

Shestakov Artem

Supervisor: Georgii Zhulikov

Submission: 13.06.2022

DSBA 213-2

# Big Homework Report

## Football Manager

### The main goal of the project

First of all, the application that was created is a convenient instrument to view the records of the CSV file. For the better experience, the sorting feature was created, as well as functions like: append row, delete row, modify row, open detail view of the row. In case to make application even more powerful and useful, the saving feature was added. All of that makes application nice and useful instrument while working with this kind of data.

### What I expected to do?

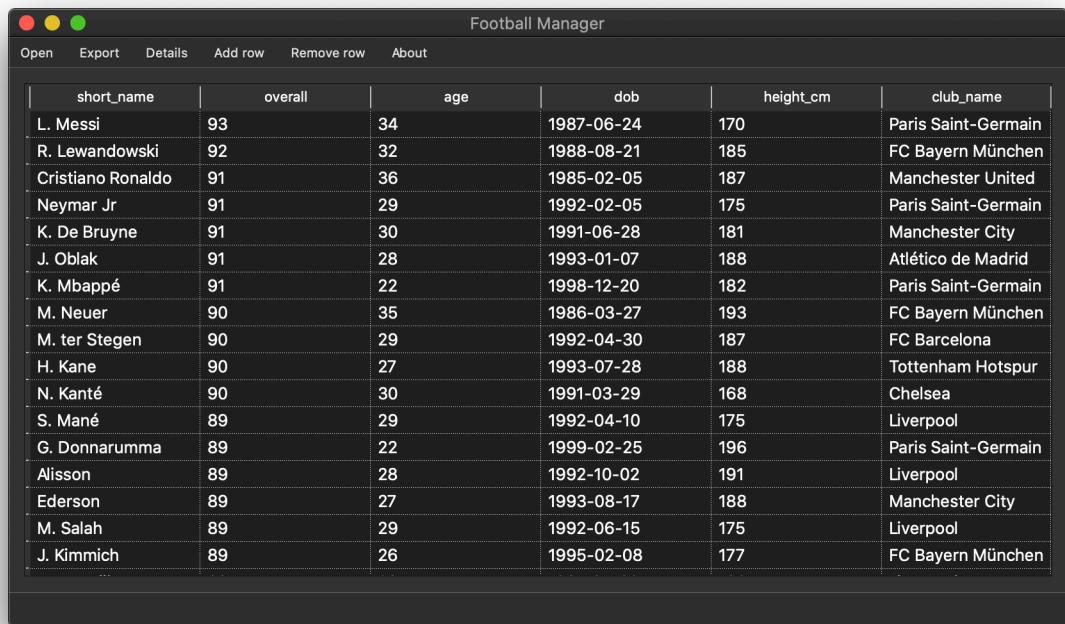
I was not too surprised by the task description, because at the lectures we were clearly given with information about the project and criteria. Everything went not without difficulties, but I think that I succeeded and wrote a simple and understandable code.

### What did I do?

I was not too surprised by the task description, because at the lectures we were clearly given with information about the project and criteria. Everything went not without difficulties, but I think that I succeeded and wrote a simple and understandable code. The main features of the application were described in

the “The main goal of the project”, here I will just show a few screenshots of the main window and a dialog windows.

