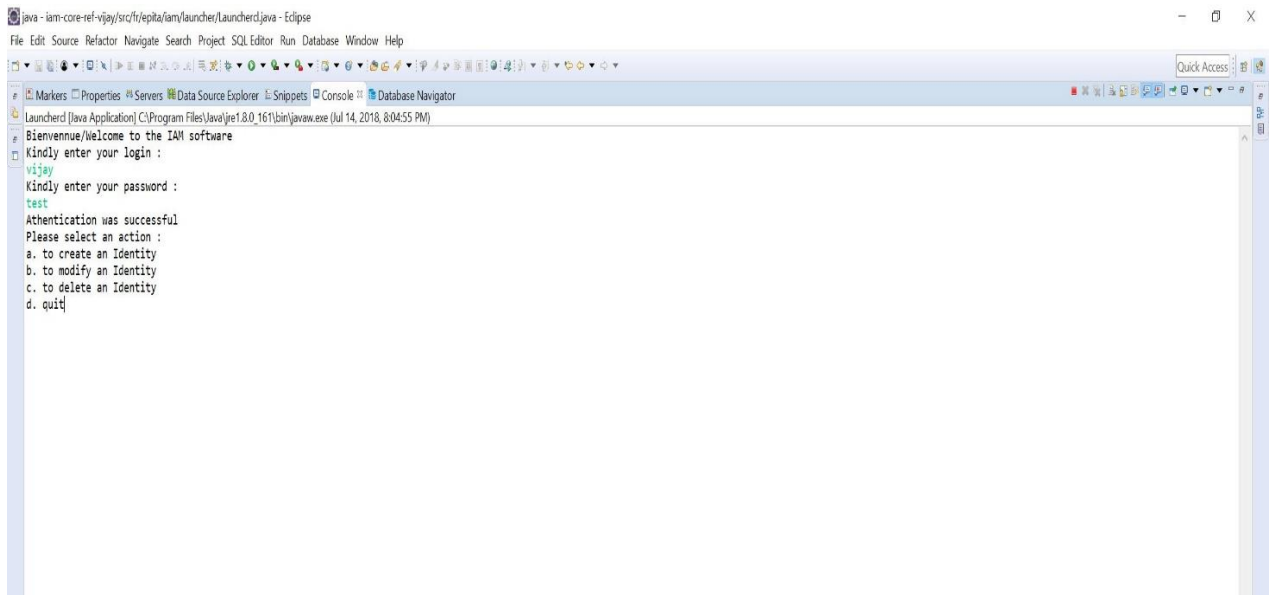
<<Java Class>>	
UpdateIdent	
fr.epita.iam.functions	
LOGGER: Logger	
UpdateIdent()	
execute(Scanner):void	

<<Java Class>>	
Println	
fr.epita.iam.util	
Println()	
println(String):void	

4. Console Operations Descriptions :

Menu :

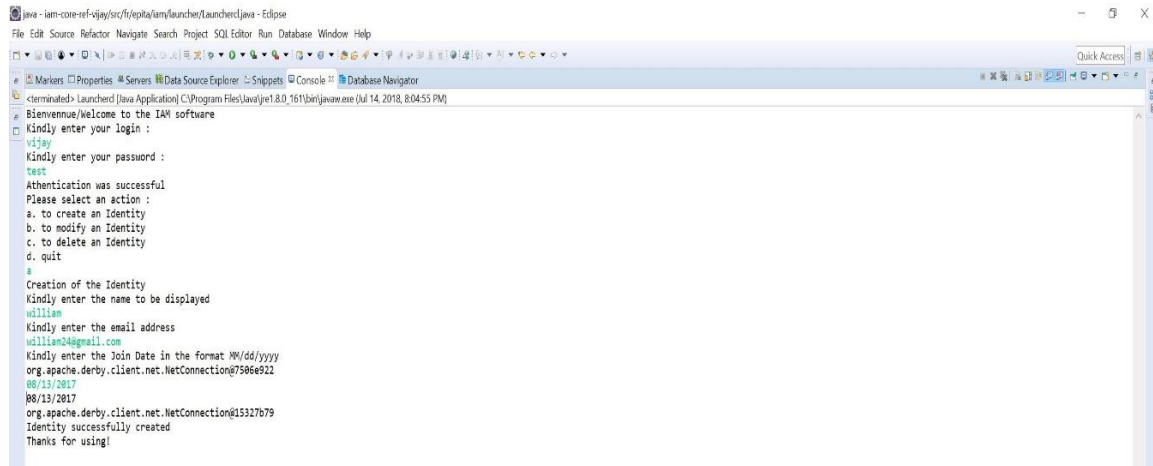
The menu is displayed to the user.



```
java - iam-core-ref-vijay/src/fr/epita/iam/launcher/Launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project SQL Editor Run Database Window Help
Markers Properties Servers Data Source Explorer Snippets Console Database Navigator
Launcher [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (Jul 14, 2018, 8:04:55 PM)
Bienvenue/Welcome to the IAM software
Kindly enter your login :
vijay
Kindly enter your password :
test
Authentication was successful
Please select an action :
a. to create an Identity
b. to modify an Identity
c. to delete an Identity
d. quit
```


