KENDO TOURNAMENT MANAGER



v1.2.5

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What's new

v1.2.0

Data exchange: added new options that allow the user to force data exchange between computers in different shiaijos.

Team order: an information message is displayed alerting the user that he is trying to modify the team order of team that is in different shiaijo.

Scores: more score rules added to allow the user to create different tournaments or leagues.

Autosave: new options for autosaving.

Monitor: new functionality that allows the use of a projector to display the score of a championship. More info in Section 1.7.

v1.1.0

Roles Importation: a new option allows the user to copy all roles from another championship, avoiding the task of defining all ot them one by one. More info in section 1.4.5.1.

Personalized Championship: new option for creating a completly custom championship. User can add any match and therefore, any kind of tournament or league can be represented. More info in section 1.6.5.

Improved network communication: now using multiples computers for the same championship has been improved. Now is quicker than before!

Chapter 1

Basic mode

The basic mode of the application allows the user to manage kendo leagues using only one shiaijo. Only one computer is used for the league management, simplifying the use and installation of the application.

1.1 Installation

1.1.1 Requirements

Kendo Tournament Manager Application (KTM) is compatible with all Windows platforms (2000, XP, Vista, Windows 7 y Windows 8) and with Linux Debian, Ubuntu, CentOS y Fedora. It is also possible that can run successfully in other operative systems but has not been tested yet.

The application has been developed in Java and needs at least the version 7 of Java Virtual Machine. This version is almost available by default in any operative system, but it is recommended to use the official version of Java distributed by Oracle. It can be downloaded from http://www.java.com/es/download/

For the basic mode of the application, all data is stored in a SQLite database, that is already included in the application. Therefore any additional software is not needed.

1.1.2 Installation

For Windows users, the application is distributed as the common Windows Installer. It is not very flexible, because the user cannot change many options. Nevertheless, this makes easier the installation because the user will accept everything that will appear in the screen.

For Linux users (Debian/Ubuntu), the application is distributed as a DEB package. Therefore a dpkg—i package.deb should be enough. For users of other distributions which do not have dpkg, I advise to download the SRC package and compile it in a Java compilator.

In all cases in which an installer is used, a shortcut will be generated in order to execute the application.

1.2 Using the application

The program is divided logically in four parts.

- 1. New entries or data register. Before the league, you should put in the database all the participants, clubs, teams and other necessary data. Everything not included will not exist for the program.
- 2. League design. First matches, league structure and other details should be decided beforehand.
- 3. League scoreboard. A screen would be filled out with the different scores obtained in the league. The results will generate the different matches.
- 4. Charts. A set of statistics and league lists. For here you can extract the ranking, a list of results and much more.

1.3 Basic program behaviour

The menu has a standar "Program" section where you can select the next options:

Database: here you can manage the connection, disconnection or conversion of the database.

Reload: you can force the reload of data from the database. It erases all not saved data and load them again from database.

Save: you can store in the database all changes made. This includes new users, tournament definitions, score added ...

Exit: close the program.

1.4 Inserting information

This includes how to store the information needed for the progress of the league: competitors, teams and clubs up to the league. Those boxes have a similar use and that is why this chapter includes all these features.



Figure 1.1: Program Menu.

1.4.1 Saving information

From version 1.0, any change is not saved automatically into the database. User must explicit do this operation or activate the auto-save option of the application.

If there are still some unsaved data, the application will remember the user to store it, or data will be lost. Then, user must choose the *Save* option in the *Program* menu.

1.4.2 General Information

There are certain parts that should not change from one league to another. This is why they must be only included only one time. An example includes competitors: information about competitors (name, ID number, etc.) would never change, that is why only they only must be included in the database once.

1.4.3 Inserting a competitor

When a future participant appears before the register desk, the steps you have to do in order to include him in the program are the following:

- 1. Asking the participant if he or she has been in another league before, in this case, their data will already exists in the program.
- 2. If not, you will have to introduce all his or her data. Follow the next steps:
 - (a) Take a photography with a webcam and a suitable software for it to store it later in an accessible carpet.
 - (b) In the application (*Insert*, Add new participant), introduce all the data of the new participant: Name, ID Number, Photography, etc.



Figura 1.2: Adding general information into the database.

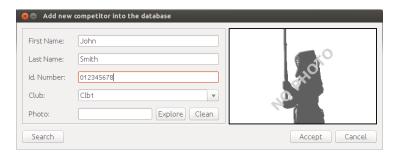


Figure 1.3: Adding a new competitor.

- (c) When you are finishing the data insertion, you have to define the role of each participant: competitor, referee, etc.
- 3. If the participant already exists on the database, the next steps are advised to follow:
 - (a) In the window (*Insert*, Add new participant), click on search button. Search for the participant in order to check if all the data are correct, using ID number or name for that.
 - (b) Include the role of the participant in order to use it in the actual league.

1.4.4 Inserting a tournament or league

For inserting a new championship (tournament or league) only is needed to select the correct option menú.

