

Basket-ball Management Sytem - BMS

User manual

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August 5, 2012

1 System environment

To use BMS, your computer should have ability to run Java application, means that it should be installed Java (Java 7 is required)

1.1 Check JAVA in your machine

These instruction is used for Windows Operation System only.

Press **Windows** and **R** keys simultaneously, then type cmd and press **Enter**

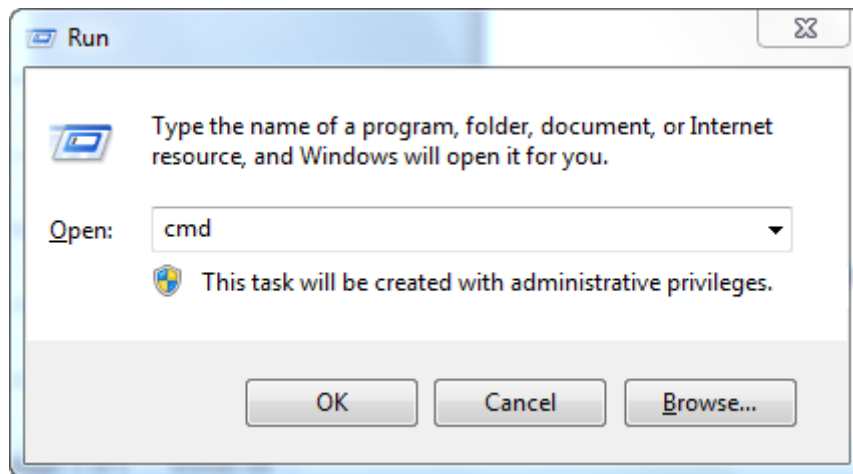
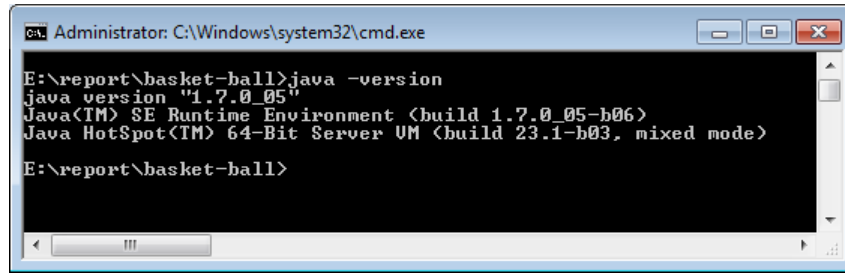


Figure 1: Run command prompt in Windows OS

In Windows command prompt windows, type java -version. If below window appears (see below figure), your computer has been already installed Java SDK 7, go to step 2

A screenshot of a Windows command prompt window titled "Administrator: C:\Windows\system32\cmd.exe". The window has a black background with white text. The command prompt shows the following text:

```
E:\report\basket-ball>java -version
java version "1.7.0_05"
Java(TM) SE Runtime Environment (build 1.7.0_05-b06)
Java HotSpot(TM) 64-Bit Server VM (build 23.1-b03, mixed mode)
E:\report\basket-ball>
```

Figure 2: Check JAVA version

1.2 Install JAVA JDK 7

If your computer has not been installed Java 7 yet, please go to link <http://www.oracle.com/technetwork/downloads-1637583.html> to choose and download a suitable version of Java SDK for your computer (for example, a suitable version for Windows 32 bit OS is `jdk-7u5-windows-i586.exe`). After download finish, please run downloaded file to install Java 7 in your computer.

Note that **x86** means your computer running 32 bits operation system, while **x64** means your computer running 64 bits operation system. In MS Windows Operation systems, you can check if your computer is installed 32/64 bits OS by press **Windows** and **R** keys simultaneously, and check it in System type field.

2 Check out BMS

Source code, and documents of BMS are committed to github at `git@github.com:pufm2/basket-ball.git` or `https://pufm2@github.com/pufm2/basket-ball.git`. Before check out, please login to github with username/password is `pufm2/changeit123`.