Create a New Identity :

The user tries to create a new identity, The following screen appears :

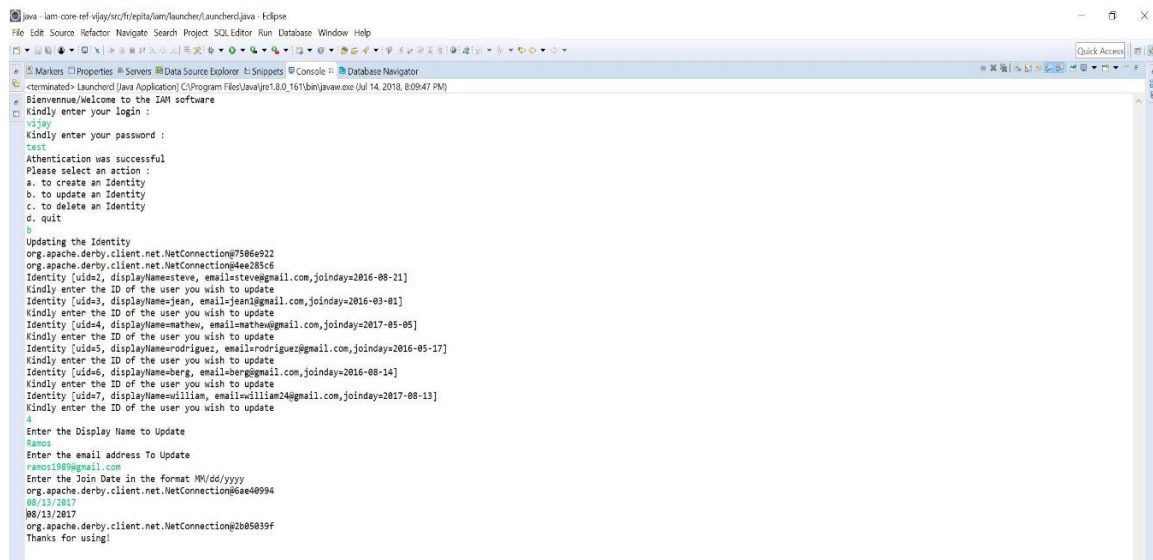


```
java - iam-core-ref-vijay/src/fit/tpita/iam/launcher/launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project SQL Editor Run Database Window Help

<terminated> Launcher [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (Jul 14, 2018, 8:04:55 PM)
# Bienvenue/Welcom to the IAM software
# Kindly enter your login :
vijay
# Kindly enter your password :
test
Authentication was successful
Please select an action :
a. to create an Identity
b. to modify an Identity
c. to delete an Identity
d. quit
a
Creation of the Identity
Kindly enter the name to be displayed
william
Kindly enter the email address
william24@gmail.com
Kindly enter the Join Date in the format MM/dd/yyyy
08/13/2017
08/13/2017
org.apache.derby.client.net.NetConnection@7586e922
Identity successfully created
Thanks for using!
```

Update of the Identity

The user tries to update the identity, The following screen appears :

