Personal e-commerce application report

- Author: Timofei Bakurov
- Group: 211-2
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- Supervisor: Shershakov Sergey Andreevich

Problem statement and thesis

"You were asked to create an application for managing various Shipping Data of a small local e-commerce company. The dataset they provided is accessible by this link: E-Commerce Shipping Data | Kaggle"

So, the main goal of the project is to analyze dataset and show the capability of working with huge amount of data. Also, one of the main requirements, is to create an application with more than one windows, so that UI was comfortable for users.

Project specification

Project specification can be found via this link: https://github.com/timofeibakurov/dsba-itop2022-hw.git, spec_131.pdf.

Implementation details

General

Generally, I was trying to follow main requirements, which are *Adding New and Deleting Existing Entries* and *Filtering and Sorting Entries*. All these requirements were done, but UI, that was given to me is not useful and user-friendly, so that I have decided to remake one. (All the differences will be shown later). Also, there was not any code structure, so I've had complete freedom in building the code architecture.

It should be noted that most of the functions implemented within the framework of the program were passed by our group at seminars and lectures, as a consequence, the development of the code architecture was not so difficult.

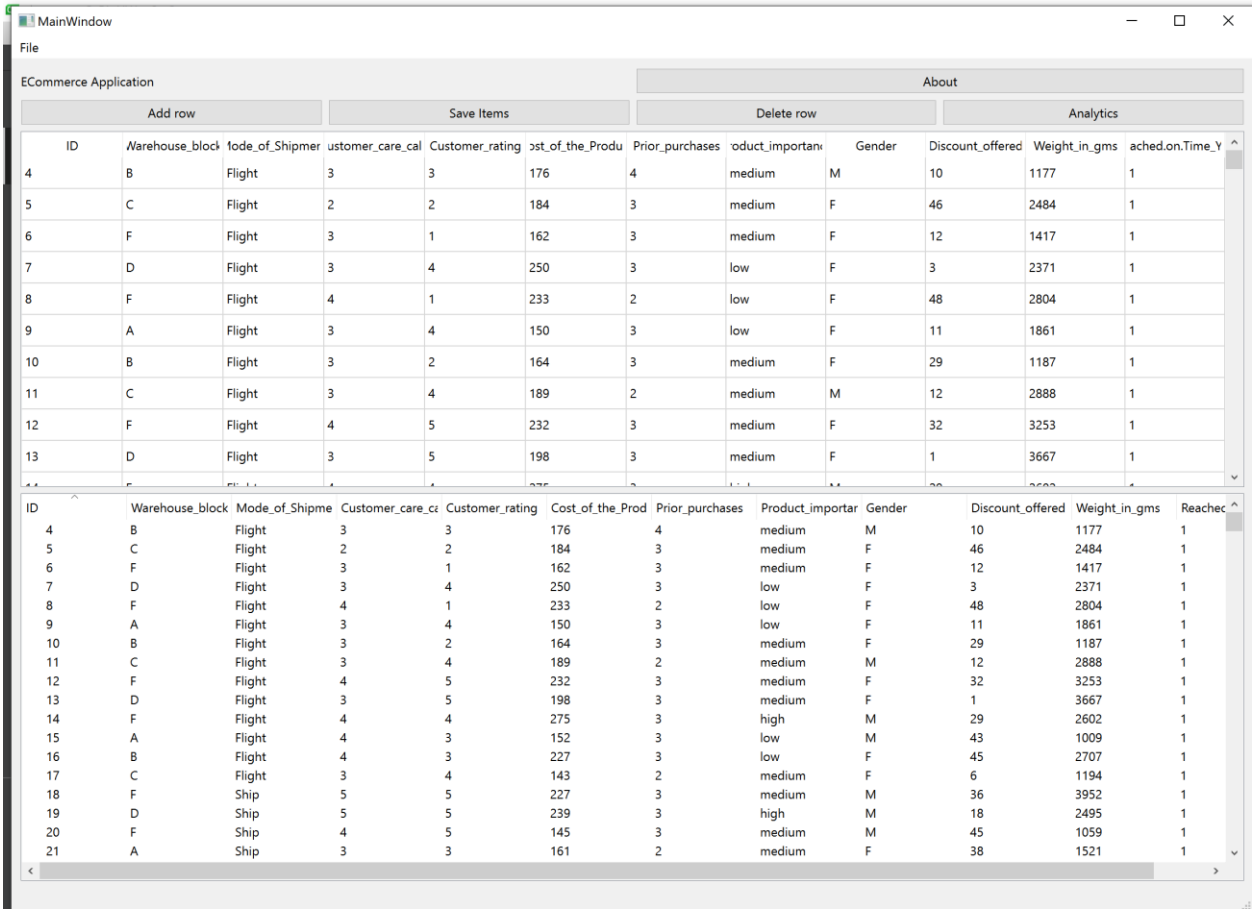
The main addition to the specification was the decision to give the user the possibility of advanced analytics (in addition to sorting through a proxy model), which caused a number of problems related to visualization. However, the installation of the QCharts module allowed us to solve the tasks.

