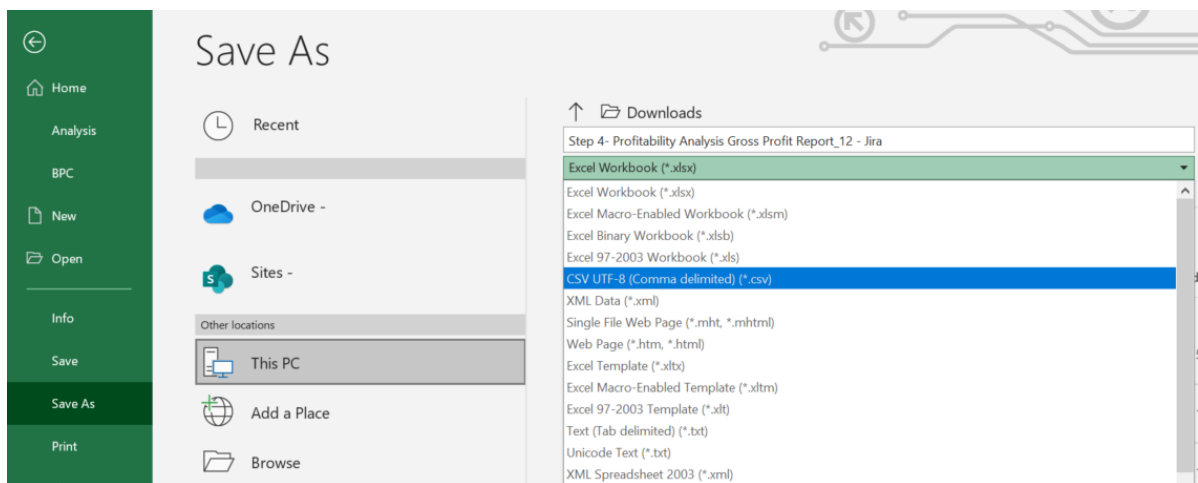# Tabelator
User manual

What do application ?

The Tabelator application creates league tables. To create such a table, the application needs input data in the form of match results.

Input data

The application needs a crosstab (or result table) saved in a CSV file. Such a file can be easily made in Excel or another spreadsheet by saving the worksheet you have made as a *.csv file.

You can also make such a file, open it or edit it in regular Notepad, but it's a rather extreme challenge.

```
Cracovia;;3-0;6-1;;2-3;1-0;2-2
Tarnovia;1-9;;5-1;4-2;3-3;5-1;5-0
Zwierzyniecki Kraków;3-0*;2-1;;2-2;6-0;1-5;1-0
BBSV Bielsko;0-4;2-0;3-0*;;4-1;0-0;1-3
Biała Lipnik;1-1;1-3;2-3;3-4;;2-1;
Makkabi Kraków;1-2;4-4;1-2;1-0;1-2;;1-1
Wawel Kraków;0-3;1-3;1-1;2-1;2-3;0-2;
```

Returning to Excel, the cross table accepted by the program should have the names of the teams in the first column, and single results in the remaining columns.

	A	B	C	D	E	F	G	H	I
1	Cracovia		3-0	6-1		2-3	1-0	2-2	
2	Tarnovia	1-9		5-1	4-2	3-3	5-1	5-0	
3	Zwierzyniecki Kraków	3-0*	2-1		2-2	6-0	1-5	1-0	
4	BBSV Bielsko	0-4	2-0	3-0*		4-1	0-0	1-3	
5	Biała Lipnik	1-1	1-3	2-3	3-4		2-1		
6	Makkabi Kraków	1-2	4-4	1-2	1-0	1-2		1-1	
7	Wawel Kraków	0-3	1-3	1-1	2-1	2-3	0-2		
8									
9									

It is also possible for the first line to contain numbers or names. But in this case, in the Tabelator application, in the **Settings tab,** select the **headings in the top row** option**.** Use the similar option if the names of the teams are in the second column, and the first one has numbers.

	A	B	C	D	E	F	G	H	I
1		1	2	3	4	5	6	7	
2	Cracovia		3-0	6-1		2-3	1-0	2-2	
3	Tarnovia	1-9		5-1	4-2	3-3	5-1	5-0	
4	Zwierzyniecki Kraków	3-0*	2-1		2-2	6-0	1-5	1-0	
5	BBSV Bielsko	0-4	2-0	3-0*		4-1	0-0	1-3	
6	Biała Lipnik	1-1	1-3	2-3	3-4		2-1		
7	Makkabi Kraków	1-2	4-4	1-2	1-0	1-2		1-1	
8	Wawel Kraków	0-3	1-3	1-1	2-1	2-3	0-2		
9									

As can be seen in the example, it is not necessary for all the results to be known.