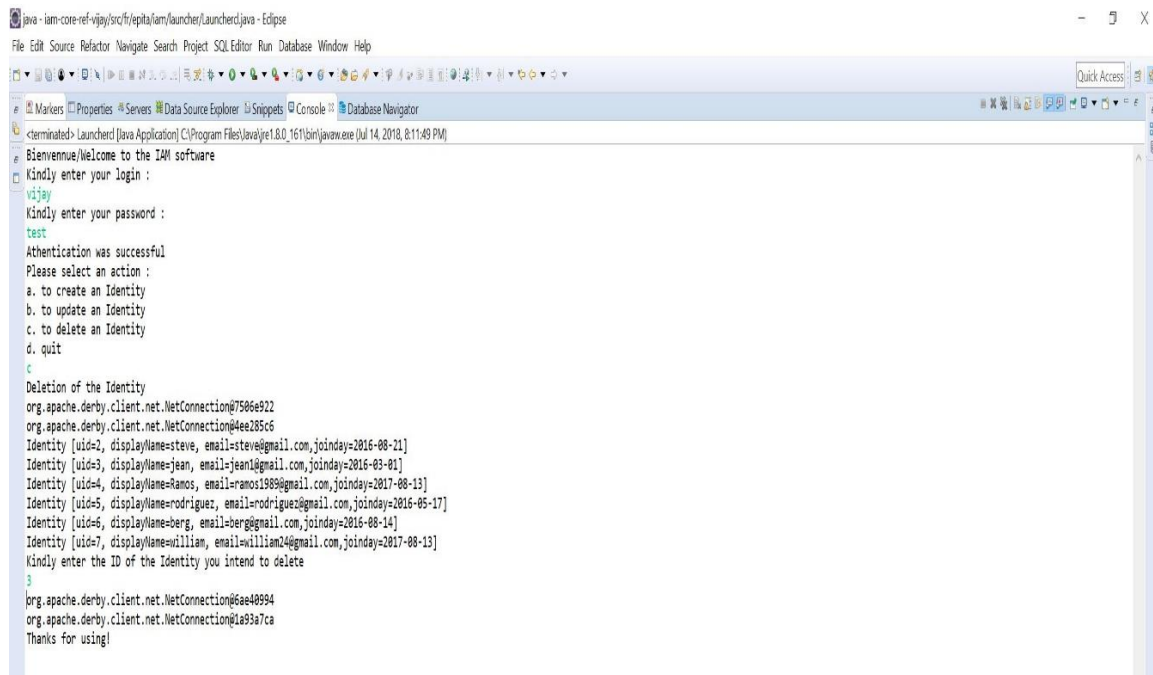


```
java - iam-core-ref-vijay/src/fit/tpita/iam/launcher/launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project SQL Editor Run Database Window Help

<terminated> Launcher [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (Jul 14, 2018, 8:09:47 PM)
# Bienvenue/Welcom to the IAM software
# Kindly enter your login :
vijay
# Kindly enter your password :
test
Authentication was successful
Please select an action :
a. to create an Identity
b. to update an Identity
c. to delete an Identity
d. quit
b
Updating the Identity
org.apache.derby.client.net.NetConnection@7586e922
org.apache.derby.client.net.NetConnection@4ee285c6
Identity [uid=2, displayName=steve, email=steve@gmail.com, joinday=2016-08-21]
Kindly enter the ID of the user you wish to update
Identity [uid=3, displayName=jean, email=jean@gmail.com, joinday=2016-08-01]
Kindly enter the ID of the user you wish to update
Identity [uid=4, displayName=mathew, email=mathew@gmail.com, joinday=2017-05-05]
Kindly enter the ID of the user you wish to update
Identity [uid=5, displayName=rodriguez, email=rodriguez@gmail.com, joinday=2016-05-17]
Kindly enter the ID of the user you wish to update
Identity [uid=6, displayName=berg, email=berg@gmail.com, joinday=2016-08-14]
Kindly enter the ID of the user you wish to update
Identity [uid=7, displayName=william, email=william24@gmail.com, joinday=2017-08-13]
Kindly enter the ID of the user you wish to update
4
Enter the Display Name to Update
Ramos
Enter the email address To Update
ramos1989@gmail.com
Enter the Join Date in the format MM/dd/yyyy
08/13/2017
08/13/2017
org.apache.derby.client.net.NetConnection@6ae40994
Identity successfully updated
Thanks for using!
```