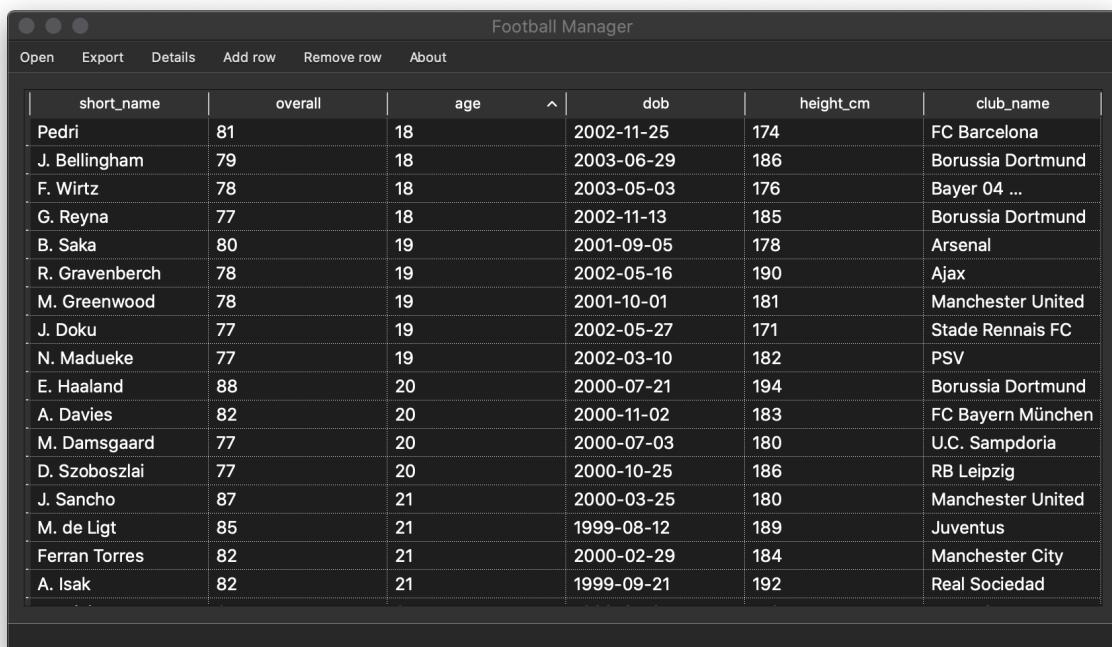
The main window:



The screenshot shows a Mac OS X style window titled "Football Manager". The menu bar includes "File", "Edit", "View", "Table", "Database", "Help", and "About". Below the menu is a toolbar with buttons for "Open", "Export", "Details", "Add row", "Remove row", and "About". The main area is a table with the following columns: short\_name, overall, age, dob, height\_cm, and club\_name. The data consists of 20 rows of player information, such as L. Messi (93 overall, 34 age, 1987-06-24 dob, 170 height\_cm, Paris Saint-Germain club), R. Lewandowski (92 overall, 32 age, 1988-08-21 dob, 185 height\_cm, FC Bayern München club), and J. Kimmich (89 overall, 26 age, 1995-02-08 dob, 177 height\_cm, FC Bayern München club).

short_name	overall	age	dob	height_cm	club_name
L. Messi	93	34	1987-06-24	170	Paris Saint-Germain
R. Lewandowski	92	32	1988-08-21	185	FC Bayern München
Cristiano Ronaldo	91	36	1985-02-05	187	Manchester United
Neymar Jr	91	29	1992-02-05	175	Paris Saint-Germain
K. De Bruyne	91	30	1991-06-28	181	Manchester City
J. Obiak	91	28	1993-01-07	188	Atlético de Madrid
K. Mbappé	91	22	1998-12-20	182	Paris Saint-Germain
M. Neuer	90	35	1986-03-27	193	FC Bayern München
M. ter Stegen	90	29	1992-04-30	187	FC Barcelona
H. Kane	90	27	1993-07-28	188	Tottenham Hotspur
N. Kanté	90	30	1991-03-29	168	Chelsea
S. Mané	89	29	1992-04-10	175	Liverpool
G. Donnarumma	89	22	1999-02-25	196	Paris Saint-Germain
Alisson	89	28	1992-10-02	191	Liverpool
Ederson	89	27	1993-08-17	188	Manchester City
M. Salah	89	29	1992-06-15	175	Liverpool
J. Kimmich	89	26	1995-02-08	177	FC Bayern München
...					

Sorting by field “age”. It can be done by clicking the header. If you click twice, the order of the sort will be changed.