In this window, you can define the general information of the championship. Number of shiaijos, size of team, banner, ...

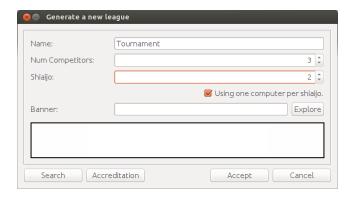


Figure 1.4: New championship.



Figura 1.5: Specific information options for each league.

The option "Using one computer per shiaijo" is need in the case that you want to use more than one computer for one tournament. For more information, read the Chapter 2.

1.4.5 Specific information for each league

There is some data that is exclusively used for a league, and may appeared or not in others. For example, the teams: a team is only valid for a league, because the name of the team may appear in different leagues, but the order of its competitors may vary. This is why they must be created again for each of the leagues. Another example is the choice of competitors who will take part in a league and their roles, because with the pass of time, some of the competitors may retire or disappear in other versions of the same league.

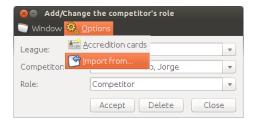


Figure 1.6: Adding a role.

1.4.5.1 Roles

The role of a participant is what he does into the league. When inserting a new competitor, we store basic information such as the name or ID number, but it does not means that the participant matchs is in a team of the league. There are different roles available into the league:

Competitor: a competitor is who will be a member of a team. Therefore, he will matche in the league to achieve the victory. Only competitors can be a member of a team.

Referee: the person who controls the matchs development.

Organizer: is the event authority. Knows what must to be done, understand the logistic of the event, and probably will be use this application.

Volunteer: help to the organizer. Has a more basic knowledgement of the league, but still is important for the league development.

Kendo volunteer: is a mix of a volunteer and a competitor. Helps into the league and also can be in a team.

seminar: can access to kendo lessons but cannot be in the competition.

Others: other roles can be added to fit the league requirements.

The menu of the windows has the next options:

Accreditation: will generate the accreditation of the selected user.

Import: allows the copy of all roles from other championship. The roles copied will not overwrite any existing role or delete any previous one.

1.4.6 Searching and modifying information

There exists the possibility to modify the data included previously (competitors, clubs, leagues...) For this, you have to go to the suitable Insertion tab for the data we want to modify. When you are inside the new box, you should see a Search button. In Figure 1.7 there is an example of this button.



Figure 1.7: Search button.



Figure 1.8: Competitors search.

Clicking on this button, a new window will appear where we can choose the search patterns. You can fill any of those patterns to do the search. In the case where two or more of them will be filled, the program will choose the pattern closer to the upper border of the screen. In figure 1.8 appear an example of a Competitor Search window. In this one you can see two different section: (A) where you will put the data to look for, and (B) where the results of the search will appear. In the example of the figure, if we fill the first and last name, the program will search for the last name. You do not need to write the whole last name because the program looks for patterns. With only one letter you will see all the last name that includes that letter in any position of their last name.

The lower part of the window is the result list (B), which will present a list of the competitors who fulfil the pattern once the search has begun. Selecting one of them and click on the Select button will allow us to go back to the data entry window with all the fields of the chosen competitor, where we can modify them.



Figure 1.9: Accreditation.

1.4.7 Data shredding

Data shredding can be done in the Search window. Going back to the example of the previous section, to erase a competitor, we must look for him first and then select him in the result list (B). In this moment, you can click on *Erase* button and the competitor will be erased from the database. Take special caution with data dependency. For example, if you erase a league, you will erase all the matches related with that league.

1.5 Accreditations / Credentials

The program allows to generate, with the previous data already inserted in the database, a list of accreditations/credentials.

The program will generate a PDF with the information of the participant, his or her involvement in the league and a photography in order to recognize him or her. This accreditation/credential must be printed (and preferably laminated) to give it to the participant. This accreditations/credentials may be useful to monitor who is inside the league, specially if there is a fee to pay. Also, it is useful to know if the entire participants are in their team. An important detail about the accreditation/credential system, is that the system will only print the accreditations/credentials that were NOT printed before, unless you choose to print all again. This means that you can print the accreditations/credentials as soon as new competitors are being introduced in the database, without worrying about the ones that are printed already.

Note: In the image shown below, you can see the logo and the design used in the 6th Kendo Open of the Universidad de Valencia. Obviously, this should be changed in order to accommodate the event you are going to organize. For this, you must change the image located at the folder images/background.png

1.6 League System

Once you have included all the data of the league and created it, you can determine the different matches. There are many ways to determine the matches according to the type of league you need. For this, you only need to select the suitable option in the upper menu:

1.6.1 Scoring rules

In this window you can determine the different scoring rules, that is, how much will be worth winning a match or if the match ends in a tie. Now there are four options:

Classic: standard Japanese system in which only the matches that have been won will be counted, and the tied matches will count the same as a lost one.

Win over draws: in the case of same number of winned matchs, the team with more winned fights will win. In a case of the same number of winned fights, the team with more hits will win. If there still a tie, the team that will pass will be the one with more draw combats, because it is considered more valuable a draw than a loss.

