

NOG'2014: Applications for Nordic Olympic Games 2014

Specification

This project included two main java based system for the Nordic Games. The two systems consist of:

- "The NOG's information system" that is able to save, get, filter and update information about all the participants in NOG. This system is dynamic and update automatically.
- "NOG's chat rooms" that is an interactive virtual meeting place that uses a distributed application using Java RMI based software which offers remotely located users, such as fans, journalists, participants to communicate with each other in different chat rooms.

Hardware and operating system that is used

All of the programming has been done on my own (my «fellow» didn't really answered). I used Linux (Ubuntu) as OS.

Software

The software I have used at home is:

- Java software: Netbeans IDE 7.4
- RMI
- JDBC → derby database.

Description of the assignments

Assignment 1 and 2 - "The NOG'2002 information system"

The assignment 1 and 2 are built on a client-server solution. It consists of two programs, one server and one client. On the server side, I register every online client using a RMI method; therefore

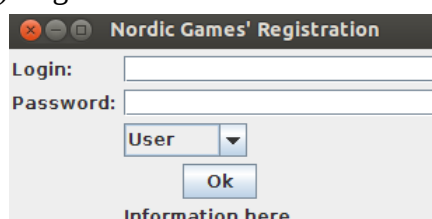
The client is a GUI interface that presents all the information needed for the user.

I have provided all the information about the participants in derby database that is automatically updated during the change.

To do so every client is connected to a client interface which connects directly to the database.

Presentation of the interface:

1) Login:



When logging in, you are asked to provide a login and password to connect to the interface.

You can login as "User", "Admin" or "Register" to the user database.

"User" makes you connect to the Chat Room (Ass3) whether "Admin" makes you connect to the information system

2) Registration:



By clicking on “Register”, you can register yourself to the user database with login password.

You can give an occupation (journalist, fan, athlete etc ... that is useful for the chat room) and give a function “Admin” or “User”.

Being an “Admin”, you are also a “User” (the contrary is not true as the normal “User” doesn't have the “Admin” rights).

3) Strength of the interface:

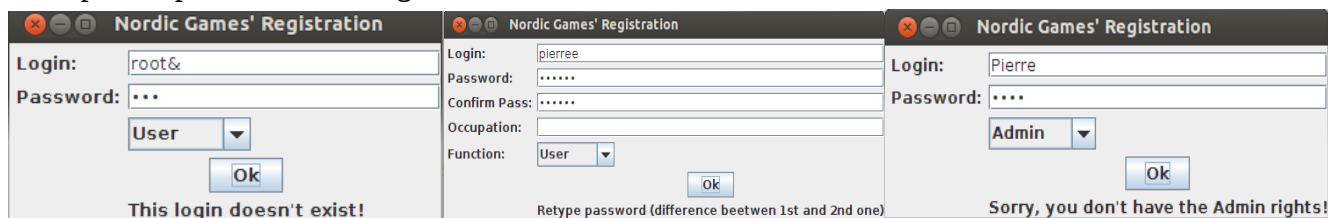
The “information here” label provides you the error you made during the registration or the login phase such as :

a) password & login verification (in login, make sure password is correct or login exists, in registration make sure confirm pass = pass)

b) you can't register with an existing login.

c) you can't go to the “Admin” page if you are not an “Admin” (but you can access “User” if you are an “Admin”).

Example are provided in the figures below:



The Admin part:

if you connect as an admin (Ass1 & 2), you have access to the participants database:

ID	Name	SEX	COUNTRY	BIRTHDATE	SIZE	WEIGHT	SPORT
50569	Contin, Alexis	M	Norway	1988/12/7	178	67	Speed Skating
50568	Mantia, Joey	M	Finland	1988/4/25	176	68	Speed Skating
50567	Kramer, Sven	M	Norway	1990/10/23	178	70	Speed Skating
50566	Max la Menace	M	Denmark	1990/4/15	178	90	Cross Country
50557	Laurent, Pierre	M	Sweden	1991/01/29	170	70	Speed Skating
50556	Odevall, Sofia	F	Sweden	1975/09/18	161	58	Speedskating
50555	Westblom, Ylva	F	Sweden	1976/10/14	199	93	Speedskating
50554	Oderstrom, Jenny	F	Sweden	1976/04/30	173	67	Speedskating
50553	Odevall, Katrin	F	Sweden	1974/12/08	164	63	Speedskating
50552	Millberg, Susanne	F	Sweden	1979/10/17	167	63	Speedskating
50551	Malmgren, Rebecca	F	Sweden	1974/01/31	165	62	Speedskating
50546	Holmgren, Ann-Christine	F	Sweden	1980/01/04	162	51	Skijumping
50545	Edwall, Malin	F	Sweden	1981/12/25	164	51	Skijumping
50544	Sundkvist, Jessica	F	Sweden	1979/06/29	165	54	Skijumping
50543	Ramstedt, Helene	F	Sweden	1979/04/20	170	62	Skijumping
50542	Persson, Carina	F	Sweden	1978/08/07	161	50	Skijumping
50541	Nilsson, Anette	F	Sweden	1979/06/23	165	53	Skijumping
50536	Ekstrand, Madeleine	F	Sweden	1975/08/27	167	60	Cross Country
50535	Ekstrand, Pernilla	F	Sweden	1978/10/27	173	65	Cross Country
50534	Vttermyr, Cecilia	F	Sweden	1964/12/13	173	60	Cross Country
50533	Steen, Linda	F	Sweden	1972/12/14	172	63	Cross Country
50532	Nurminen, Sari	F	Sweden	1972/11/07	167	59	Cross Country
50531	Nirmark, Anna	F	Sweden	1975/02/29	176	69	Cross Country
50526	Johansson, Ann-Charlo...	F	Sweden	1979/07/15	164	55	Biathlon
50525	Andersson, Irene	F	Sweden	1972/12/17	165	58	Biathlon
50524	Ohlund, Marianne	F	Sweden	1969/05/26	166	57	Biathlon
50523	Ohlberg, Kristina	F	Sweden	1975/09/29	171	62	Biathlon
50522	Thombladh, Ingrid	F	Sweden	1975/10/26	175	58	Biathlon
50521	Rydberg, Anneli	F	Sweden	1974/02/25	174	72	Biathlon
50516	Sandberg, Ingela	F	Sweden	1974/04/26	163	60	Alpine Skiing
50515	Milovic, Daniella	F	Sweden	1978/07/16	172	76	Alpine Skiing
50514	Rask, Esa	F	Sweden	1972/08/01	161	67	Alpine Skiing
50513	Karlstrom, Therese	F	Sweden	1978/12/22	164	64	Alpine Skiing
50512	Appelgren, Gabriella	F	Sweden	1972/09/28	172	68	Alpine Skiing
50511	Salminen, Lena	F	Sweden	1975/03/05	169	67	Alpine Skiing
50056	Vazquez, Tony	M	Sweden	1980/09/27	175	72	Speedskating
50055	Hjelte, Patrik	M	Sweden	1975/07/05	187	84	Speedskating
50054	Eriksson, Leif	M	Sweden	1969/12/13	187	80	Speedskating
50053	Cederlof, Johnny	M	Sweden	1978/06/08	180	75	Speedskating

Filter Text:

Delete Participant

Add Participant

Refresh

Info

In this database, you can:

- 1) Sort every column (just click in the column you are interested) and they will be sort by alphabetic or increasing number (in the figure above, participants are sorted by decreasing ID).
- 2) Filter columns (such as name column etc ...)

ID	Name	SEX	COUNTRY	BIRTHDATE	SIZE	WEIGHT	SPORT
50558	Martia, Joy	M	Finland	1988/4/25	1.76		68Speed Skating
50526	Johansson, Ann-Charlotte	F	Sweden	1979/07/15	1.64		55Biathlon
50533	Cederberg, Johnny	M	Sweden	1978/09/08	1.90		75Speedskating
50035	Zettergren, Johan	M	Sweden	1971/11/11	1.78		76Cross Country
50026	Hedlund, Johan	M	Sweden	1976/11/29	1.81		75Biathlon
50024	Wernberg, Joakim	M	Sweden	1978/07/17	1.83		88Biathlon
50014	Wikblad, Jonas	M	Sweden	1969/01/01	1.76		80Alpine Skiing
42026	Harstad, Jon	M	Norway	1978/03/02	1.83		79Biathlon
42022	Johansen, Jan Helge	M	Norway	1972/10/04	1.75		73Biathlon
25546	Johansdottir, Holmfridur	F	Iceland	1980/01/02	1.64		84Skijumping
25012	Jedensson, Brag	M	Iceland	1977/06/12	1.84		83Alpine Skiing
18516	Franssila, Johanna	F	Finland	1974/04/03	1.71		64Alpine Skiing
18015	Lassila, Jorma	M	Finland	1975/02/27	1.77		78Alpine Skiing

Participants are filtered using the key Jo.