The screenshot shows the same "Football Manager" application window. The "age" column header is highlighted with a blue background and a small upward arrow icon, indicating it is currently sorted in ascending order. The data in the table reflects this sorting, with players like Pedri (18 age) at the top and others like A. Isak (21 age) at the bottom. The rest of the interface is identical to the first screenshot.

short_name	overall	age	dob	height_cm	club_name
Pedri	81	18	2002-11-25	174	FC Barcelona
J. Bellingham	79	18	2003-06-29	186	Borussia Dortmund
F. Wirtz	78	18	2003-05-03	176	Bayer 04 ...
G. Reyna	77	18	2002-11-13	185	Borussia Dortmund
B. Saka	80	19	2001-09-05	178	Arsenal
R. Gravenberch	78	19	2002-05-16	190	Ajax
M. Greenwood	78	19	2001-10-01	181	Manchester United
J. Doku	77	19	2002-05-27	171	Stade Rennais FC
N. Madueke	77	19	2002-03-10	182	PSV
E. Haaland	88	20	2000-07-21	194	Borussia Dortmund
A. Davies	82	20	2000-11-02	183	FC Bayern München
M. Damsgaard	77	20	2000-07-03	180	U.C. Sampdoria
D. Szoboszlai	77	20	2000-10-25	186	RB Leipzig
J. Sancho	87	21	2000-03-25	180	Manchester United
M. de Ligt	85	21	1999-08-12	189	Juventus
Ferran Torres	82	21	2000-02-29	184	Manchester City
A. Isak	82	21	1999-09-21	192	Real Sociedad

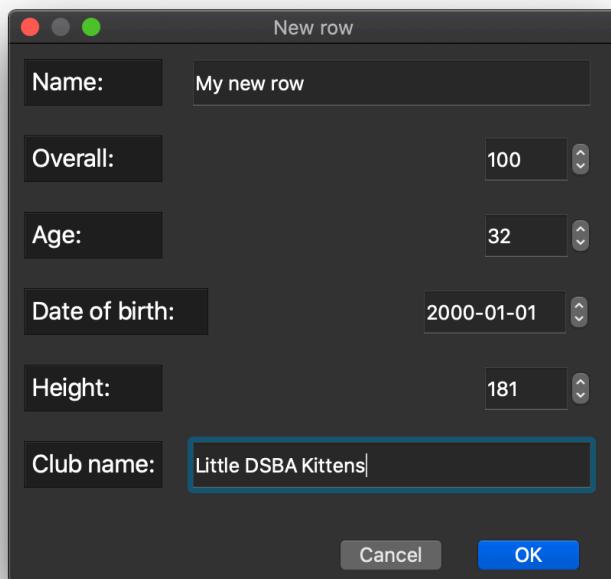
If some item is clicked twice, you can easily change the text inside

Football Manager						
short_name	overall	age	dob	height_cm	club_name	
L. Messi and Me	93	34	1987-06-24	170	Paris Saint-Germain	
R. Lewandowski	92	32	1988-08-21	185	FC Bayern München	
Cristiano Ronaldo	91	36	1985-02-05	187	Manchester United	
J. Oblak	91	28	1993-01-07	188	Atlético de Madrid	
K. De Bruyne	91	30	1991-06-28	181	Manchester City	
K. Mbappé	91	22	1998-12-20	182	Paris Saint-Germain	
Neymar Jr	91	29	1992-02-05	175	Paris Saint-Germain	
H. Kane	90	27	1993-07-28	188	Tottenham Hotspur	
M. Neuer	90	35	1986-03-27	193	FC Bayern München	
M. ter Stegen	90	29	1992-04-30	187	FC Barcelona	
N. Kanté	90	30	1991-03-29	168	Chelsea	
Alisson	89	28	1992-10-02	191	Liverpool	
Casemiro	89	29	1992-02-23	185	Real Madrid CF	
Ederson	89	27	1993-08-17	188	Manchester City	
G. Donnarumma	89	22	1999-02-25	196	Paris Saint-Germain	
H. Son	89	28	1992-07-08	183	Tottenham Hotspur	
J. Kimmich	89	26	1995-02-08	177	FC Bayern München	

If some row in not longer needed, it can be easily deleted by selecting and clicking “Remove row” button. (Here, the Cristiano Ronaldo was deleted)