3 Extract Downloaded file

Extract `basket-ball_src.zip` (which is attached with the email), extract it

Choose a location, which you want to extract this file, for example, it is C:

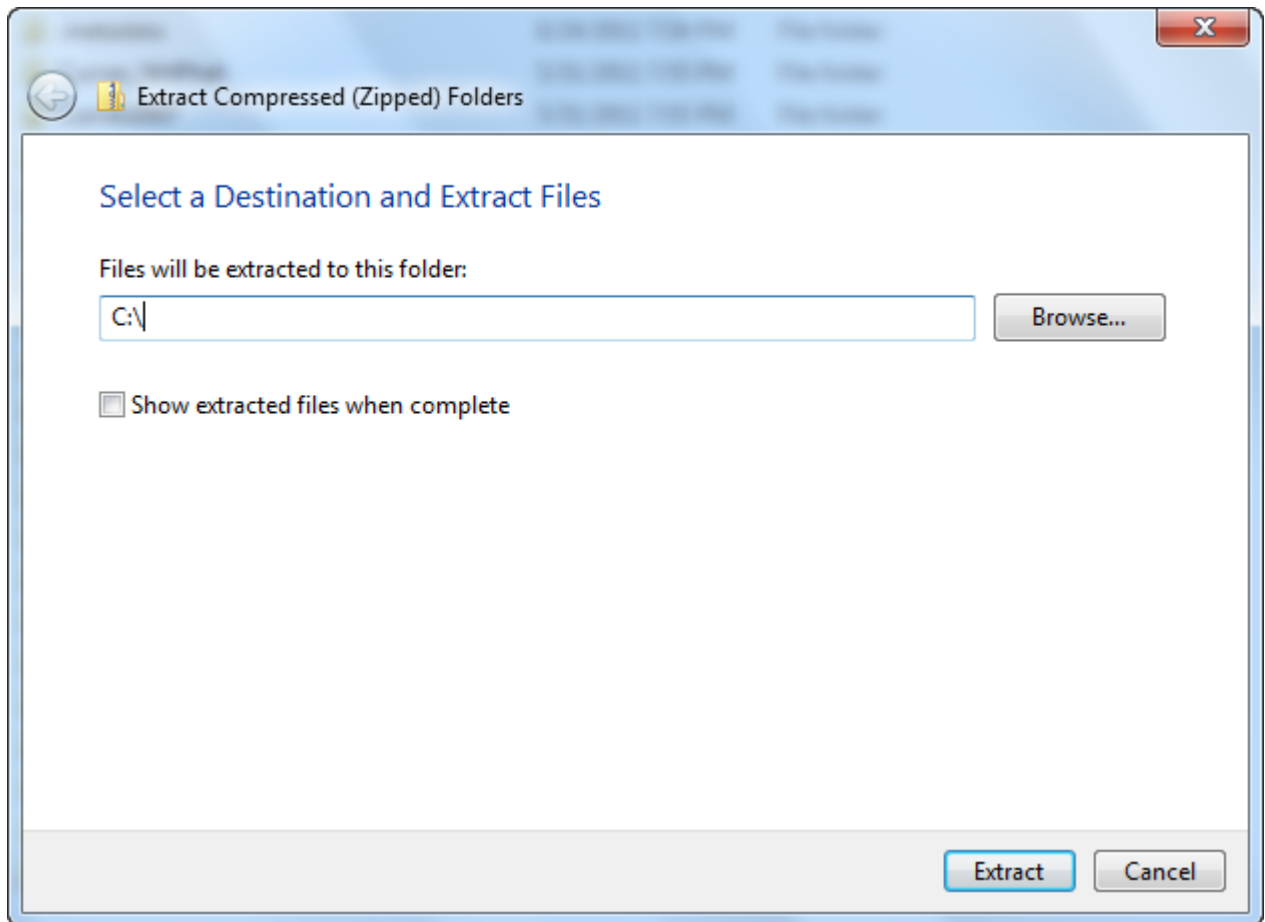


Figure 3: Extract BMS zip file to computer

A zip file containing

- An Eclipse project (including all the needed libraries)
- File "basket.properties", it contains necessary information to connect to database
- The documentation of your project