Wanting to simplify the work with the application as much as possible, I also decided to add the ability to edit the table directly on the main screen (this function is implemented via add row -> *the user fills in the row that appears* -> save elements). Also, to simplify the interaction, shortcuts were introduced (Ctrl+O for loading the table and Ctrl+S to preserve innovations).

Project structure

Unfortunately, developer did not have time to struct the project, but here can be found a brief description, but code is commented, so you can read it. Also, please, note that for the correct work you **NEED TO INSTALL QT CHARTS LIBRARY** using **QT Maintenance tool.**

Description



ID	Warehouse_block	Mode_of_Shipment	Customer_care_cal	Customer_rating	Cost_of_the_Produ	Prior_purchases	Product_importan	Gender	Discount_offered	Weight_in_gms	Reached.on.Time_Y
4	B	Flight	3	3	176	4	medium	M	10	1177	1
5	C	Flight	2	2	184	3	medium	F	46	2484	1
6	F	Flight	3	1	162	3	medium	F	12	1417	1
7	D	Flight	3	4	250	3	low	F	3	2371	1
8	F	Flight	4	1	233	2	low	F	48	2804	1
9	A	Flight	3	4	150	3	low	F	11	1861	1
10	B	Flight	3	2	164	3	medium	F	29	1187	1
11	C	Flight	3	4	189	2	medium	M	12	2888	1
12	F	Flight	4	5	232	3	medium	F	32	3253	1
13	D	Flight	3	5	198	3	medium	F	1	3667	1