Football Manager						
short_name	overall	age	dob	height_cm	club_name	
L. Messi and Me	93	34	1987-06-24	170	Paris Saint-Germain	
R. Lewandowski	92	32	1988-08-21	185	FC Bayern München	
Neymar Jr	91	29	1992-02-05	175	Paris Saint-Germain	
K. Mbappé	91	22	1998-12-20	182	Paris Saint-Germain	
J. Oblak	91	28	1993-01-07	188	Atlético de Madrid	
M. Neuer	90	35	1986-03-27	193	FC Bayern München	
K. De Bruyne	91	30	1991-06-28	181	Manchester City	
N. Kanté	90	30	1991-03-29	168	Chelsea	
M. ter Stegen	90	29	1992-04-30	187	FC Barcelona	
H. Kane	90	27	1993-07-28	188	Tottenham Hotspur	
S. Mané	89	29	1992-04-10	175	Liverpool	
Ederson	89	27	1993-08-17	188	Manchester City	
E. Haaland	88	20	2000-07-21	194	Borussia Dortmund	
M. Salah	89	29	1992-06-15	175	Liverpool	
Alisson	89	28	1992-10-02	191	Liverpool	
T. Courtois	89	29	1992-05-11	199	Real Madrid CF	
V. van Dijk	89	29	1991-07-08	193	Liverpool	

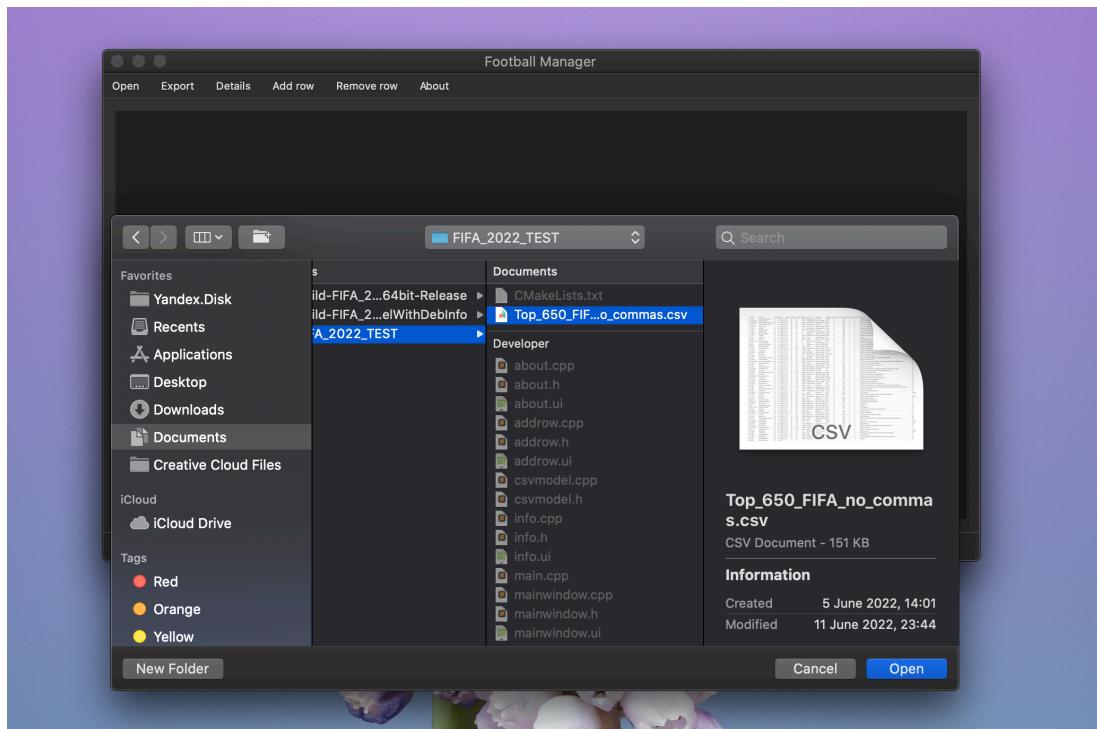
To add a new row, just click “Add row” button. A new dialog window will appear and ask for details.