4 Structure folder of project

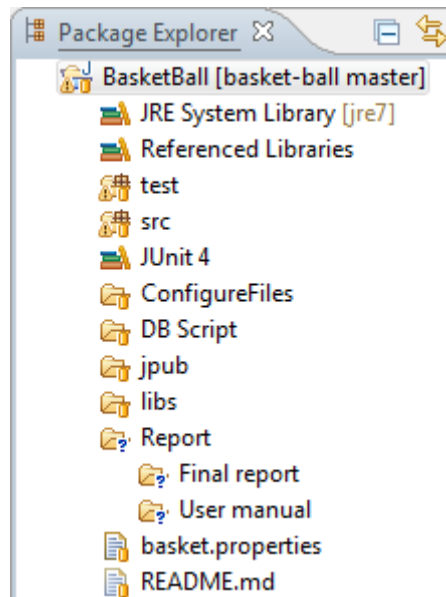


Figure 4: Folder structure of BMS

- “DBScript” folder: all necessary script to make initial structure and data for project
- “Documents” folder: all documents which are made during project
- “src” folder: all java source code for this program

5 How to use project

5.1 Create ADT and table

Before using BMS, you should create types (ADT - Abstract Data Type) and table for BMS, insert initial data for it. Please follow these steps

- Login to your Oracle server with any user which can create new user (normally, you can login with SYS or SYSTEM user)
- Run script 1CreateUser.sql
- Logout from Oracle server
- Login to Oracle server with username and password is "*basket_user*" and "*basket_pwd*" (without quotes)
- Run script 2CreateType.sql
- Run script 3CreateTable.sql
- Run script 4CreateConstraint.sql

- Run script 5InsertData.sql

5.2 Define connection

At first, you should provide exactly information of Oracle Server which you want BMS will interact.

Open file “basket.properties” in project folder by using your editor (ex: Notepad). Change to your database server, port and database SID

5.3 Run project

There are two ways to use this project

1. Import the project into Eclipse, then run class puf.m2.basket.run.RunBasket.java
2. Extract zip file basket-ball.zip (which is attached with the email), run “run.bat”.

6 BMS functions

Before using BMS functions, we must login to system by prepared username and password. Within deploy package, it has some prepared username like this. Note that username and password are not case sensitive

| Username | Password |
|----------|----------|
| Phat | Phat |
| Hoan | Hoan |

Figure 5: List of prepared username and password

6.1 How to login

After run application, you should provide correct username and password.

Figure 6: Login form

If username or password does not correct, you will see an error message

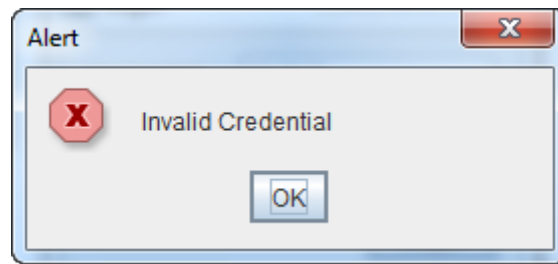


Figure 7: Alert if incorrect username or password

If username and password is correct, depend on user's role, system will open the main form of BMS.

6.2 Manage Person

There are some type of person in BMS: Coach, Person, President, Secretary, Treasurer, Vice president

1. Manage coach, president, secretary, treasurer and vice president

At first, there are only two button in form: NEW and FIND

A screenshot of a software window titled 'Basket-ball management system'. It has a menu bar with 'Person', 'Organization', 'Tournament', 'Report', and 'About'. The main area contains two labels: 'Coach ID' and 'Coach name'. The 'Coach ID' label is next to a text box containing the number '99'. The 'Coach name' label is next to an empty text box. At the bottom left, there are two buttons: 'Cancel' and 'Save'.