International: in the case of same number of won matchs, the team with more draw matchs will be prevail over the one with less draw matchs. In a case of a tie, the team with more won fights will pass, if also there is a tie, then the team with more hits will win. This is the score rules used in the International Kendo Championships.

Custom: lastly, there is a system that allows to give a score to the matches that have been won or lost, to imitate other system such as other sports, a victory will be valued with three points and a draw will be valued with one point. Here the user can choose any scoring system that he or she prefers.

1.6.2 Simple league

A simple league is a league where all teams matchs one among each other. The winner will be the team with most won matchs.

User can define any combination between different teams, or can use the pre-existent options to define all matchs.

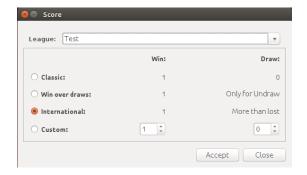


Figure 1.10: Scores.

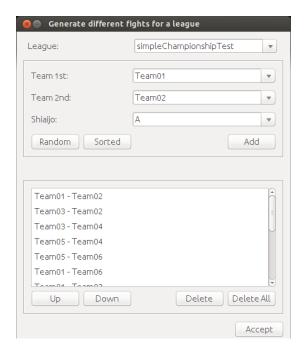


Figure 1.11: Simple league.

Exists a button to create random matchs. If it is clicked, a match list will be generated. Each team will match for two consecutive matchs. As usual in kendo.

Other button has a similar behaviour, but the teams will be selected by alphabetic order (by team's name).

Matchs will not be created until the button *Accept* will be pressed. Therefore, the user can do different tests to see the behaviour of the window. Once the *Accept* button is pressed, all previous matchs will be deleted and the new one will be created.

1.6.3 Round-Robin Leagues or Ring Leagues

We call round-robin league or ring league is the one in which a team competes in a successive way with each other without resting. This way, each of the teams will matche against the other teams in a successive way, trying to distribute their strengths in different matches. Although is not an official league system, it is very useful in training and it is why is included in the program. For using this modality, it is recommended that the participants with more experience match earlier, saying, being in higher positions in the list. In this window, the user only need to select the order in which the teams will enter the shiaijo and the program will calculate all the matches keeping that order. It stands out that number of matches obtained this way are equal to (teams*(teams-1)/2), so it is only advisable to make this tournament with a reduced number of teams.

1.6.4 Championship

The designer is a graphical interface that tries to make easier for the user the creation of a league. It is specially designed to understand what you are doing in any moment, when a championship is being created. Figure 1.12 shows an example of the designer.

In the designer there are two different sections. One where you "draw" the structure of the league, and another in which all the teams that are not assigned to a league appeared and you can choose and add them to the league.

The 'number of winners' option allows to define how many teams will pass to the second phase. An arrow for each team will appear in the designer. Red arrows are for first team and green ones for the second team.

At last, the option "Create all possible fights" changes the behaviour for all the groups of the first round. If selected a team will fight versus all other teams in the same group.

1.6.4.1 Generating a championship

To generate a championship, what you have to do is add as many groups as you wish. In each of those groups we will be adding the teams to compete against them. To add a team in a group, you only have to choose the group and after that, you choose the team. Then, we click on Add button and then, the

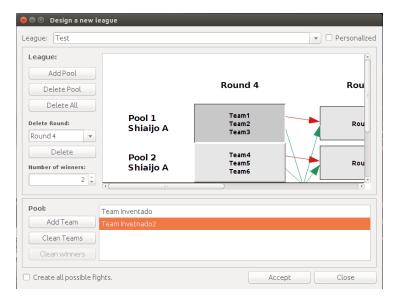


Figure 1.12: Championship designer.

team will be inside the group. The team will disappear from the league because the same team cannot be in two different groups. You can modify ONLY the initial teams because the winners of those groups will pass to the next stage automatically.

1.6.4.2 Modifying the inserted groups

Clicking twice in a group will open a window and allow to modify some options of that team, such as the shiaijo, the number of winners that will pass to the next round (if we are in championship mode) or the team order. If a group contains more than one winner, the arrows will change colours to be able to distinguish where any of the winners will pass on the next round.

1.6.4.3 Custom championship

This option gives more freedom to the user. It allows choosing in which group the winner will be. You only need to choose a group of the first round and one of the second round. An arrow will appear pointing out that the action has been stored. You need to take into account that this program does not allow anomalous things like, for example, that more than two groups choose being in the same group in the next round, doing this, the program will erase any link that are not allowed.

1.6.4.4 Erasing a phase

This option allows to erase a round (a column of the "tree") and all the matches that are on it. This way, you can go back in the championship if any mistake has been made. We need to emphasize on, if you erase a round of a league, you will erase the following rounds after that one. So, erasing the first round it is the same as erasing all round

1.6.4.5 Buttons

Here is a brief explanation of the use of each buttons of this window.