Filter Test:	Jo
Delete Participant	Add Participant
Refresh	Info

3) Update Participant:

You can automatically update participants (without changes of loading and automatic update in your sheet of participants).

Some columns use ComboBox (because there are only a finite number of choice) such as sports, country, Sex ... Other are free to modify and the ID isn't editable (it's the primary key of every participant).

4) Add/delete Participant:

You can create a new participant.

You can also a participant by typing its ID number and confirming with your password.

Register new athlete to NOG	
ID:	50570
Surname, Name:	
Gender (F or M):	F
Country:	Denmark
Birthdate:	Please use yyyy/mm/dd
Size (cm):	
Weight (kg):	
Sport:	Alpine Skiing
Ok	
Register a new participant to NOG	

You just have to fill every blank.

Once the participant is created or deleted, your personnal database is automatically updated.

Delete Participant to NOG	
ID:	Type the ID to cancel
Pass:	
Ok	
Validate by Typing your pass	

Interraction with other "Admin":

When there are at least 2 admins connected to the information system, every time one is making a change, all the other are automatically informed in the info bar.

They can decide to see the update (participant update, new participant, participant deleted) by refreshing the page → I prefer this solution than an automatic update as automatic one disturb the admin while working.

The Update are sent to the main server and then to every client using an RMI method.

Filter Text:	<input type="text"/>
Delete Participant	<input type="text"/>
Refresh	Johansen, Jan Helge has been updated by root in: SEX with value M

Assignment 3 - "NOG's chat rooms"

This assignment consists of three different programs, USER, ChatRoom and RegistrationCenter. User is the GUI interface used for a user to create, delete and visit chat rooms. This means that a user can be able to chat with other user that is also connected with the same Registration Centre.

ChatRoom is a Chat room created by a user and registered at the RegistrationCenter.

RegistrationCenter is a registration centre for all the chat rooms used in the application. A chat room that is registered can be visited by all users.

The communication is done for everyone by RMI.

To register to the Chat Registration center, ust follow the previous part and login as a simple "User".

NB: Admin are allowed to register as simple "User".

ChatRoom – A chat room

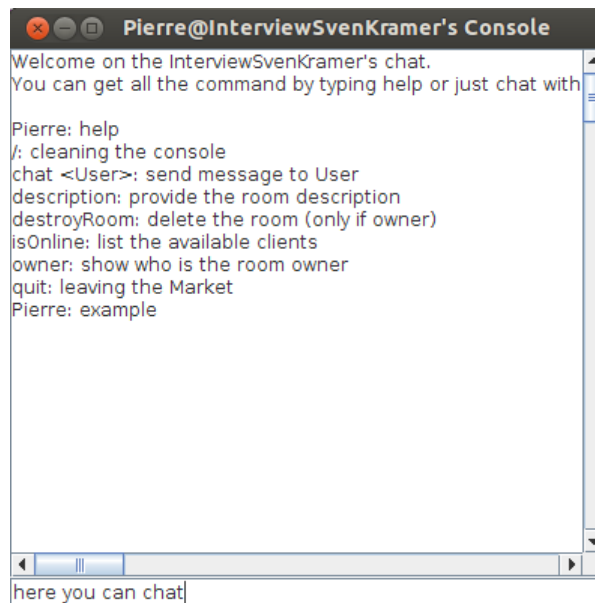
Once registered you access the chat room service where you can join a room or create a new room and being the new owner.

User - User application

Once you have created a room or decided to join a room, you are provided a console to chat with peers.

This console has some specific commands:

- See who is online
- See the description of the chat room
- destroy the chat room (only for owner ... doesn't work really well)
- Clean the chat room
- all these commands can be seen by typing the help command
- Chat to a specific (to do)
- Simply chat with pairs.
- See who is the owner
- Quit the Chat Room.



Every chat room is registered as a RMI Server so that every chat room is independent.

To run the applications

Assignment 1 and 2 - "The NOG's information system"

Before starting

- Make sure that rmiregistry is added → using a terminal, go to the corresponding Project/build/classes/ path and type rmiregistry&.
- Export or create the 2 JDBC derby database (users and participants) and make sure they are connected.

Server

run the server through netbeans

Client

For every client, run them through netbeans.

To access the information system, just run the client as an admin in the first window displayed when you run the Client (make sure the client has the Admin rights!).

Assignment 3 - "NOG's Chat Rooms"

To access the chat room system, just run the client as a user in the first window that is displayed when you run a Client.