Figure 8: Insert new person

If you want insert new person, press NEW button, fill in all necessary information and press SAVE

In case of person's information is not provided fully, or that ID/ Person name already exists in BMS, BMS will show error message

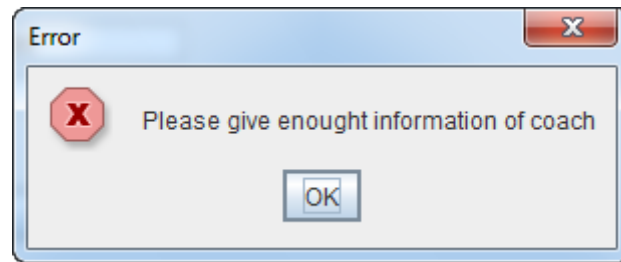


Figure 9: Error message when person name is blank

If BMS found that person in system, it will show their information in form, after that you can UPDATE their information or DELETE them

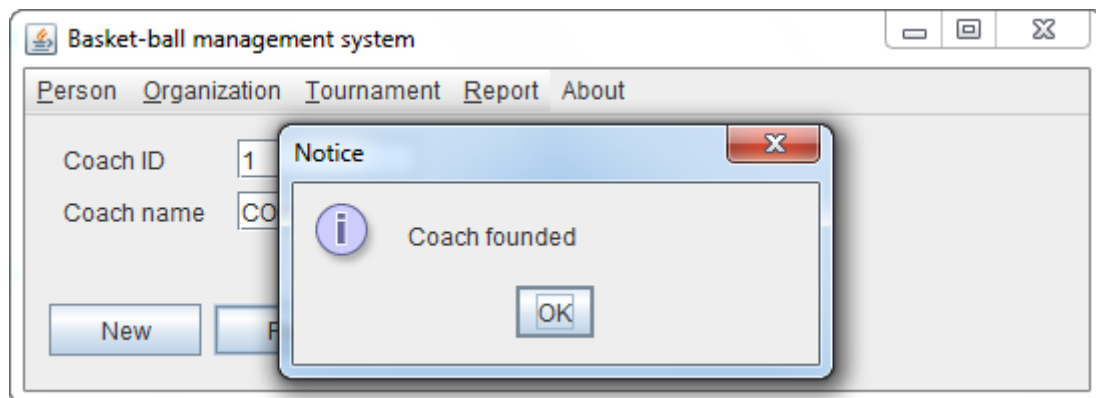


Figure 10: Find person input message

2. Update person

After find that person, you can change his/her information (except person ID), then press "SAVE" button to save updated information

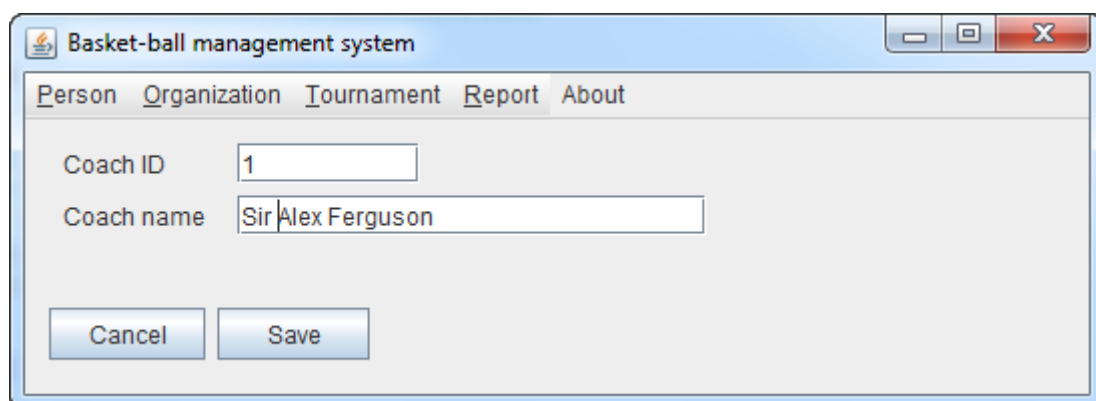


Figure 11: Update user successful (1)

