## A personal essay on creating a computer program

Science, Computer Science



## **Computer Programming Project Paper**

In Computer Programming class, we have been learning raptor for all of the school year so far. We have learned about call statements, selection and loop structures, in addition to many more things in programming. For the end of the year, we had to put all of this knowledge into use and make a program. For my program, I made a flashcard program where the user can enter whatever they want and it will display it on a screen that pops up after the user finishes entering the information that they want to study with the flashcard program. Users can input up to ten terms into the flashcard program at one time. It is a very useful program with a practical application.

The way the program works is first by initializing all of the variables needed to store the information for the flashcards that the user inputs. There is 20 variables, so all of these variables caused it to be a pretty time consuming process. Next, the user is asked to input the first term for the flashcards. After they enter both parts of it, I used a selection structure to create a prompt that asks them if they want to input another flashcard. Each time they enter a flashcard, they have the option of stopping, until it gets to the tenth flashcard which I set as the limit for the last card a user could make. When all of the information has been inputted into the variable for the flashcards, a graphic display opens. I learned how to create this by using this Help section on the raptor program. Everything with the graphic display was fairly simple, and it was also easy to understand and adopt into my program.

When the first part of the flashcard comes up on my program, it requires the user to click anywhere on the window to show the second part of the card.

Then when the user clicks again, it will clear the screen, and the next flashcard will pop up with another click. The user is able to cycle through all of the flashcards which they have input into the program like this. Then when the user is done looking at all of their flashcards, it will close the window. I used a call statement which can be found in the help section to make it do this. One of the problems I ran into was learning how to use more features in the graphic display window. I knew how to use some of them because I incorporated graphics into my project that I made for the Halloween assignment. With the use of the help section, it was very easy to learn, and it took about 35 minutes to learn everything about graphics that I needed to for this project. One of the other issues I ran into was related to how the users created flashcards. I wanted to make the program so that a user could create unlimited flashcards, and it would create new variables each time the user did this, however I could not find anything in the help section or online to help me accomplish this, so I decided to make it so the user could only enter ten terms. I know this is possible in other coding languages, but I'm not sure about raptor since it is a fairly basic program. The end result of this wasn't too bad because most people wouldn't need more than 10 flashcards anyway, and if they did, they could always enter more after they are done studying the 10 flashcards that the program allows.

Overall, it was a very interesting program that was a cool experience to make. It taught me a lot about graphical windows in raptor and what they can be used for. My program serves a practical purpose that could actually be used by people. It was a challenge to make, but I always enjoy a

challenge. I definitely liked this project, and I can't wait to learn more so that I can add that knowledge into future projects of mine.