Forfeits in this example are marked with *. If you use a different symbol, you can change it in the Tabelator application in the **Settings tab**. There you can also indicate that you are using a different result separator (e.g. a colon if you prefer the 3: 0 notation to 3-0).

This is a good opportunity to mention that Excel repeatedly converts match results marked with a hyphen/minus (-) to dates and results marked with a colon (:) to hours. The solution is to enter the results as text, i.e. preceded by an apostrophe (e.g. '2-0), this character is automatically removed when saving as a CSV file. The second way is to format the cells as Text, but this should be done before typing the results. The third way is to use the en dash (–) or em dash (—) character as the result separator. They can be found in the Windows' **Character Map** and copied or entered from the keyboard (hold down the Alt and enter the code 0150 for the en dash or 0151 for the em dash). In the same way, they can be entered into the Tabelator application.

It is very important that in the worksheet, apart from the table, there are no unnecessary filled cells. They will be saved and cause an application error.

It does not matter what you enter on the diagonal - whether you leave these cells blank or mark them specially, the Tabelator application will skip them anyway.

If your version of the spreadsheet does not support the encoding of your national characters as Unicode (UTF-8), then in the Tabelator application, in the **Settings** tab, you can indicate that you use a different character encoding.

Point system

Systems 3-1-0 and 2-1-0 are simply given points for a win, a draw and a loss.

The remaining systems were used in the past in some countries.

- The **Albanian** system is a 2-1-0 system where the guest was given +1 point (3 in total) if he won.
- The **Bulgarian** system is a 2-1-0 system, in which a 0-0 draw meant -1 points for both teams (therefore each team got 0).
- The **French** system is a 2-1-0 system in which the team that scored 3 or more goals received +1 points (total of 3, 2 or 1).

- The **Greek** system is a 2-1-0 system, in which each team received +1 points for a participation in the match (thus a total of 3, 2 or 1), except for the loss in the match by a verified forfeit.
- The **Iraqi** system is a 3-1-0 system, with the modification that if the goal difference in the match (including the verified forfeit) was 3 or more, the winner would receive +1 point (4 in total).
- The **Irish** system is a 3-1-0 system in which the guest received +1 points, unless he lost (a total of 4 or 2).
- The **Polish** system is a 2-1-0 system with such a modification that if the goal difference in a match not verified as a forfeit was 3 or more, the winner received +1 point (3 in total), and the loser received -1 point (-1 in total).
- The **Soviet** system is a 2-1-0 system, in which a draw meant -1 points for a given team (thus receiving 0) if it has already exceeded the allowable draw limit in the whole tournament. Depending on the league and season, this limit was 8, 10 or 12.

In some leagues the principle of tie-breaking matches with overtime or penalty shootouts was used, and special scoring was applied depending on whether the match was won within regular time or later. The Tabelator application in its current version does not support such tournaments.

