

Create — Applications from Ideas Written Response Submission Template

Submission Requirements

2. Written Responses

Submit one PDF document in which you respond directly to each prompt. Clearly label your responses **2a – 2d in order**. **Your response to all prompts combined must not exceed 750 words, exclusive of the Program Code.**

Program Purpose and Development

2a. Identify the programming language and identify the purpose of your program. Explain your video using one of the following:

- A written summary
- of what the video illustrates OR
- An audio narration in your video. If you choose this option, your response to the written summary should read, “The explanation is located in the video.”

(Approximately 150 words)

Insert response for 2a in the text box below.

I used snap to create my code with putting together different blocks to make it work properly. The purpose of my program was an easy way for people to learn their colors in French. It first goes through and tells you all the colors in English to French and how to pronounce them in French. Then the program allows you to click on the colors presented on the screen and it will say the colors in French. It is a very helpful and simple way to learn how to pronounce all the different colors in French.

2b. Describe the incremental and iterative development process of your program, focusing on two distinct points in that process. Describe the difficulties and/or opportunities you encountered and how they were resolved or incorporated. In your description clearly indicate whether the development described was collaborative or independent. At least one of these points must refer to independent program development; the second could refer to either collaborative or independent program development. (*Approximately 200 words*)

Insert response for 2b in the text box below.

All of my project was independent. I worked on my own to get my project perfect. I had a little bit of difficulties when I tried videoing the project. When I used CamStudio I had a hard time with it speeding up my video since it my project has sound, I had a hard time saving it, and it was too long at one point so I had to lessen the video. But other than that my project ran smoothly. I had to get the time perfectly because my project was a little bit over a minute so I had to decrease the time that it said something.

2c. Capture and paste an image or images of your program code segment that implements the most complex algorithm you wrote. (marked with a color border below)

A screenshot of a Scratch script. The script starts with a 'when green flag clicked' event block. It then contains a series of 'say' and 'play sound' blocks for each color. The 'say' blocks are: 'Today you are going to learn your colors in French and how to pronounce them.' (4 secs), 'Red is rouge.' (2 secs), 'Orange is orange.' (2 secs), 'Yellow is jaune.' (2 secs), 'Green is vert.' (2 secs), 'Black is noir.' (2 secs), 'Blue is bleu.' (2 secs), 'Brown is marron.' (2 secs), 'Gray is gris.' (2 secs), 'Pink is rose.' (2 secs), 'White is blanc.' (2 secs), and 'Purple is violet.' (2 secs). The 'play sound' blocks are: 'new red' (until done), 'new orange' (until done), 'juane1' (until done), 'vert1' (until done), 'noir' (until done), 'blue' (until done), 'brown' (until done), 'grey' (until done), 'pink' (until done), 'blanc' (until done), and 'purple' (until done). The script ends with a 'say' block: 'Now click on the colors to see how to say them!' (2 secs).

```
when green flag clicked
say Today you are going to learn your colors in French and how to pronounce them. for 4 secs
say Red is rouge. for 2 secs
play sound new red until done
say Orange is orange. for 2 secs
play sound new orange until done
say Yellow is jaune. for 2 secs
play sound juane1 until done
say Green is vert. for 2 secs
play sound vert1 until done
say Black is noir. for 2 secs
play sound noir until done
say Blue is bleu. for 2 secs
play sound blue until done
say Brown is marron. for 2 secs
play sound brown until done
say Gray is gris. for 2 secs
play sound grey until done
say Pink is rose. for 2 secs
play sound pink until done
say White is blanc. for 2 secs
play sound blanc until done
say Purple is violet. for 2 secs
play sound purple until done
say Now click on the colors to see how to say them! for 2 secs
```