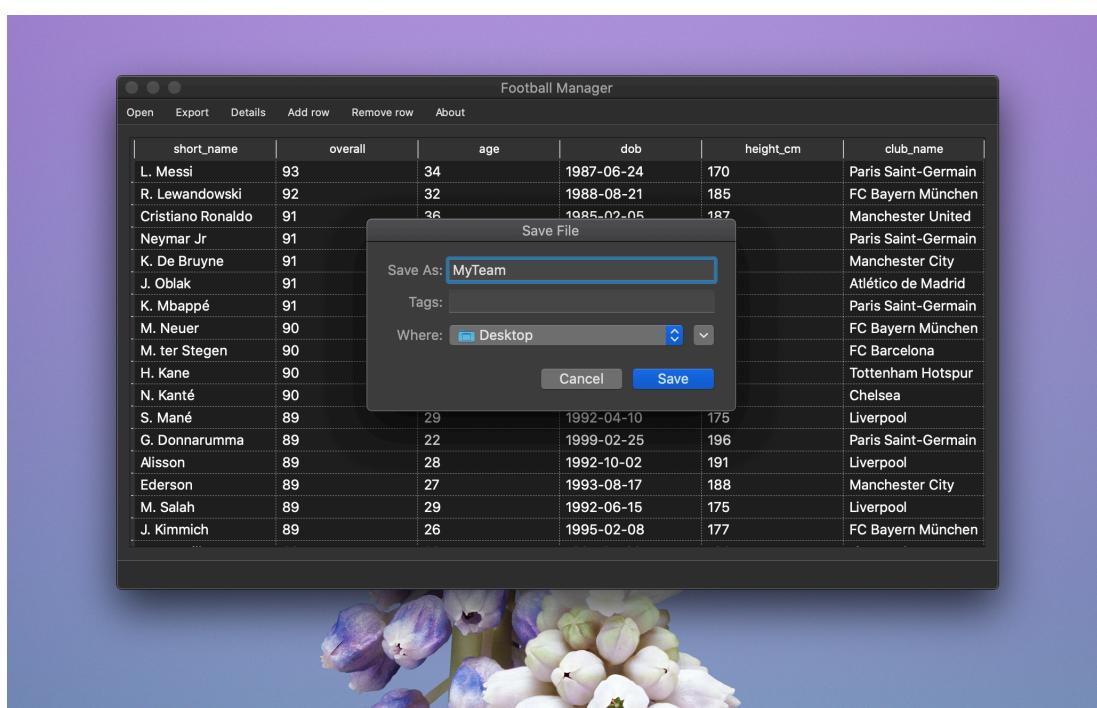
After clicking “OK”, a new row will be added.

Football Manager						
short_name	overall	age	dob	height_cm	club_name	
My new row	100	32	2000-01-01	181	Little DSBA Kittens	
L. Messi	93	34	1987-06-24	170	Paris Saint-Germain	
R. Lewandowski	92	32	1988-08-21	185	FC Bayern München	
Cristiano Ronaldo	91	36	1985-02-05	187	Manchester United	
Neymar Jr	91	29	1992-02-05	175	Paris Saint-Germain	
K. De Bruyne	91	30	1991-06-28	181	Manchester City	
J. Oblak	91	28	1993-01-07	188	Atlético de Madrid	
K. Mbappé	91	22	1998-12-20	182	Paris Saint-Germain	
M. Neuer	90	35	1986-03-27	193	FC Bayern München	
M. ter Stegen	90	29	1992-04-30	187	FC Barcelona	
H. Kane	90	27	1993-07-28	188	Tottenham Hotspur	
N. Kanté	90	30	1991-03-29	168	Chelsea	
S. Mané	89	29	1992-04-10	175	Liverpool	
G. Donnarumma	89	22	1999-02-25	196	Paris Saint-Germain	
Alisson	89	28	1992-10-02	191	Liverpool	
Ederson	89	27	1993-08-17	188	Manchester City	
M. Salah	89	29	1992-06-15	175	Liverpool	