Add Teams: add the chosen team to the selected group if it is still possible (if it is not full)

Erase Teams: erase all teams of the selected group.

Erase Winners: erase from the selected group all links to the next round created before. This button will only be available in manual mode.

Add Group: add a group to the designer below the selected group. In this group you can include the different teams to compete between them. Also, a new group will be added to the next round if it is necessary. This will only be possible if there are teams available to fill it.

Erase Group: erase the selected group releasing the teams included on it to be included on other groups. If it is necessary it will erase the groups of the next round.

Erase All: erase all groups, links and selected teams, allowing restarting.

Generate Matches: once over, if you push this button, all the desired matches will be generated. The window will close because it is no longer useful. The rest of the league will be automated.

Close: close the window saving the design made and allow continuing it later.

Number of Winners: In this option you can put the number of winners that will pass to the next round. If you put one, only the winner of that group will pass to the next round. If you put two, the first and second will pass to the next round, etc.

1.6.5 Custom

This option allows the creation of any kind of championship or league by the user.

With this option, the user can add any match without restrictions. A pop-up window will ask the user for the new match configuration: which team will face another one. The created match will be added automatically to the Scoreboard

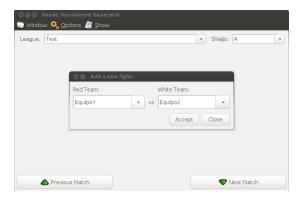


Figure 1.13: Custom league.

(Section 1.7). Each time all matchs are over, the pop-up window will appear again asking for a new match to be added.

Anytime the team classification can be obtained using the correct option of the menu.

1.7 League Scoreboard

This is the most important screen of the program because is the one who allows to take control of the different matches. In this screen, the user can include all the matches' hits as soon as they occur in the match in a easy, quick and intuitive way. The program will store them in the database automatically. The category the program deals with is "SAN BON SHOBU", meaning the best of three valid points as maximum within the time in an individual match. The team with more won matches will be the winner. If the number of won matches is the same, the team with more individual matches won will be the winner. If there is still a draw, the team with more valid points will be the winner. If there is still a draw, there will be a deciding match in whom a representative of each team will compete, and the one who makes the first valid point will be the winner.

It is divided in three parts: control of the league, control of the matches and group of buttons.

1.7.1 Control of the league

The upper part of the window shows all the data of the league. It can also show a banner or an ad if this window is shown in a projector. Also, it allows changing the league to choose the appropriate one and can also change the shiaijo. A window can only show the matches of a shiaijo in a certain moment, and if you have more than one computer, it is advisable the use of each one for a different shiaijo (and never more than one for shiaijo).

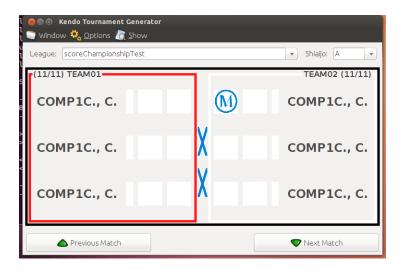


Figure 1.14: Scoreboard.

1.7.2 Control of the matches

Here is shown a list of the matches between the teams. This list will depend on the selected league, the selected shiaijo and the matches previously defined with the league designer. Changing the shiaijo will also change the list, to show other groups of matches. The list of matches adapts to the screen resolution. That is, if the screen resolution is bigger, the more matches will appear on this list. Usually, it will appear two or three matches. In the screenshot given, only one match is shown, but can also show three:

Previous Match: with the previous score, it allows to the competitors to check their matches once they go out of the shiaijo. Also, the audience can see the previous score. In the screenshot shown this does not appear due to the low resolution of the used screen.

Current Match: it is marked with a black box. This is the most important because it is the only one who can be modified. In this match, you can include the score and misses just by selecting the proper box with the right button of the mouse. A menu will appear allowing to choose which hit has been done and the match will be updated automatically.

Next Match: a list with the name of the next competitors allows those to be ready for the next match. Doing this, a lot of time is saved and allows to the audience to see the course of the league. If the screen is big enough, more matches could appear on the screen.

Remember that you can only modify the current match. The rest of the matches are protected by the program. In each of the matches, the program will order the competitors according to the order given when the team is made up.

1.7.2.1 Scoring menu

When a scoring or miss box is selected with the right button of the mouse, a small menu appears with all the option. Basically, it allows adding the different hits made in the match in order to be captured on paper.

The program is smart, so it fills the score by itself if any competitor gets two misses (hansoku) or avoids putting any score in the wrong box.

1.7.2.2 Draw menu

If you select with the right button of the screen the empty space between the two teams, a small menu will appear in order to allow you to choose a draw for that match. This option will draw a big cross between the two teams, so the user and audience will understand easily that the match was a draw. Anyway, when the score of the next match changes, the program will understand that the previous match has finished and will draw the cross automatically.

1.7.3 Buttons

In the bottom part of the window appears a group of buttons that allows controlling the matches.

Previous Match: Allows going back to other matches to correct any possible mistake done.