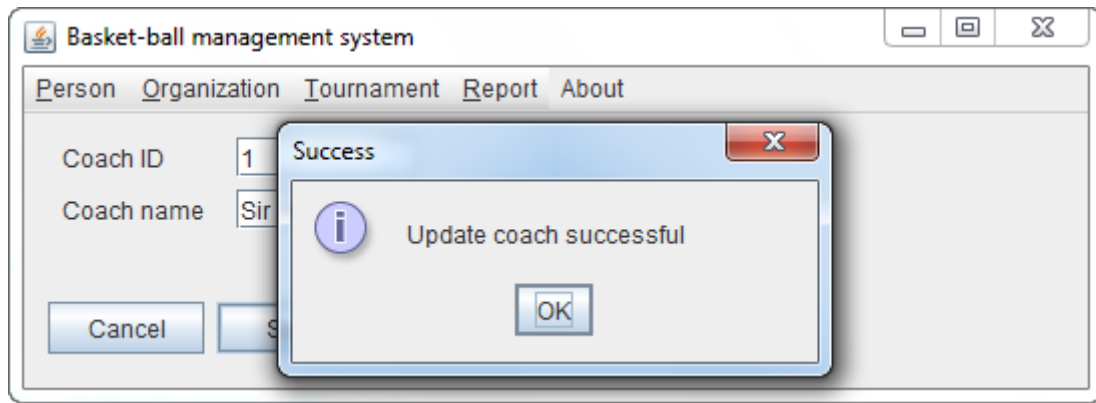


Figure 12: Update user successful (2)

3. Delete person

After find a person, you can delete him from BMS, press **Delete** button to remove that person from system. For consistency reason, user who deleted from BMS already exists in BMS, but you can not find him more.

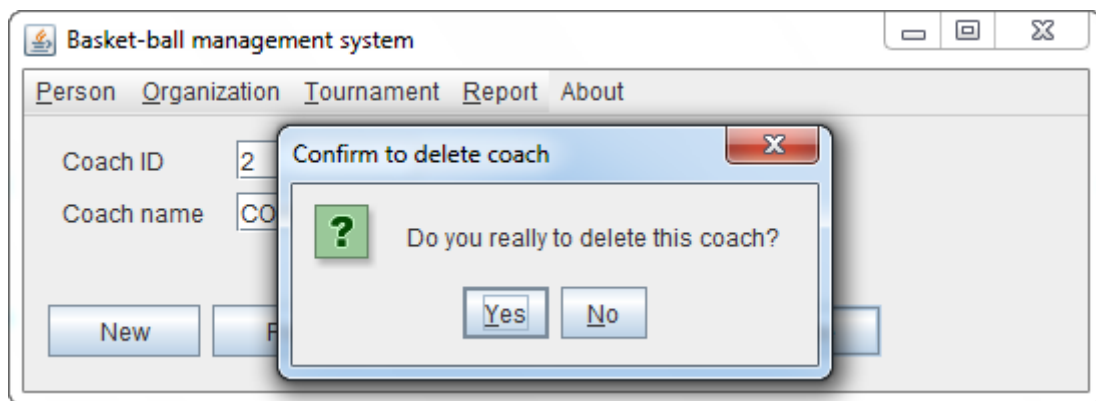


Figure 13: Delete person successful

With player, you can insert/update/delete like other person. But with player, you should choose the correct city of his address. When you choose city, latitude and longitude of that player with show below city name.

6.3 Manage organization

In organization, you can manage category of team, list of club and office of club. Actions for interacting data like manage person.

6.4 Manage tournament

With in tournament, you should manage list of teams, seasons and match

When you define match, please note team 1 and team 2 of match must be difference.

After you press button “Set teams of match”, list player of these teams will be load to controls. You can choose team and player to add points which that player score in this match. It is useful for some later report

The screenshot shows a window titled "Basket-ball management system" with a menu bar containing "Person", "Organization", "Tournament", "Report", and "About". The "Tournament" menu is currently selected. The main area contains the following controls:

- Match ID:** A text input field.
- Match Date:** A date picker control.
- Season:** A dropdown menu showing "SEASON 1".
- Team 1:** A dropdown menu showing "TEAM 1".
- Team 2:** A dropdown menu showing "TEAM 1".
- Set teams of match:** A button.
- Details:** A section containing:
 - Team:** A dropdown menu.
 - Player:** A dropdown menu.
 - Point(s):** A text input field.
 - Add:** A button.
- Table:** A large empty rectangular area below the "Details" section, likely for displaying match data.
- Footer:** A row of buttons: "New", "Find", "Cancel", "Save", "Update", and "Delete".

