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NS-0109

Programming Creativity

Professor Spector

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**Self Evaluation**

Programming creativity was a course that I was excited to transfer into because I was curious about programming, and in need of a class that was project-based and had a creative component. Professor Spector’s class provided a great introduction to programming, and to computer science in general. Additionally, programming creativity proved to be stimulating through projects that tested the imagination and abilities of me as a novice to programming.

The first program I created was during a demonic coding session. It involved experimenting with different cursor types and was very simple, due to the majority of the program being derived from the processing website’s reference page. Still, I was able to assign particular cursor types to appear when between particular coordinates on the canvas, which I thought was a success. The second program was an attempt at creating a custom cursor, but it was never continued to a point of completion.

The third program was an attempt at creating a button. It was the most complicated code I had made so far during the semester and was a success in that I learned how to constrain certain functions to a particular part of the screen, as well as completely change what’s presented via mouse clicking. MoveRotate was the fourth program I wrote, and it too was simple in that I was learning how to apply movement via keyboard keys.

The midterm tool assignment was a project that I thoroughly enjoyed because of its scale. I attempted to use a two dimensional array, Booleans, collision statements, and four loops in addition to working with time. It was ambitious and difficult to make work (I never was able to apply a sense of “gravity” like I wanted to), but from it I learned how to correctly apply arrays and four loops to my programs, and experiment with collisions.

RectMoveState was a program that I tested the usage of different “states”, for lack of a better description. After obtaining the midpoint of the rectangle, I was able to assign different parameters to its environment based on the position of the shape; creating four quadrants for the rectangle to navigate.

The final project was by far my favorite because it demonstrates the closest I had reached all semester to writing a program that exhibited some form of creativity or autonomy. The pet square code uses booleans, functions I created, keyboard and mouse functions, as well collision statements to produce a shape that was interactive (in that it followed key commands) as well as independent (in that it performed certain features without any prompt).

As a student during days that weren’t completely devoted to coding, I would take notation of the presentations given on topics like quantum computing, evolutionary computing, and number systems. I found evolutionary computing to be the most interesting because the development of the algorithm/program follows a blueprint similar to that of biology in that it optimizes and branches out in new directions from a point of origin. Overall, I very much enjoyed Programming Creativity and believe it will serve as a useful basis for future programming endeavors as well as add a practical and versitile skill that is fun.