Next Match: Ends the current match and it becomes the previous match. The next match could be modified for the introduction of the scores. To finish this match, wait until all matches of the different competitors are finished. This button also allows generating the different stages of the championship as the matches finish. Once all matches have finished (all matches from all the shiaijos) the program will generate automatically the next round. Therefore, remember always to finish all matches before changing the shiaijo. If you see that the program does not generate the matches of the next round, it is possible that you forgot to finish a combat from any other shiaijo. Also, when all matches of a group had finished, the program will show briefly the scoring of all teams that have taken part in that group.

1.7.4 Menu

Options in the different upper menu.

In the Windows menu:

Change position of the teams: it is hard to predict where a computer is in relation to the match. This option allows changing the side of the teams represented in the screen. This way, the teams that are on the left of the screen will change to the right and vice versa. By default, the program

assumes that the computer will be in front of the main referee, but if this is not the case, you can change the position of the teams.

Change position of the colours: similar to the previous option, allows to exchange the colour of the teams. It has no effect to the matches, but allows the user to follow up the match.

Monitor: the basic function of the monitors is to use them with a projector and show them to the audience and, this way, they could see how the league or championship is going. The best way to use those options is having a computer connected exclusively to the MySQL database via network and to a project visible to the audience. This screen shows the matches that are currently disputing, displaying the teams matching and the score of that match. Each 10 seconds, the screen will change for displaying the different shiaijo. This way, with only one projector you can display the entire league. This window is not interactive, that is you cannot modify any result from this screen, avoiding any mistake. Obviously, there is no inconvenient to connect more projectors in order to display any information. This feature can be protected by a password, to asure that nobody use an unattended computer.

Exit: close the window.

Options menu:

Change the order of a team: it is possible to change the team's member order. The changes will have effect in the next matches, therefore, only passing teams are allowed to change its member order.

Add/remove match: only for custom and simple leagues. Allows to manually add new matchs.

Show menu:

Tree: it shows a window in which the progression of the league can be seen (this option will only be available if the league is a championship), the teams whose pass to the next round and the defined matches. The rounds will be completed automatically once all the matches of the round had finished.

Score list (group): this option will show a list of the teams that are currently in a match. Showing the won and lost matches by teams and individually and the points made. Also, the teams are listed by scoring, meaning that the first on the list is the one with the highest score.

Score list (global): this option is similar to the previous one, but will compare all teams of the league, not only the current ones.

1.8 Graphics and lists

Apart from the handling of participants and league, the program also allows printing part of the data in order to improve the management of the league.

1.8.1 Support lists for the organization

There is the possibility to make different lists with the information for print those and putting up along the building or around the shiaijo. All the lists generated a PDF file which you can use to check it or print it.

- Accreditations/Credentials: This option allows generating a file with all the accreditations/credentials of a championship, this way, they will be ready to print and hand over to the competitors. Four accreditations/credentials appear in a page. It is advisable to laminate them and hand over with a necklace or any other way in order to be able to be seen with a quick look.
- **Team list:** A list with all the teams and members that participate in the league. This way, all competitors of that league and all the other teams can check if their data are correct.
- Match list: A list with all the matches already defined in the league. This way, if there is no projector and you cannot see the scoreboard, at least you can check the order of matches in order to be ready for your turn.
- Scoreboard list: Once a championship is finished (or any of its rounds) you can print a list with the score of each of the teams. This way, you made public the total score of a team and you can see which team will pass to the next round or which team is the winner. If the championship is a championship or an elimination league, the scoreboard will be unified according to each round of the league in order for any competitor of the league to check how the league is going.
- Match summary: Creates a summary with all the matches including all the hits done by each of the competitors.
- **Referee list:** A short list with the names of all the referees that take part in the competition.

1.8.2 Diploma

A small diploma award for each of the competitors in the championship is given at the end of it. Obviously, you need to change the background design each year in order to avoid any confusion. Once printed, it only needs to be signed by any person responsible to give some validity, being a nice memento for all the competitors.

Knowing that the design can change, the program allows you to change the position of the name of the competitors to adapt them to the design.



Figure 1.15: Choosing the position of the names for the diploma.

In Figure 1.15 we can see an example, in which the name on the diploma is chosen in the blank space on the diploma. The side slider allows changing the height where the name is going to appear, while a thin line indicates his approximated position according to the value modified in this slider.

In a side of the window, the user can choose witch roles will have a diploma. Note: only new diplomas will be printed if "print all" option is not selected.

1.8.3 Graphics as conclusions of the league

You can generate different graphics for checking easily how the league has been going on and how the competitors have improved. Those graphics can also be obtained for a specific league or for all the leagues (general statistics).

Hit percentage: Those graphics represent which is the score percentage. That is, which percentage of Mens, Kotes and other hits are given or received. It can also be useful for a player to check his or her strong and weak points. For examples, if all the hits are given in a specific zone can show if the competitor has a weakness in his or her guard and has an uncovered zone in a part of the body of that competitor.

