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Final Project: Word Chooser Game

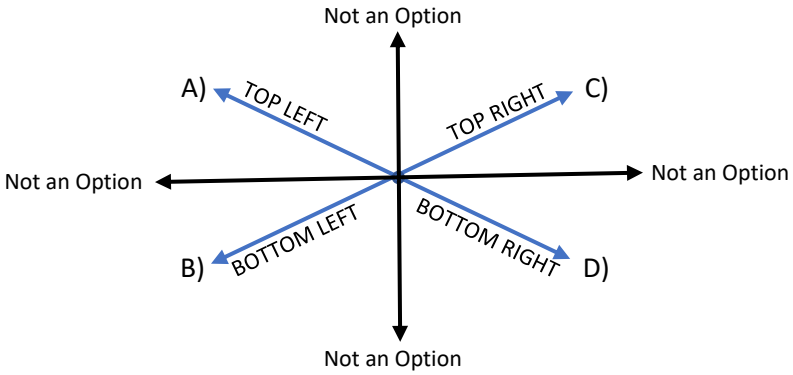
Link to Presentation: https://youtu.be/3I4MW31st7s

Underlying Concept of the Project

This project is built off from the Choreography Project where a Word Guesser game was created where users had to guess words based on the random letters that appeared on the screen. From this, users would need to match the words they wrote down with the words that would appear on the screen. However, the Word Guesser game lacked the interactive sense with the user. Thus, in the current project, The Word Chooser, the game was programmed to be more interactive with the user by allowing the user to "choose" a word that has all the letters present as opposed to "guessing" what words would appear. Therefore, the games name was changed from Word Guesser to Word Chooser.

Word Chooser uses fuzzy sets that helps communicate with the joystick the user can use to select the correct option. Below is an in-depth breakdown/flowchart of the Fuzzy Logic Behavior to gain a better understanding of the code. The program also utilizes switch cases and if/else statements that allow different screens to appear with or without a users input. For example, "Press Joystick" to continue allows the user to have full control of the game and will not go to the next screen without the user.

For the user's convenience and ease, I presented the options as follows along with the direction the joystick needs to travel for the user to select an option. The blue lines indicate the option and the black line illustrates an invalid option. This can later be programmed if more levels and options are available.



Fuzzy Logic Behaviour Table

y-axis		x-axis		Action =	Action	Case #
0	*DOWN*	*RIGHT*	0	0+0	Indicates if the option chosen is correct or incorrect. This option corresponds to ‘D)’.	**0**
		CENTER	1	0+1	Displays “Not An Option” because it is not an option that can be chosen from in the game.	**1**
		LEFT	2	0+2	Indicates if the option chosen is correct or incorrect. This option corresponds to ‘B)’.	**2**
3	*CENTER*	*RIGHT*	0	3+0	Displays “Not An Option” because it is not an option that can be chosen from in the game.	**3**
		CENTER	1	3+1	Displays “Not An Option” because it is not an option that can be chosen from in the game.	**4**
		LEFT	2	3+2	Displays “Not An Option” because it is not an option that can be chosen from in the game.	**5**
6	*UP*	*RIGHT*	0	6+0	Indicates if the option chosen is correct or incorrect. This option corresponds to ‘C)’.	**6**
		CENTER	1	6+1	Displays “Not An Option” because it is not an option that can be chosen from in the game.	**7**
		LEFT	2	6+2	Indicates if the option chosen is correct or incorrect. This option corresponds to ‘A)’.	**8**

******Note:*** 3 y-axis possibilities x 3 x-axis possibilities = **9 Total Cases**