Bookshop

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Problem:

Making a GUI application for managing data on the topic – online book shopping using certain patterns, such as:

1. "Model-View-Controller" design pattern
2. "Master-Detail" UI pattern

Implementation details:

Tools used to solve the problem:

1. Class "About" – opens new window, which contains information about the author of the project and logo of the application, created by class "AdditionalWidget".
2. Class "AdditionalWidget" – this class uses QPainter to make logo of the application.
3. Class "AddRow" – opens a new dialog, contains fields for all information about a new book to be added.
4. Class "Basket" – opens new window, which shows all items chosen from the Main Window and calculates sum of their prices to show, how much it is cost to by chosen books.
5. Class "Information" – opens all known information about the book from the the table.
6. Class "MainWindow" – first window, which contains almost all functions and classes that are implemented in the project and represents information from obtained file.
7. Class "Proxy" - consists of all filters, which are used for managing data of file and search system, which helps to find certain books, using all known data about them.
8. Class "Booktable" - creates a table, which consists of main data from dataset about books, it is also responsible for managing data from .csv files, which it gets from the Main Window.

Results and Discussion:

1. Implemented: Some features of project were created not as it was planned by its author to make it more comfortable and pleasing to the eye: there is a table at the most part of the main window with columns, which are also filters for data(ascending and descending order depended on each column) and additional column, which allows a user to add any book to the basket; the menubar, which is filled by two elements:"File" makes it possible to display data by uploading file, "About" presents specific information as it was said above; there are two panels at the another part of the main window: "interaction" is used for buttons, which allows a user to add a new row, remove a row, check books, which were added to basket and change the theme of the main window; "Stars Filter" is a box with two sliders and two lines for setting the amount of stars and displaying the appropriate books.
2. Not Implemented: there was a problem with changing data in file, the code for this aim still exists and should work, but unfortunately it is not; there planed to be an image from link in window with information about book, however there is only a link, because it was really tough to make a code, which obtains an image from the internet resources; there was a try to make translations, but it was left behind as the idea with link

Conclusion:

1. Almost all of the ideas of the author were implemented and there are some additional things, which are useful and makes the application more user-friendly, but I think that it is possible to add more features to make the application greater
2. As for the impression about this work, it was really difficult, but also interesting