Figure 14: Manage match

6.5 Report

We also provide some stat and report for user to summarize tournament information. Some report use Oracle SdoGeometry to calculate geographic localization. There are:

1. Average score of date

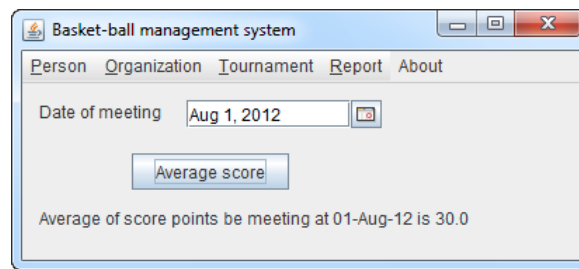


Figure 15: Average score of date

2. Average score of season

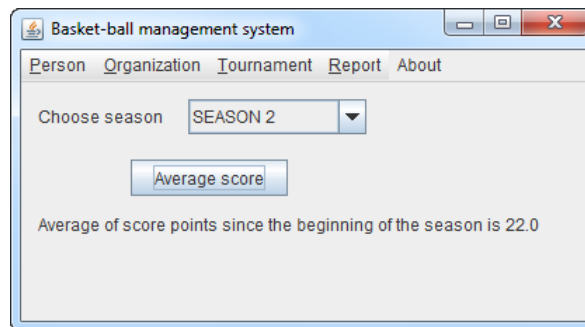


Figure 16: Average score of season

3. Average of moving distances between two matches

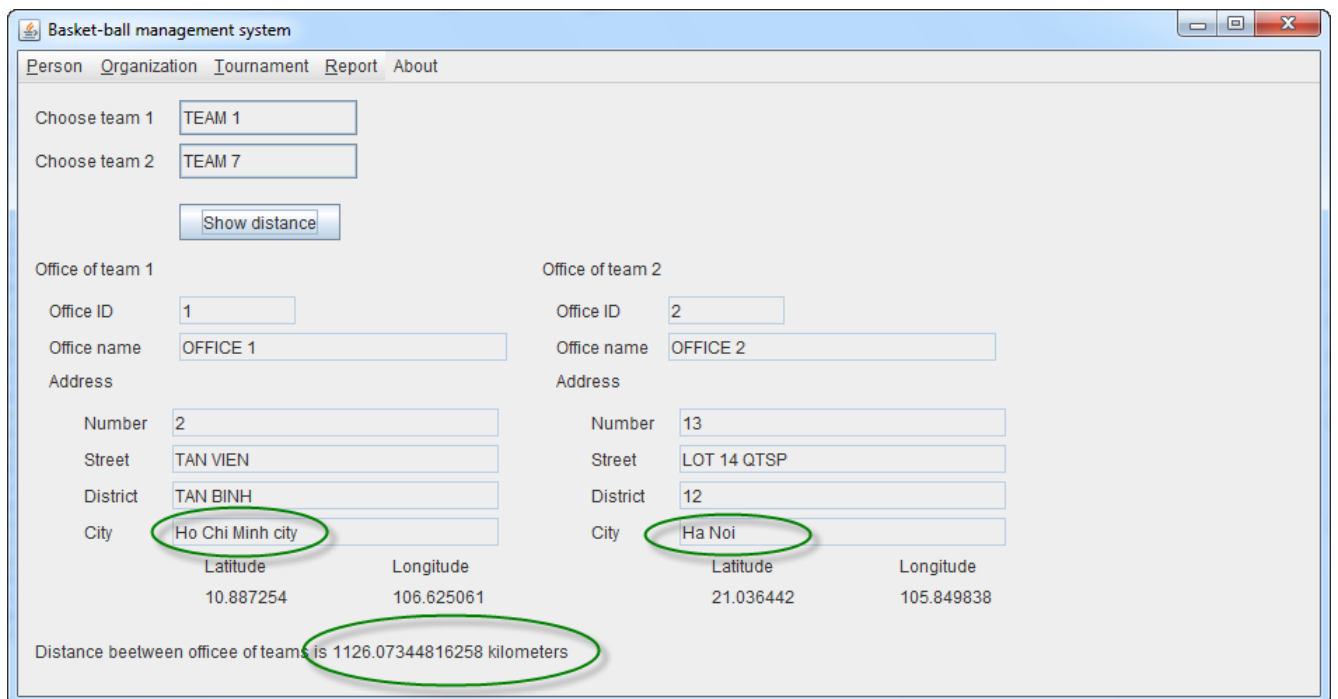
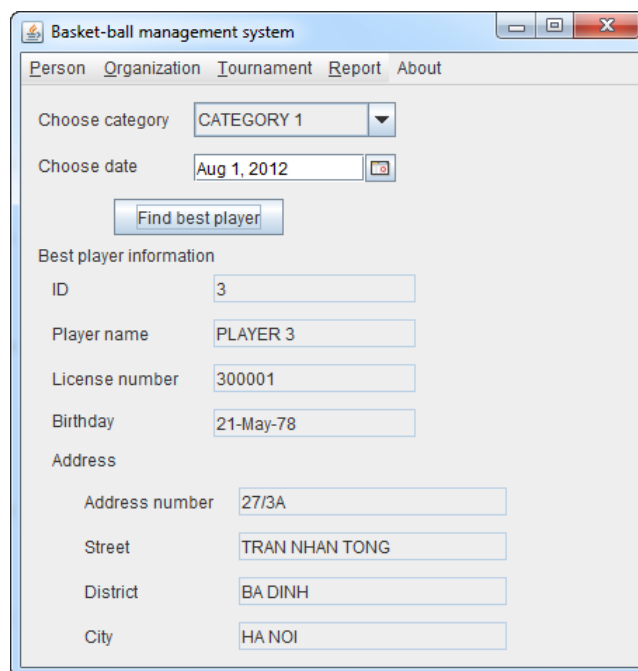