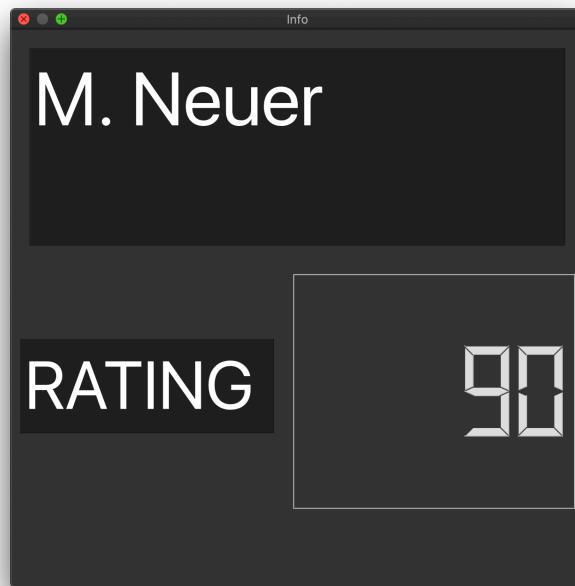
While clicking on open, you can easily upload .CSV file. A new dialogue window will help to choose the right file.



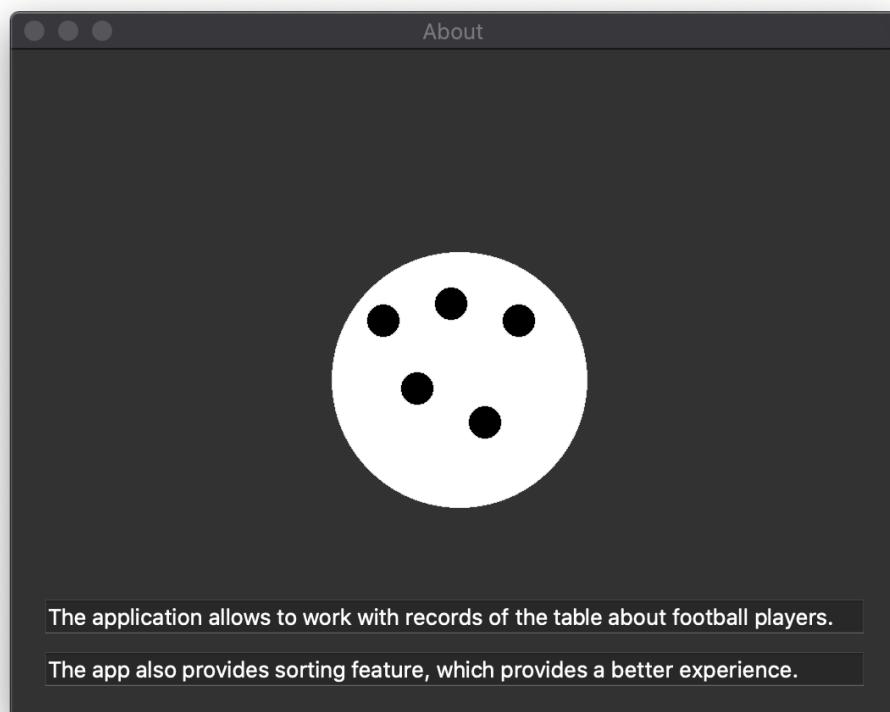
Button export works the same way: it allows to save file in any location, just by clicking the button.



Details widget is created to show the necessary information.



About is a small window with description of the application and the logo  
(football ball) ⚽



## Difficulty's

Almost at every part of the task I faced some problems with QT, it's versions, errors of complier and etc.. I definitely learned a lot about data structures and data types. But it was fascinating experience, and I'm happy that we have a QT part in our course.

## Conclusion

The app is done, but there is still some details that could be implemented. For example, filtering feature or deleting records that are already in the table. Also I consider some improvement: allow user to merge two different files into one. But that's only the ideas...