**Topic: Game Shop**

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# 3.1 Goal of the project.

The goal for our project was to make a menu with a lot of options like adding games with a bunch of criterias, showing all games you’ve entered, edit their info and more!

# 3.2 Roles of the people involved.

**Code: Kaloyan Dinev, Stoyan Kolev, Stanislav Todorov**

**Presentation: Kaloyan Dinev, Stanislav Todorov**

**Documentation: Borislav Ferdinandov**

# 3.3 Level of difficulty of the project – main problems throughout development.

We did not stumble across many problems, only minor bugs with the code which we cleared really quickly.

# 3.4 Segments of the code and their functions.

**2 tier architecture: Presentation and data layer.**

* **Presentation layer - 4 functions : showGames, searchMenu, editMenu, mainMenu**
  + **showGames:** This function is from type void. It contains two parameters**(GAMESHOP\* game, int& gameCount).** We used a for loop that cycles till the number of games**(int& gameCount)** to print every game.
  + **searchMenu:** The function is from type void. It contains two parameters**(GAMESHOP\* game, int& gameCount).** We used multiple IF statements so the user could choose a criteria to find a game.
  + **editMenu:** Same as the function above **(searchMenu).**
  + **mainMenu:** This function is from type void. It also contains two parameters**(GAMESHOP\* game, int& gameCount).** We used switch case so that the user could choose between six options: add a game, show all games, buy a game, search game, edit game, leave the shop.
* **Data layer**
  + **addGame:** The function is from type void. It has two parameters**(GAMESHOP game[], int& gameCount).** We used couts so that we can show the user what information to enter.
  + **buyGame, chooseInd :** These are functions that have three parameters**(GAMESHOP\* game, int& gameCount, int ind).** 
    - **chooseInd:** finds the index of the game that the user wants to clear and returns it.
    - **buyGame:** moves the game that the user bought to the very last index from the array and the number of games decreases by one.
  + **searchGame:** 
    - **searchBy (year, review, price, sales, company, size)Menu:** The function is from type void. It has two parameters**(GAMESHOP\* game, int& gameCount).** This function wants the user to enter criteria that he wants to search and when that criteria finds the matches, it calls **the function :**

**searchGameby(year, review, price, sales, company, size).**

* + - **searchGameby(year, review, price, sales, company, size):** The function is from type int. It has three parameters**(GAMESHOP\* game, int& gameCount, int criteria(year, review, price, sales, company, size).** It prints all games that have matched the criteria.
  + **edit(year, review, price, sales, company, size):** Functions from type void with two parameters**(GAMESHOP\* game, int& gameCount**)**.** Two variables are declared in it**(int ID; year, review, price, sales, company, size).** The user has to enter the ID of the game that he wants to edit and to enter the new info.

# 3.5 Used technologies, development environments, development tools and their uses.

Interestingly enough our code was written on two development environments – Repl.it and Visual Studio. At first we started to write it in Repl.it but then we switched to Visual Studio.

In terms of used Literature or things that we gathered from somewhere else that is not our own, well… We actually wrote the code without the help of any Indian tutorials or nice and kind people from Stack Overflow. Every line of code is our property.

# 3.6 How to use it?

You just debug it and then you are granted a menu with options to choose from.

# 3.7 Conclusion. Main result – does it have application for the moment, what future plans do you have for it.

In conclusion it was a really enjoyable experience to be working on this project in particular. That is because we know each other well and it was not a problem to work as a team.

At the moment the Game Shop (that is what we like to call it) has only one application for us and it is – not to get F. Jokes aside currently there is no real application other than having fun with it.

In the future we would like to implement a data base where there will be more than 150+ games and you will not type the information for your favourite games.. It will be there so do not worry. And those 150+ games will include titles like – Minecraft, Tetris, Asphalt 9, Grand Theft Auto V (GTA V), Fortnite, Rise of the Tomb Raider, Counter Strike: Global Offensive (CS:GO), Red Dead Redemption 2, PlayerUnknown's Battlegrounds (PUBG), Dota 2, League of Legends (LoL), World of Warcraft (WoW) and many more!