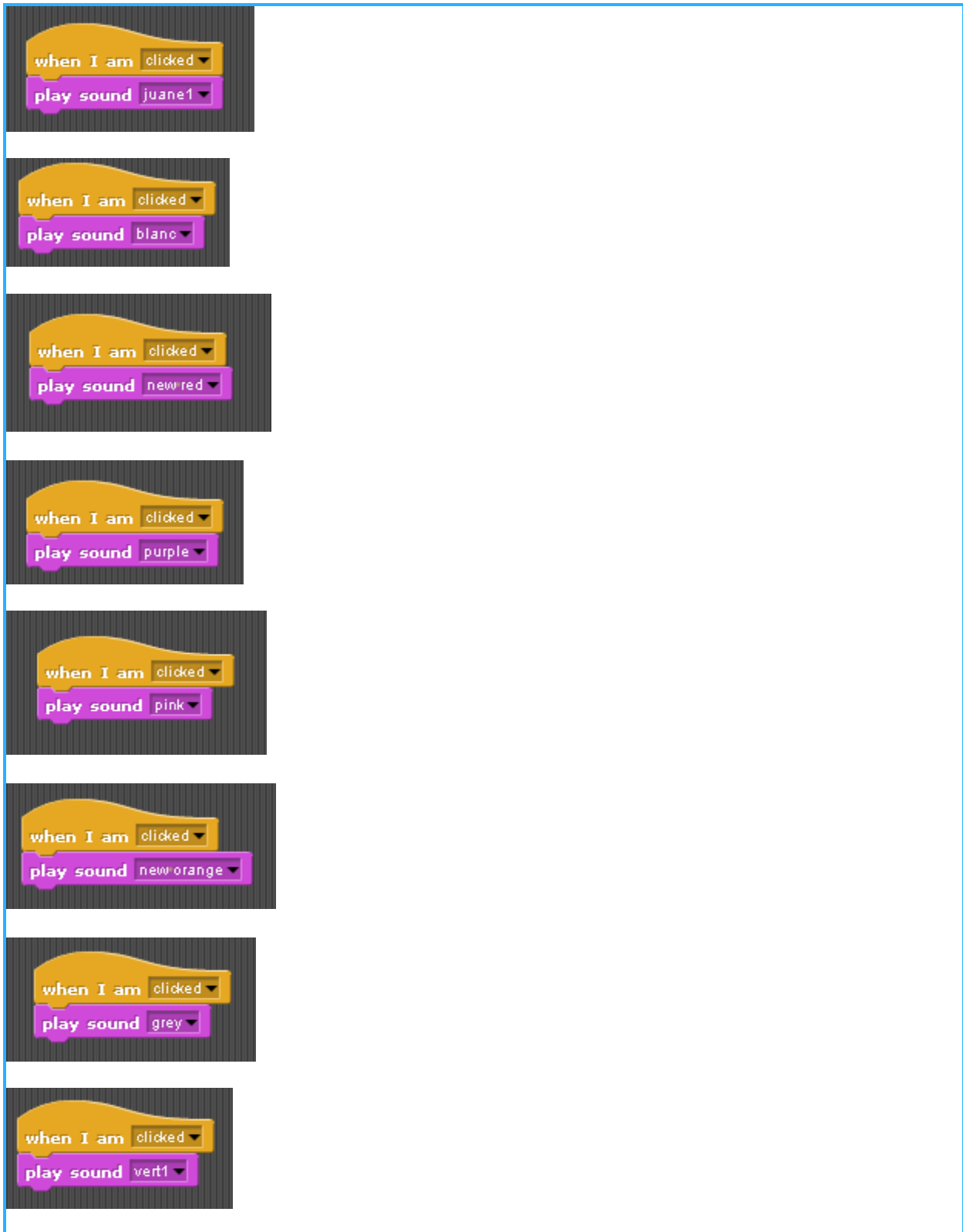
Your algorithm should integrate several mathematical and logical concepts. Describe the mathematical and logical concepts used to develop the algorithm.

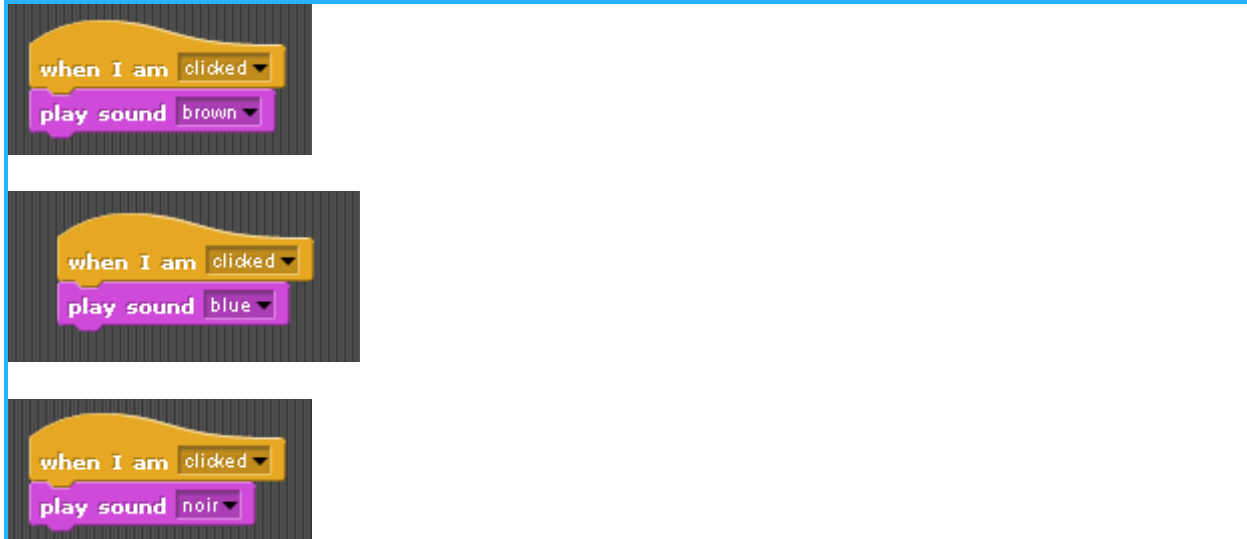
Explain the complexity of the algorithm and how it functions in the program.
(Approximately 200 words)

Insert text response for 2c in the plain box below.

I had to time my sprites for it to be the exact seconds that things need to be said. If I did not do this then my time would be off for the videoing. Plus I had to let it say what it needed to say in the right amount of time so the viewers can read everything properly. I also had to record myself saying the colors in a right amount of time so it would work with my video and it would not be too long.

2d. **Capture and paste an image or images** of the program code segment that contains an abstraction you developed (marked with a matching **blue color border** below)





Your abstraction should integrate mathematical and logical concepts. Explain how your abstraction helped manage the complexity of your program. (Approximately 200 words)

Insert text response for 2d in the plain box below.

This allowed the users to interact with the program. This set of programming allowed the users to click on the colors and then it would say the color in French. This I thought would be a great learning source if the user forgets how to say the color then it can just click on the color that is presented on the blackboard. I had to think through on how it would work in the best way and where I can get the sounds. I ended up having to record all the sounds using my voice. Then I found out that by clicking the sprite and it saying the color that it would be the best learning source for the users.