Amadeus Rodriguez

Scratch CSP Written Response

2a. My scratch program is a revolutionary event that will go down as the greatest in the all the history of mankind. My program is a game of tic tac toe. But it is no ordinary game of tic tac toe, no THIS game of tic tac toe was made block by block, if statement by if statement my own two bare typing fingers. The purpose of my program is to not only entertain the homosapiens of the world, but also motivate future generations of programmers to try and top such genius programming as myself. In my glorious illustrious, explanation video you will see the explanation of such programming. The first half of the video, it is simply me and a partner playing the tic tac toe game one time through. The second half of the video, you will see the coding that went into this significantly complicated programming as well as the algorithm present in the background coding.

2b. There many difficulties in which I encountered in this scratch project. Let me take you through the journey of my technological voyage. At first i was certain that I was going to create my project via Canopy and create a hangman game. Days later i researched the coding in which it takes to create a hangman programmed also my colleague had already done the hangman project via Canopy. So i had to remaining options. Create a different game via Canopy, a tool in which i was very comfortable with and had had success in the past. But i saw it as an opportunity in which i could take advantage of and completely shift to Scratch. Scratch became a great success as you know i have created the greatest experiment of all time.

```
fine IsWinner?
    item 📭 of squares 🔻 = WhoseTurn and item 27 of squares 🔻 = WhoseTurn and item 37 of squares 🔻 = Wh
 et Winner v to WhoseTurn
    item 47 of squares = WhoseTurn and item 57 of squares = WhoseTurn and item 67 of squares
set Winner v to WhoseTurn
    item 😰 of squares 🔻 = WhoseTurn / and // item 😵 of squares 🔻 = WhoseTurn / and // item 👽 of squares 🔻 = Wh
set Winner v to WhoseTurn
    item 😰 of squares 🔻 = WhoseTurn / and // item 🕸 of squares 🔻 = WhoseTurn // and // item 😰 of squares 💌 = WhoseTurn
set Winner to WhoseTurn
   item 🖭 of squares 🔻 = WhoseTurn / and / item 🖫 of squares 🔻 = WhoseTurn / and / item 🖫 of squares 🔻 = WhoseTurn
set Winner v to WhoseTurn
   item 😯 of squares 🔻 = WhoseTurn / and // item 🍪 of squares 🔻 = WhoseTurn / and // item 🕏 of squares 🔻 = WhoseTurn
set Winner v to WhoseTurn
    item (1) of squares (2) = WhoseTurn and item (3) of squares (3) = WhoseTurn and item (3) of squares (3) = WhoseTurn
    item 3v of squares v = WhoseTurn and item 5v of squares v = WhoseTurn and item 7v of squares v = WhoseTurn
   Winner ▼ to WhoseTurn
```

This coding segment is by far the most difficult and the essential part and piece of code to my entire project. I found myself contemplating on which algorithm to insert into my project to make it unique and outstanding. I decided to use my Canopy python skills i was so profoundly amazing at in previous projects to carry it over to this difficult Scratch project. In Python, you can create a variable and define such variable makin it mean and execute anything you want. The function would be called IsWinner and it would determine which scenarios would lead to either x or o being the winner. Here it lists out every possible outcome in which can be made in the

game of tic tac toe to see if either x wins or o wins. As you can see this is obviously the most complicated part of the piece and eventually led to my Scratch programming Stardom.

2d.

```
when I receive Spot Clicked v

if item ClickedLocation of squares v empty and Winner = nobody then

replace item ClickedLocation of squares v with WhoseTurn

broadcast Spot Changed v

IsWinner?

if Winner = nobody then

broadcast Next Person's Turn v

else

if Winner = x then

stop all v

else

stop all v

else
```

This is my abstraction piece of code in my godly program. Although it isn't a mathematical version, it conveys logical concepts in various attempts. ClickedLocation is a variable in which i created in the home page that establishes when a square is clicked a signal is sent to the server. The logical part of the concept is that logically when a square is pushed the previous IsWinner is called and Next person's turn is also broadcasted. This logical concept definitely helped manage the complexity of greatest program of all mankind.