Ranking: This is represented in a list in order of the competitors or teams score. It is shown separately the victories and points obtained. In case of a draw, it is shown in alphabetical order. If all the championships are shown, the competitors who had taken part in most championships will probably have more points.

1.9 Options

Lastly, the program allows the user to configure some options for its use:

Language: you can select the language in which the program will be displayed.

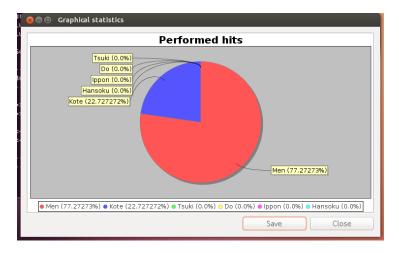


Figure 1.16: Percentage of hits given by a player.

Log: you can create a register with the program's log. This way, a text file with all the actions that has been done with the program will be stored and you can have a monitoring of this program.

Autosave: the user can activate the autosave option. If it is selected autosave by time, all information not saved before will be saved for each 20 minutes. If autosave by action is selected, each change in the application (new user, add score point, ...) will be automatically saved.

Debug: you can see any errors of the program if there is any. This allows the user to have more information if any action could not be done due to a configuration or introduction error. For example, if the program cannot connect to the database. Note: to understand those errors, you may have some knowledge with Java programming.

1.9.1 Summary

For a quick reference guide, I repeat the main steps to make the program work correctly:

- 1. Connect to the database with the connection window when you execute the program.
- 2. Add all the clubs to the league. The representative will be added later.
- 3. Add all the competitors.
- 4. Once the competitors are in the database, you can add the representative to the clubs.
- 5. Add a new league.

- 6. Define the role of the competitors. Only the competitors who have an appointed role will be included in a league when the teams are created.
- 7. Create the different teams and add their members.
- 8. Choose which league you need and the matches between the teams.
- 9. Use the scoreboard for adding the results of the different matches. This window can be used with a projector for the audience and competitors.

Steps 1, 2, 3 and 4 will be done only once because they are common to different leagues. That is, you only need to fill the information about competitors only once and you can use that information again for future leagues. Steps 5, 6, 7, 8 and 9 must be repeated for each league.

Chapter 2

Advanced use

With the advanced use of the application, multiple users can use different computers to manage one championship. Therefore, can work together different computers running this application sharing the same database. This allows to use one computer per shiaijo.

For advanced use, only a MySQL database must be installed in one computer (called central computer). Other computers will connect to this computer to access data. A network must be used for the connection (usually a Wireless network). When running any KTM on each computer, the user must set the connection to the correct database using the central computer IP.

When the connection is established, in the Scoreboard any user can choose a different shiaijo.

Using this mode, prevent data fragmentation in multiple database, and therefore, one computer can obtain the new matches of next phases.

2.1 Requirements

As commented before, the requirement for using the application in advanced mode, is to install a MySQL database. This is a database server used by our application. Same as the Java virtual machine, this one is completely free too (except the technical assistance). Can be downloaded here: http://dev.mysql.com/downloads/mysql/5.1.html The version used in our program is 5.1, so the same version or any subsequent must be enough to work. I advise to download some server maintenance application: http://dev.mysql.com/downloads/gui-tools/5.0.html With these applications you can make backups of your databases and avoid data loses, but they are not essential for the use of the KTM. These applications just need to be installed in a PC, the one who is going to save the data. Consult chapter 3 for more information.

2.1.1 Installation of the database

Installing a MySQL database is very easy. In Windows there is a Graphical User Interface for this scope, and in Linux, the server can be found at the repository.

Once installed, some questions will be asked to the user. You can choose the default option in almost all of them. Some advices are:

- 1. Choosing the kind of server. I recommend to use the "Developer machine" option.
- 2. Database charset. I recommend to use UTF-8, but it depends on the user language.
- 3. Uncheck "only local access" in the security options. Remember that we need that several computers use this database.
- 4. Remember the user password. Will be asked for connecting to the database. Later you can create new users for each computer (more secure) or share the same user and password (less secure).

With this recommendations, all will be works correctly.

2.1.2 Installation of the database

From the version 0.9 of the program, the database is installed automatically in the MySQL server if this one is not installed yet. Anyway, if any problem appears, you could also install it manually. For this, use the program MySQL Admin and the file included in the "database" folder. Install it as it is a backup with the option MySQL Admin allows to.

2.2 Connection to the database

2.2.1 Requirements

Now I assume that all computers are connected together using a network. This network (wireless probably) must be robust. If you are using a wireless network, avoid the use an Ad hoc network and use an access point to ensure some quality.

2.2.2 Connection

For accessing to other machine's database, you must choose the option *Program*, *Database* in the applications menu. First of all, we need to disconnect from the SQLite database, that is the default one. And later, perform a new connection.

When creating a new connection, the program asks you for the data in order to connect to the database server (MySQL). This data are username, password, computer and database. The username and password are root and the one specified previously in the installation, or the one by default if it has been changed.



