Discussion1

Hello everyone, my name is Eric Vara and I am a full-time student, employee in highland ca, dad of two girls who is attempting to get a major in computer programming so that I may invest in real estate. I am from San Bernardino California, and some of my interests are going on out of the ordinary long trips to pretty much anywhere. I also switched my degree plan from engineering, because after taking my first programming class with Dr. Fay, I realized I loved programming and that I wanted to do it for a while. I realized how fun it was to arrange specific code in a manner to manipulate ideas to open up so many different creative projects. I found myself coding during my free time, as well as the weekends, when I first began learning to code java. I am now pursuing my associates in computer programming so that I may hopefully apply and work for amazon; the company I'm working for now. Programming has been so much fun for me over the semesters that it's been turning into a hobby of mine. I'm looking forward to this semester's experience, and I'm happy to be in professor Cawley's class again.

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What's interesting about an iterator is that is acts as an object that targets an element inside the container. Iterators are mainly used to shuffle through specific details of a container. They are known to act as a pointer which selects a specific location and then accesses the information at the specific location. Another main job for an iterator is to string algorithms and containers together, allowing them to manipulate data located within these containers. Here is an example of an iterator being used:

for (j = vector.begin(); i != vector.end(); ++i)

{

     cout << \*i << " ";

}

A game developer should use the C++ STL because of its wide variety of robust predeveloped code which can help minimize the amount of lines needed to write a particular piece of code. This can save much time and effort when establishing a new program that requires redundant algorithms constantly being used. Some explicit advantages of a vector over an array is the ability to remain flexible and efficient. Although a vector requires more memory, it still remains almost always a better option then a typical array. To use some of the tools in a game would mean there would be much simplicity when involving the fundamentals of loops through specific encounters. this would clean up code in many ways which would allow for easier visualization.

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Global variables are accessible from any part of your program, this is sometimes good but can be bad when repeating variables are declared within your program. The reason seasoned programmers advise against using global variables is because of their vulnerability to being changed with any given method without realizing it. Function calls begin to become dangerous when dealing with the program's functions and its unpredictable state to change a value or declare the variable for a second time. Although global variables may look cleaner and more organized while being easily able to see, they tend to cause issues when working through different function calls.

To get this peace of code to work, one thing I would do is place the second printBoard inside the getTwoMoves() functions, so the printBoard() function doesn't have to repeat itself twice.

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While playing the game Candy Box 2, I noticed a bunch of different possibilities the programmer could have used while programming this game. This game can consist of many different types of classes and objects to display the entire world map that was implemented into the video game. for instance, the world map itself could be in a class called maps which may consist of the different locations on the world map along with mini maps within areas such as the village. The weapons in the forge from the blacksmith can be in a class called weapons, armor, or something like utilities. The blacksmith himself may also be in a class full of characters that collaborate into a list of enemies, villagers, travelers, or any other wanderer within the video game RPG world.

When discussing object-oriented programming, I'd imagine the programmer may have divided up parts of the program into files that may be organized into different sections or locations of the game. Personally, I think I would have organized the system in a manner where the village had its own section, while the lighthouse and other areas on the map had their own area in the program where the things that were happening in these areas, would be programmed in their corresponding files. By doing this, I would aim to organize the files in such a way where programmers, along with myself, can easily find and reference. I hope this makes sense when discussing OOP and its involvement with the organization and placement of the different classes around data and in the different files within the game.

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You can build some very interesting games when implementing and utilizing aggregation, while taking advantage of the capabilities to enhance how your project can communicate and cooperate within many different files for clarity or any other reason. A game such as Doodle Jump can consist of many different files, or classes, that may have organized objects of monsters called Monsters within the game files. These different objects can contain much information about those specific types of Monsters which may have different aspects like name, color, type of monster, or any other feature stored within that object inside a separate class.

          Encapsulation allows for combining data into methods which operates on that specific data. This is conducted to restrict access from the user, other programmers, or any other information you wish to either keep out of reach from someone/something or just to clean up the different files you are working with. The friend function does violate these models and can cause issues when involving things such as security or anything else you wish to restrict certain access to or hide. It's not an issue if your trying to access data though; the friend function allows you to specify that a function is a friend of a class so that you may now access that piece of data while encapsulated.