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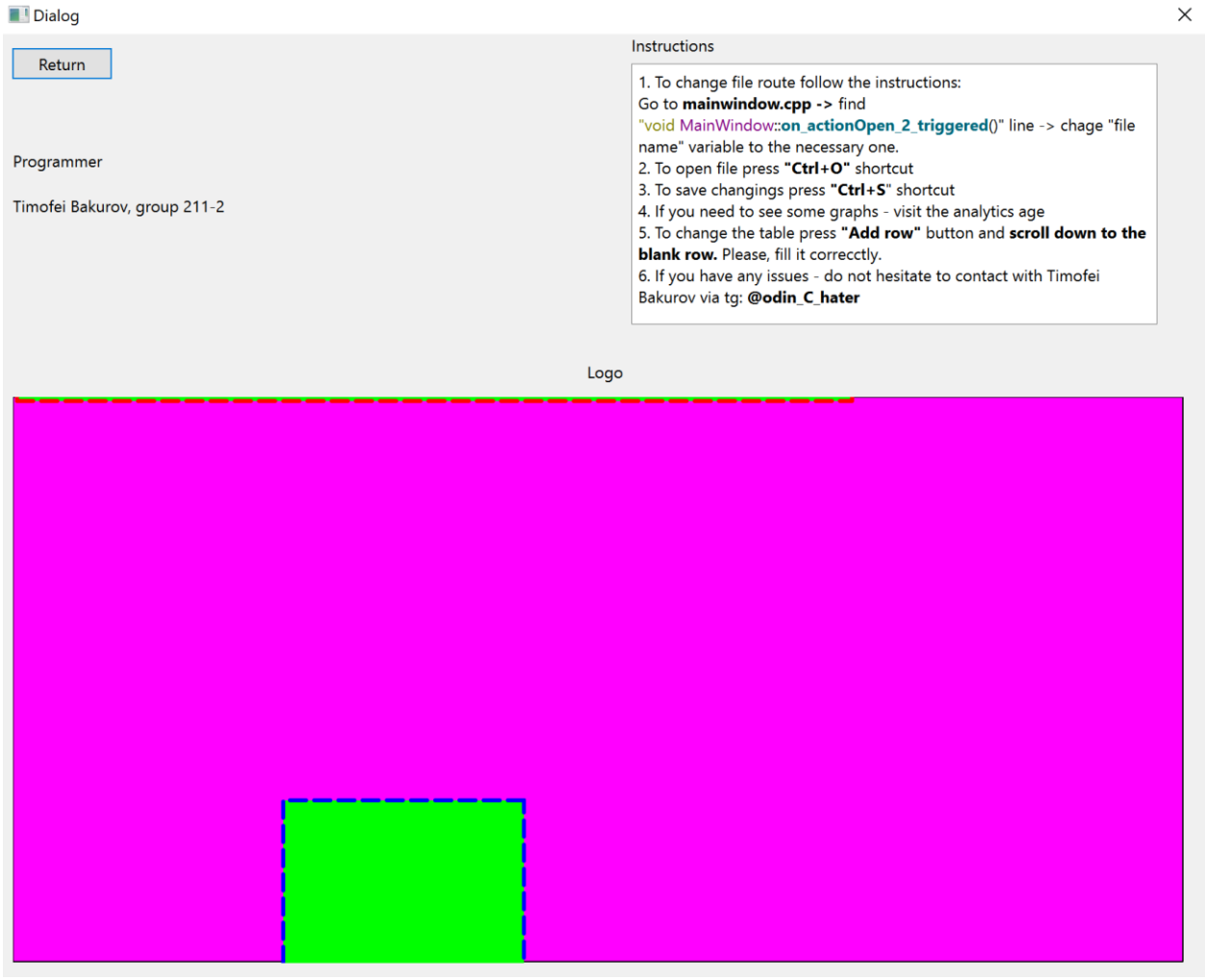
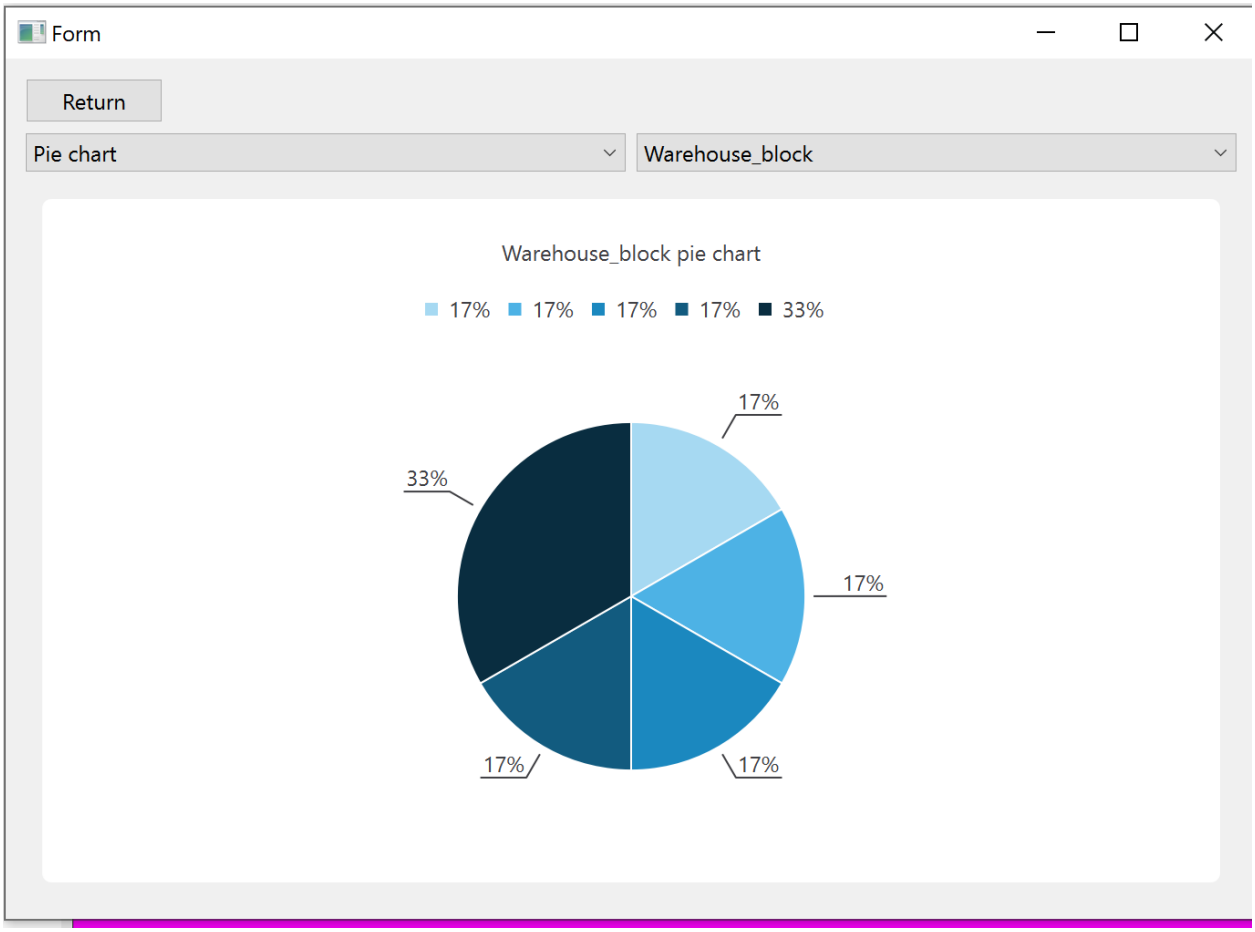
11	C	Flight	3	4	189	2	medium	M	12	2888	1
12	F	Flight	4	5	232	3	medium	F	32	3253	1
13	D	Flight	3	5	198	3	medium	F	1	3667	1
14	F	Flight	4	4	275	3	high	M	29	2602	1
15	A	Flight	4	3	152	3	low	M	43	1009	1
16	B	Flight	4	3	227	3	low	F	45	2707	1
17	C	Flight	3	4	143	2	medium	F	6	1194	1
18	F	Ship	5	5	227	3	medium	M	36	3952	1
19	D	Ship	5	5	239	3	high	M	18	2495	1
20	F	Ship	4	5	145	3	medium	M	45	1059	1
21	A	Ship	3	3	161	2	medium	F	38	1521	1

Main window


Dialog
Return
Programmer
Timofei Bakurov, group 211-2
Instructions
1. To change file route follow the instructions:
Go to **mainwindow.cpp ->** find
"void MainWindow::**on_actionOpen_2_triggered**()" line -> chage "file name" variable to the necessary one.
2. To open file press **"Ctrl+O"** shortcut
3. To save changings press **"Ctrl+S**" shortcut
4. If you need to see some graphs - visit the analytics age
5. To change the table press **"Add row"** button and **scroll down to the blank row.** Please, fill it correcctly.
6. If you have any issues - do not hesitate to contact with Timofei Bakurov via tg: **@odin_C_hater**
Logo

“About” page



Analytics page

Results and conclusion

So, the project was completed with minor improvements in the UI. Subsequent corrections may be related to the introduction of a validator when filling out the table and improving the data interface, which will allow you to draw garfics depending on two variables.