Figure 2.1: Exporting from SQLite to MySQL.

The computer will be localhost if the server is in the same computer (the typical situation in most of the cases), or the network address of the computer which contains the data. The database will be 'kendotournament' which is what identifies our database in relation to the other programs that may be using it.

2.3 Exporting data from basic mode to advanced one

If you have been working in the basic mode and need to switch to the advanced mode, and want to avoid to reinsert all data again in the new database, exists an option in *Program*, *Database*, *Convert to...* that export all data from one database to the other one. Therefore you can use all data in the new database as before.

You also can use this option to create some backups.

2.4 Configuring Advanced Use mode

For using the "advanced use mode, as well as using a MySQL server, you need to choose the option "Using one computer per shiaijo" in the window for creating a new championship. For more information, you can read Section 1.4.4.

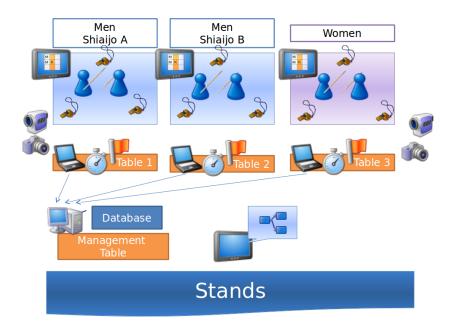


Figure 2.2: Diagram of the 8th Open of kendo of the UV.

When this options is selected, new options will appear in the Scoreboard allowing the user to force the data exchange among all computers that are managing the different shiaijos.

2.5 Real case: 8th Open of Kendo of the Universidad de Valencia

Everything is easier to understand with an example, so here it is a diagram of the championship made in the city of Valencia in February 2011.

As you can see in the diagram, the championship consisted of two different tournaments distinguished by genre: male and female. Due to the participation, mostly of male competitors, on the championships, two shiaijos were dedicated to the male tournament.

Four laptops were used for managing this championship. One of those was in the coordination table, which was the host for the database and had a printer to print everything needed such as accreditations or the teams' arrangements. The other three laptops were in each of the tables in each of the shiaijos. Those three laptops were in charge of taking account of the score in each of the matches.

Those laptops were connected among them with a wireless network, avoiding more wires around the place. For this, we used a common Wi-Fi router. Having four monitors to show the results was the first idea.

Three monitors in each of the shiaijos, showing the results of the current match to the referee and/or audience, and another monitor showing the current state of the league to the audience or the score of each of the shiaijos. In order to show those screens, there should be, at least, other four computers in monitor mode, or just connect them to the other laptops because they will show what is currently doing each of the computers.

When you execute KTM in each of the computers, the one of the coordination table will be the one with the database installed, so you must introduce this information:

Server: localhost, user: kendo, password: ******.

The other three computers will have the same information, unless the server is the IP of the coordination computer.

Note: matchs must be saved before created to be seen by the others computes. Remember to save the matchs when created.

Note: A very important detail in those situations, specially if each of the laptops are working with just the battery, is avoiding that the coordination computers get in standby mode. If the computer gets in this mode, the Wi-Fi network will shut off, and therefore, the other three computers will not have access of the database, causing server access errors. Another reason that this connection error shows may be caused if a laptop auto-connects to another wireless network. Check this out carefully to avoid any undesired problem

Chapter 3

Customization of the application

This application is distributed as free software and can be used by any kendo club without any cost. Also, if you have spare time you have total freedom to customize the application to your liking. Specially, you can change the look and the text.

3.1 Changing images

All images can be changed. You only have to go the images folder of the program and change the contents but you must respect the name of the file. This way, the program will load your images instead of the originals. The image of the diploma in the diploma folder should be changed all years, changing text, date and name of the tournament at least.

Also, you will probably prefer to change the content of the background folder each year, because it is possible that someone uses an accreditation of other year. It is not easy to change the position of the letters or the pictures, so it is advisable that you use a design that does not seem conflicting with the rest of the design where the information is displayed. Some of the images are used as a background for some of the lists generated by the program.

3.2 Adding a language

This program is ready for adding new languages or corrections for the ones that are already on the program. It has a folder called translations that contains all the information shown in the program. It is not encrypted or compiled, is just a simple text that you can modify. It is in XML format, but do not worry if you do not know what it is, because it is very easy to change.

Algoritmo 3.1 File languages.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<translator>
<languages abbrev="en" > English < / languages>
<languages abbrev="es" > Español < / languages>
</translator>
```

Algoritmo 3.2 Extracted from gui.xml

```
<AcceptButton>
<en>Accept</en>
<es>Acceptar</es>
</AcceptButton>
```

The first thing to do is add the language. For this, you should modify the file included in the translations folder called languages.xml. The algorithm 3.1 shows its initial value. Basically, what you must do is add a new line under the one containing the word "Español" the same way and BEFORE the one that contains the code </translator>. Changing the name of the language that we want the program show and the content of "abbrev" with a code that connect with it. This code will be the one we use on the files for searching the languages. For example, if we want to add Italian to the program we should write:

```
<languages abbrev="it" >Italiano</languages>
```

Remember to write the language in the proper language in order for the user to understand it and find it. Now you must change all the other files in the folder translations and modify its content. For example, in the file gui.xml we can see, what has been shown in the algorithm 3.2. Even only a paragraph is shown, you should do the same with all them.

Following the Italian example, we should add the following BEFORE the </AcceptButton> because it is what indicates the end of the paragraph.