Criteria

Number of points is the primary sort criterion, but can be changed to **a points per game** or **a points ratio.** The second term refers to the percentage of points scored of the normally available score and written as a decimal (eg 0.750 is 75%). The points per game or points ratio has been used in some leagues in the past for tournaments that were not completed and teams played an unequal number of games. In this case, the Tabelator application will show the number of points in the resulting league tables only for information purposes, because the teams will be sorted by point per game or point ratio.
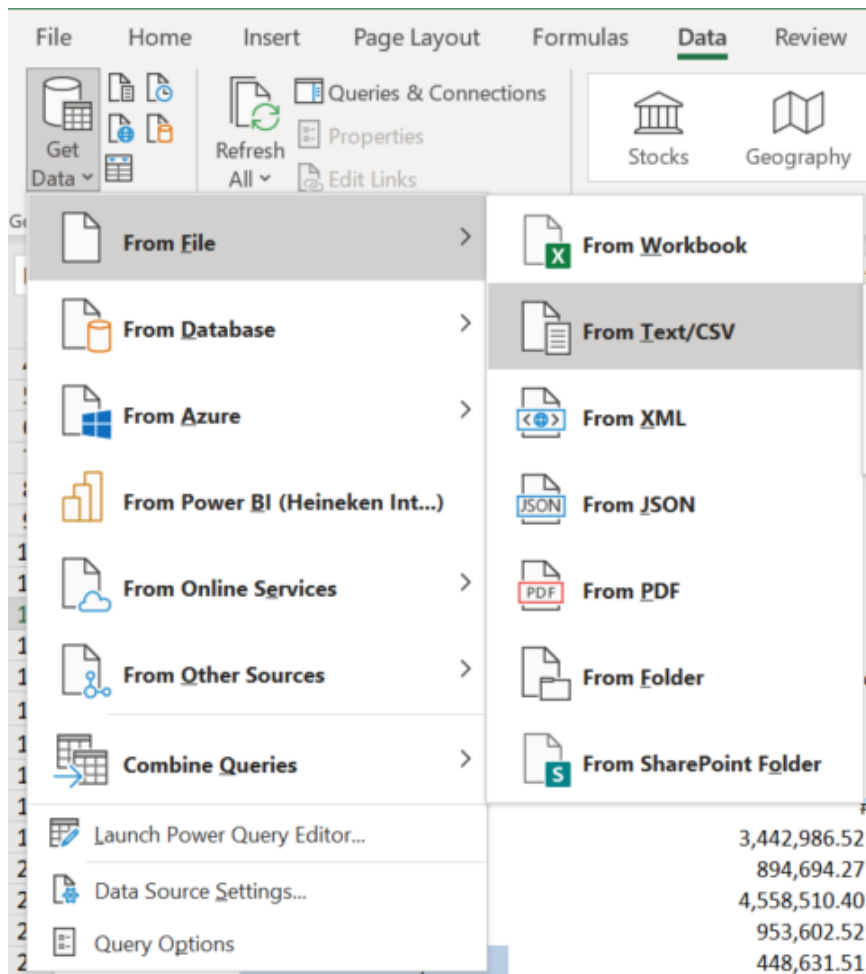
In the **Criteria** tab, select the next criteria (tiebreakers) used in the case of equal points. I assume that most of them are familiar to you and do not require any explanation. **The goal average** is the result of dividing the number of goals scored by the number of goals conceded, the tiebreker that has been used in the past. The **head-to-head** option has two additional variants. Marking positions **... after all games have been played** will cause that the mini-table will be used only if all tied teams have already played a set of games among themselves. It may also happen that the criterion of direct matches will not determine everything and some teams will be tied in the mini-table. In this case, some tournament regulations require the head-to-head criterion to be used again, but for a smaller number of teams. For this, use the option **... repeat for a smaller subset.**

The following criterion can be found in the tournament regulations: *according to the applicable UEFA rule, that away goals are double counted, a more favorable difference between the goals scored and lost in the matches of these teams.* This criterion was always applied as the next to *difference between goals scored and conceded* criterion. This means that the first of the mentioned ones can be simplified, as a rule *greater number of goals scored away,* and so it was done in the Tabelator application (as **away goals**).

The author of the application realizes that in the mini-table for two teams, the criteria **goal difference** and **goals scored** are the same criteria and lead to the same order. Both of them have been retained because both appear in some tournament regulations as being used consecutively in the case of two teams.

League table

If you check the appropriate option in the Table tab in the **Table tab,** the created league table will be automatically saved to the Tables folder (a subfolder in this folder where you store the Tabelator application). If you decide to save the league table as a *.csv file, you can then open it in Excel or another spreadsheet and freely customize its appearance or use it for your other purposes. I recommend not to open it directly by mouse clicking - it may cause a problem with displaying national characters. It is much better to use the **Download Data** option available in Excel in the **Data** tab.

Special uses

The table below covers the handling of special rare cases. You don't have to use it, or even know if you don't have such needs. I recommend that you first get acquainted with the practical operation of the application in ordinary situations, and then read the section below intended for advanced users with special requirements.

Special uses – additional ranking

One of the frequently used criteria for determining the order in the tournament regulations are different additional rankings (e.g. cards or Fair Play), which cannot be read from the cross table. This ranking can be added to the data by entering it in the first column after the crosstab.

	A	B	C	D	E	F	G	H	I	J
1	Cracovia		3-0	6-1		2-3	1-0	2-2	532	
2	Tarnovia	1-9		5-1	4-2	3-3	5-1	5-0	213	
3	Zwierzyniecki Kraków	3-0*	2-1		2-2	6-0	1-5	1-0	524	
4	BBSV Bielsko	0-4	2-0	3-0*		4-1	0-0	1-3	326	
5	Biała Lipnik	1-1	1-3	2-3	3-4		2-1		312	
6	Makkabi Kraków	1-2	4-4	1-2	1-0	1-2		1-1	241	
7	Wawel Kraków	0-3	1-3	1-1	2-1	2-3	0-2		421	
8										

The Tabelator application assumes that the higher the ranking value, the better. If you use a ranking that works the other way around (e.g. card ranking, where the club with fewer cards is higher) then write down its values with minuses to work properly (e.g. -5 when the team received 5 yellow cards).

