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July 6 2023

W11 Final Project Diagram

Brother Poulson

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| Main Class | | |
|  | This class will include the main menu portion of the entire project. Will use a loop for choosing different menu options including an option to exit the program. |  |

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| VideosGames Class (Parent) | | |
| Variables  \_productTitle (string)  \_productSystem (string)  \_productDescription (string) | Constructors  (int) Games  (int) Price  (string) Title  (string) System | Methods  DisplayList() (abstract)  SavePurchases() (abstract)  CheckoutPurchases() (abstract) |

This will be the parent class for each video game, video game system, and equipment that goes with each set (controllers, headsets, expansion packs, and more), along with videos (DVDs, Blue-Rays), digital videos, and video players that the user can enter in for purchase that the user can enter in for purchase. The user can also remove a purchase from the list if they decide to either replace or delete that item.

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| Games Class (Child) | | |
| Variables  \_gamePrice (int) | Constructors  Will put in the set and get methods to construct itself. | Methods |

This is the first child class that will be inherited from the VideoGames parent class. It will include it’s own variable to get the price of each video game that is purchased.

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| GameSystems Class (Child) | | |
| Variables  \_systemType (string)  \_systemPrice (int) | Constructors  Will put in the set and get methods to construct itself. | Methods |

This is the second child class which will also be inherited from the VideoGames parent class. It will include it’s own variable to get the price for purchasing a system and also one for the type of system.

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| GameEquipment Class (Child) | | |
| Variables  \_equipType (string)  \_equipPrice (int) | Constructors  Will put in the set and get methods to construct itself. | Methods |

This is the third child class that will be written just like the GameSystems class. It will include an individual variable to get the price from the user of equipment that goes with each sets of video games and their systems. It also will include a variable prompting for that specific type of equipment.

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| DiscVideos Class (Child) | | |
| Variables  \_discType (string)  \_discPrice (int) | Constructors  Will put in the set and get methods to construct itself. | Methods |

This is the fourth child class that will be inherited. Similar to the child classes inherited from the VideoGames class, the DVDs child class will include a variable to get the type of DVD and a price for the DVD as well.

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| DigitalVideos Class (Child) | | |
| Variables  \_mobileType (string)  \_digitalPrice (int) | Constructors  Will put in the set and get methods to construct itself. | Methods |

This is the fifth child class that will be inherited. Since this option is for mobile devices, the first variable will get the type of mobile device that the video is being purchased on, then the price of it.

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| VideoPlayer Class (Child) | | |
| Variables  \_playerType (string)  \_playerPrice (int) | Constructors  Will put in the set and get methods to construct itself. | Methods |

This is the final class that will be inherited. This option will include a variable to prompt the user for what type of video player is being purchased and another variable for the price of it.

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| File Class (Load and Save) | | |
| Variables  \_shoppingList (List of both games and videos) | Constructors  \_filename (string) | Methods  SaveFile() (void)  LoadFIle() (void) |

This is the class that will save and load every single file and list that is included in the entire program. It will include a variable to store the files in that hold both games and videos, and a constructor to allow the user to give their file a name. It will also two methods to save and load each file as well.