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Final Write Up

Abstract

This paper will discuss the idea of my Priority Point Calculator program along with my thought process for certain aspects concerning its code. The general hope for my program is for it to reach functionality and be of use for the Marist students and faculty when it comes to figuring out housing and how many points a student has.

Introduction & Detailed System Description & User Manual

My idea would be to create a priority point calculator. The idea came to me when thinking of future housing. We never really know how many points we have until we have to ask the housing department when it's crunch time in order to pick the best housing. My idea would be to have the user calculate how many points they would have based on the clubs they are in, the sports they play, community service and their academics. The user would input or check off what activities they participate in, enter in their current G.P.A. (which they can find on degree works), the sports they play, and whether or not they have participated in community service activities. When entering this information, depending on certain clubs, they must input their percentage of attendance and position. Some clubs have a rule that if you only attend 50% of the meeting that you either get half of the priority points or you don't get them at all. Also,

depending on the position you hold in the club you can get more priority points. Once the student enters all this information in, the program should have all the values and information of how many points is each club, positions, G.P.A, and sports. When that is all entered and done the program should print out the result, indicating how many priority points you have. I have even considered adding to the program to have the user input what year they are (meaning freshman, sophomore, junior and senior) so that the program will even tell them the options of housing they have. I also might want to include in the program the option of averaging priority points. What I mean by that is, if someone is planning to live with three people making the four of them in total, that after calculating the amount of priority points each individual has to average the amount to see where they have the option of living together.

Previously in my milestone, so far I had only made a basic layout of my code. My program now includes a series of different types of if statements such as using if statements for a double and for string responses. I had already made the beginning portion of my program in which it asks the user to enter in all their information. I was previously playing around with how I wanted to store the information when it came to determining the club portion of my program. I have now decided to implement nested if statements for the club and sports portion of my program. Before, I was unsure whether or not I wanted to set my program up in a way that if the user were to enter in "P.A.W.S" for example it would have all the information stored and just move on to the next question, or if I wanted to set it up in the manner where I program it to ask if the user is in a club then ask about their attendance policy with a series of yes or no questions. An example would be asking if they are a club officer and if they answer "Yes", calculate and store the appropriate points (since club officers obtain a higher priority point value) or if they

enter "No" to incorporate it as 0. Then it would proceed with if they have attended more than 50% of the meetings and so on and so forth. While finishing up my program I had decided against typing out each specific club and rather have them enter the number of clubs they are in and multiply / add it by each club's respective points. Previously, the beginning portion of my program, when it asks for you current GPA was completed. Now, the series of if statements and point values were assigned and stored for each component of my program.

Users can now interact with my program by inputting their information to calculate their amount of priority points. I have now completed my program and updated my UML Diagram to appear as such.

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- + priorityPoints : int
- + clubPoints: int
- + sportsPoints : int
- + historyPoints : int
- + roomPoints: int
- + servicePoints: int
- + isportsPoints: int
- + GPA: double
- + clubs : double
- + answer : string
- + PosAnswer: string
- + SportsAnswer: string
- + Sports : double
- + iSportsAnswer : string
- + isports : double
- + historyAnswer : string
- + roomAnswer: string
- + serviceAnswer : string
- + hours: double
- + totalAverage : double
- + classAnswer : string
- + avgAnswer : string
- + avg Average : double

Literary Survey & Requirements

As far as my knowledge goes I don't believe there is any other program like the one I am creating. I really do believe that my program is unique and would hopefully be beneficially used by all Marist students and faculty. My primary purpose for creating such a calculator was to let students check their priority point standings whenever they wish. My hopes would be that this calculator could be added as a part of the MyMarist website, so that students and faculty may access it with ease. In terms to any requirements regarding hardware, any operating system would be fine and compatible.

Conclusion

Therefore, in conclusion I believe that my program will be extremely beneficial for not only the students but for the faculty as well. My program will make it a lot easier for students to determine the amount of priority points without having to go through the hassle of bothering the Marist housing department during crunch time. Students will be able to find out the different kinds of housing that's available to them as well and see their calculated priority points.