Deletion of the Identity :

The user tries to delete the identity, The following screen appears :

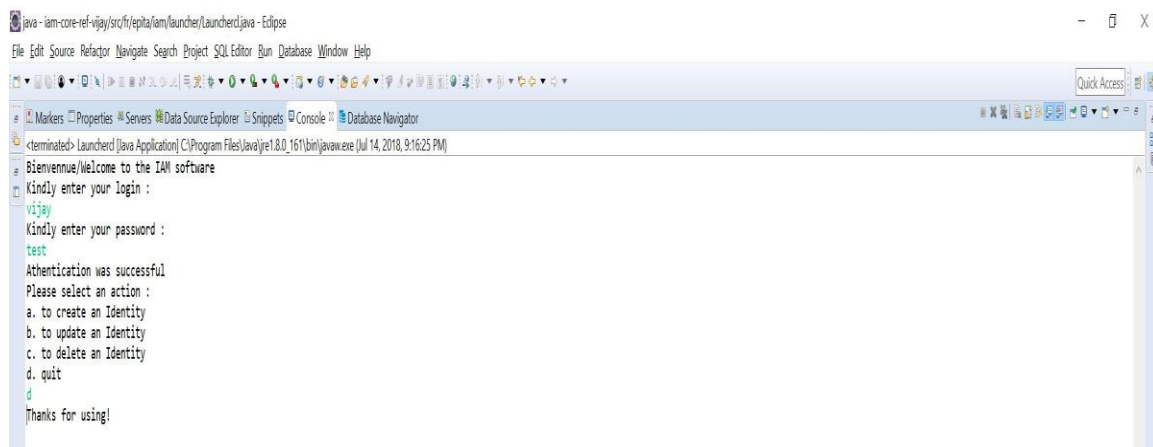


```
java - iam-core-ref-vijay/src/ft/epita/iam/launcher/Launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project SQL Editor Run Database Window Help

<terminated> Launcher [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (Jul 14, 2018, 8:11:49 PM)

Bienvenue/Welcome to the IAM software
Kindly enter your login :
vijay
Kindly enter your password :
test
Authentication was successful
Please select an action :
a. to create an Identity
b. to update an Identity
c. to delete an Identity
d. quit
c
Deletion of the Identity
org.apache.derby.client.net.NetConnection@7506e922
org.apache.derby.client.net.NetConnection@4ee285c6
Identity [uid=1, displayName=steve, email=steve@gmail.com, joinday=2016-08-21]
Identity [uid=3, displayName=jean, email=jean1@gmail.com, joinday=2016-03-01]
Identity [uid=4, displayName=Ramos, email=ramos1989@gmail.com, joinday=2017-08-13]
Identity [uid=5, displayName=rodriguez, email=rodriguez@gmail.com, joinday=2016-05-17]
Identity [uid=6, displayName=berg, email=berg@gmail.com, joinday=2016-08-14]
Identity [uid=7, displayName=william, email=william24@gmail.com, joinday=2017-08-13]
Kindly enter the ID of the Identity you intend to delete
3
org.apache.derby.client.net.NetConnection@6ae40994
org.apache.derby.client.net.NetConnection@1a93a7ca
Thanks for using!
```

Quit :



```
java - iam-core-ref-vijay/src/ft/epita/iam/launcher/Launcher.java - Eclipse
File Edit Source Refactor Navigate Search Project SQL Editor Run Database Window Help

<terminated> Launcher [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (Jul 14, 2018, 9:16:25 PM)

Bienvenue/Welcome to the IAM software
Kindly enter your login :
vijay
Kindly enter your password :
test
Authentication was successful
Please select an action :
a. to create an Identity
b. to update an Identity
c. to delete an Identity
d. quit
d
Thanks for using!
```

Configuration Instructions :

- ❖ At first, User has to install JAVA into his system.
- ❖ The next step for the user is to make sure Eclipse is being installed in his system.
- ❖ The user has make sure the derby database has been installed in his system.
- ❖ The next step involves of installing the derby database into your eclipse

User name : vijay

Password : test

Bibliography :

<http://thomas-broussard.fr>

<http://thomas-broussard.fr/work/java/courses/project/fundamental.xhtml>

www.stackoverflow.com