Figure 17: Average of moving distances between two matches

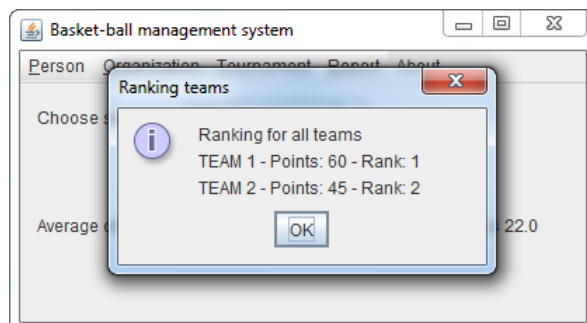
4. Find the best player of date for a category



The screenshot shows a window titled "Basket-ball management system" with a menu bar containing "Person", "Organization", "Tournament", "Report", and "About". The main area has two input fields: "Choose category" with a dropdown menu set to "CATEGORY 1", and "Choose date" with a text box containing "Aug 1, 2012" and a calendar icon. Below these is a "Find best player" button. Underneath, the "Best player information" is displayed in a form with the following fields: ID (3), Player name (PLAYER 3), License number (300001), Birthday (21-May-78), and Address (Address number: 27/3A, Street: TRAN NHAN TONG, District: BA DINH, City: HA NOI).

Figure 18: Find the best player of date for a category

5. Ranking teams



The screenshot shows the same "Basket-ball management system" window, but with a "Ranking teams" dialog box open in the foreground. The dialog box has an information icon and contains the text: "Ranking for all teams", "TEAM 1 - Points: 60 - Rank: 1", and "TEAM 2 - Points: 45 - Rank: 2". There is an "OK" button at the bottom of the dialog. In the background, the "Choose category" dropdown is set to "CATEGORY 1" and the "Choose date" text box contains "Aug 1, 2012".

Figure 19: Ranking teams

7 Contact

If you have any question for using this project, do not hesitate to contact with us

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