If the tournament regulations provide for the use of several different rankings as successive criteria, make one (e.g. like this: ranking = 1000 * ranking1 + ranking2). The entered ranking values must be integers.

Special uses - drawing lots

One of the selected criteria may be drawing lots. In this case, the Tabelator application will run them in the background. Each team will get a different random integer from the [0.99] range, and the one with the higher number will be higher in the table. If you do not decide to draw and the tiebreakers which you use do not allow you to sort the teams unequivocally and there will still be teams occupying the same place (*ex aequo*), the Tabelator application will keep their order as entered in the input data.

The drawing lots option is provided for users who are organizers of some tournament.

Special uses - starting values

The columns following the crosstab can be used to add non-zero start values. We use it when - for whatever reasons - teams do not start the tournament from 0 points and 0 goals and the cross table alone is not enough to create a correct result league table.

The Tabelator application assumes that the potential columns after the crosstab are:

1. Additional ranking (see above)
2. Games
3. Points
4. Goals scored
5. Goals conceded
6. Wins
7. Draws
8. Losses
9. Home goals
10. Home goals conceded
11. Home wins
12. Home draws
13. Home losses
14. Away goals scored
15. Away goals conceded

16. Away wins
17. Away draws
18. Away losses

All entered numbers must be integers.

Of course, you don't need to fill all of these columns, even with zeros. Just fill in the ones you need. This allows you to deal with unusual situations.

In this example, the Cracovia team starts the tournament with -5 points.

	A	B	C	D	E	F	G	H	I	J	K	L
1		C	T	ZK	BB	BL	MK	WK	ranking	mecze	punkty	
2	Cracovia		3-0	6-1		2-3	1-0	2-2			-5	
3	Tarnovia	1-9		5-1	4-2	3-3	5-1	5-0				
4	Zwierzyniecki Kraków	3-0*	2-1		2-2	6-0	1-5	1-0				
5	BBSV Bielsko	0-4	2-0	3-0*		4-1	0-0	1-3				
6	Biała Lipnik	1-1	1-3	2-3	3-4		2-1					
7	Makkabi Kraków	1-2	4-4	1-2	1-0	1-2		1-1				
8	Wawel Kraków	0-3	1-3	1-1	2-1	2-3	0-2					
9												

In the example below, in the place of the Cracovia - BBSV game, a *bilateral forfeit* was awarded (both teams lose the same match 0-3). Neither team will score any points for him, both will concede 3 goals, and the match will be recorded for both of them as played (+1 to the number of matches for each team).

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		C	T	ZK	BB	BL	MK	WK	ranking	mecze	punkty	bz	bs
2	Cracovia		3-0	6-1		2-3	1-0	2-2		1			3
3	Tarnovia	1-9		5-1	4-2	3-3	5-1	5-0					
4	Zwierzyniecki Kraków	3-0*	2-1		2-2	6-0	1-5	1-0					
5	BBSV Bielsko	0-4	2-0	3-0*		4-1	0-0	1-3		1			3
6	Biała Lipnik	1-1	1-3	2-3	3-4		2-1						
7	Makkabi Kraków	1-2	4-4	1-2	1-0	1-2		1-1					
8	Wawel Kraków	0-3	1-3	1-1	2-1	2-3	0-2						
9													

This example can be expanded: in the following columns, add 1 to both teams to the number of defeats, and even add Cracovia 3 goals lost and a lost match at home, and BBSSV by analogy, but away.

Asymmetrical forfeit can be solved in a similar way, e.g. the result from the pitch 7-2 for one team, but 7-0 for the other team. In this specific example, it is enough to put the result 7-2 in the cross table and for the penalized team to enter -2 in the column corresponding to goals scored.

Using the remaining columns, you can rewrite the values that are from previous tournament (e.g. when the league is divided into groups, maintaining the current points, goals, wins, etc.)

Artur Fortuna

PS. The cross table used in this aid comes from the book Jerzy Miatkowski, Jarosław Owsiański: *1927. Ten pierwszy sezon ligowy* (second extended edition). Only the first one is real.