```
<it>Accettare</it>
```

Where 'it' is the abbreviation we marked on the file languages.xml This way, the program finds the suitable text for the selected language. It takes some time but is easy to do.

Of course, after all the translations if you want to share your work with other people you only need to send me the folder translations compressed with your contents to softwaremagico@gmail.com. I will include it in the next version of the program and also, you will be in the credits of the program thanking you for your work.

3.3 Changing the design of the diploma

To generate a new diploma each year, you only need to modify the file that you can find in the folder diploma keeping its name and ending. The program will

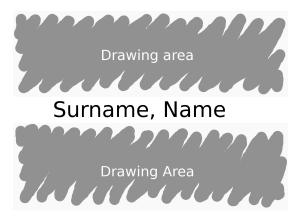


Figure 3.1: Distribution of a diploma.

select this new image as a background for the next generated diploma.

In figure 3.1 you can see the common distribution of a diploma, in which exists two different background areas, one that includes the name of the tournament and another one with a smaller font with the most important information of the diploma. The size of the areas could also be modified because the program can change the position of the name.

3.4 Licences and extra

In the window "About..." is included among them, the licence of the program, gratitudes and another important things. I encourage all of you to customize the program for your club and even to modify it to make it better. The licence of the program is GNU and all this is allowed. Just maintain the name of the author (© Jorge Hortelano Otero) and the name of all the other people that has collaborated and even your own name if the change is meaningful. If you do not have technical ability to modify it, you can write me to point out everything that the program lacks or any errors. I will include all the information in future versions, as I am actually doing thanks to the e-mails of many users.

Chapter 4

FAQs

4.1 Execution

4.1.1 When I make click in the link of the program, this does nothing. What is happening?

If you click on the program link and no window is shown, probably you have an obsolete Java version and you need to update it or you do not have installed the Java Virtual Machine. You can solve this installing the virtual machine. Is completely free and you can download it from:http://www.java.com/es/download/

Note: The Java machine that Windows has by default will not work properly with his program.

4.1.2 When I click the button, this does nothing. Furthermore, the program does not allow me to do anything and I have to restart it.

This may has happened because when you click the button, an exception has occurred. This means that the program has crashed due to a bug. Although the program has been debugged constantly, there is always place for any unexpected bug. The best you can do in those situations is to execute the program from the Windows' command console or Linux's terminal. This way, you will have more information about what has happened. If this error repeats, you can send it to me by e-mail and I will try to solve it and avoid it will happen in future versions.

4.2 Databases

4.2.1 I have general problems with the database

This problem is quite vague, but I will throw some suggestions in order to solve this problem.

- 1. If you already have a previous version installed, you can also update the database. For doing this, you just need to choose the suitable option in the program. At the same time the program is improving, the complexity of the database is growing, because without those modifications the new functions of the application could not be used. If this does not solve the problem, try to erase the database and installing it again with an empty database of the program.
- 2. If the laptops are working only with their batteries, you should avoid that the main laptop gets in standby. If that is the case, the wireless network will be shut down and therefore, any other laptop will lose their connection with the database of the program, causing server access errors. This connection error may be caused if any of the laptops auto-connects to another wireless network. Check all the laptops to see if they are on and connected to desired wireless network.
- 3. Use KTM program from the command line. This will show more information about the problem and it will be easier to correct it.

4.2.2 Importing/Exporting Databases

If there is any problem importing a database, this can be caused by different causes:

- 1. The file is from a previous version of the program and the database does not coincide. In this case, the best thing to do is installing the free program MySQL Workbench and checking what fields are incoherent in the new; although for this, some SQL knowledge is needed.
- 2. There is already data in the database that is trying to overwrite. Is there is any problem, it is important to empty the database before trying to import a new one. For this, MySQL Workbench can be used.
- 3. Since the version 0.95 of the program, those are not compatible with former databases. Therefore, you have to uninstall and reinstall the database.

4.2.3 Which are the differences between SQLite and MySQL? Which should I use in my championship?

In general, MySQL is more powerful than SQLite and allows more possibilities. But, the installation is harder and the resources consumption higher. Then the decision will be conditioned by:

- 1. If you are using an old computer, or you do not want to expend so many resources in the application, use SQLite.
- 2. If you need more than one computer in your championship. Use MySQL. Note: Only one computer will need the MySQL server installed on it.
- 3. If you are using several thousands of registers (i.e. professional champion-ship), use MySQL.
- 4. If you need to move the database from one computer to another one, SQLite is easier but MySQL also allows to do it with MySQL Workbench tool.

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