

Animation of the Poem “How Not to Have to Dry the Dishes” by Shel Silverstein Using Alice Programing

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Grade 3
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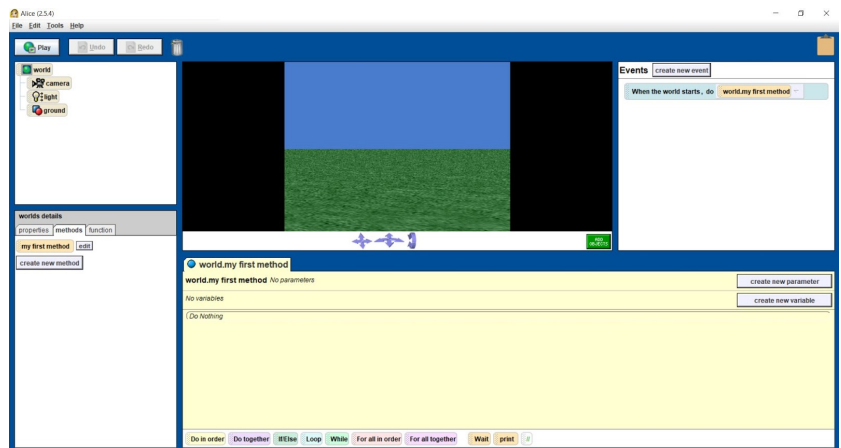
Link to video of project:

<https://drive.google.com/file/d/1g2Gwgdue6lZmkQ4YDsfPZnAoGKccm95V/view>

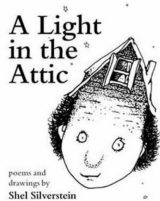


For my computer project this year, I wanted to use Alice programming to act out a poem I chose by Shel Silverstein. Alice is a tool used to teach programming concepts using block code and three-dimensional objects. It teaches object-oriented programming, using things like methods and properties. I had played with it in the past, and I wanted to use it for my project so I could learn more about how to use it. I decided I wanted to animate a poem using objects in Alice, so I had to explore what objects were available in the program and what each object could do or be programmed to do to help me tell the story.

When starting with Alice programming, this is what the world looks like. It contains the camera, light, and the ground. There are no other objects in the object tree and there are no methods being called for any of the objects.



HOW NOT TO HAVE TO DRY THE DISHES BY SHEL SILVERSTEIN



If you have to dry the dishes

(Such an awful, boring chore)

If you have to dry the dishes

(Stead of going to the store)

If you have to dry the dishes

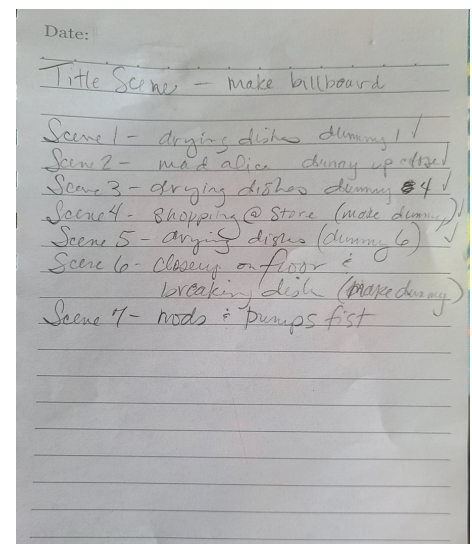
And you drop one on the floor—

Maybe they won't let you

Dry the dishes anymore.

First, I had to look for a poem to program. My mom looked up a website that had funny poems on it. I chose this one by Shel Silverstein. I liked this one because it was funny, and looking through the Alice objects, I thought I had enough objects available to be able to make it work. I chose objects like plates, cups, a kitchen counter, and a refrigerator. Some of these things served as scenery, but other things served as main props to tell the story.

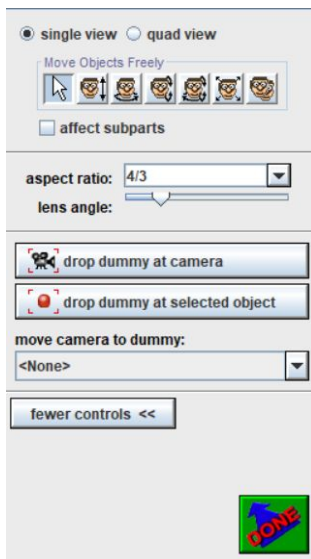
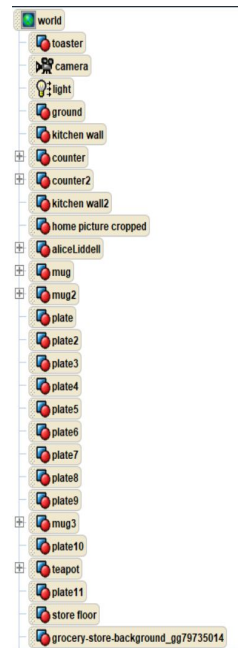
Next, my mom helped me make a plan of what to code to act out the poem. We made each section of the poem a different scene we needed to animate. Also, we wrote down some notes on what we would need to either make that scene work or to transition to the next scene.





To add objects to the world, click “add objects” and you can choose objects from any of these categories in the object gallery. You can use objects for characters or just as props and backgrounds.

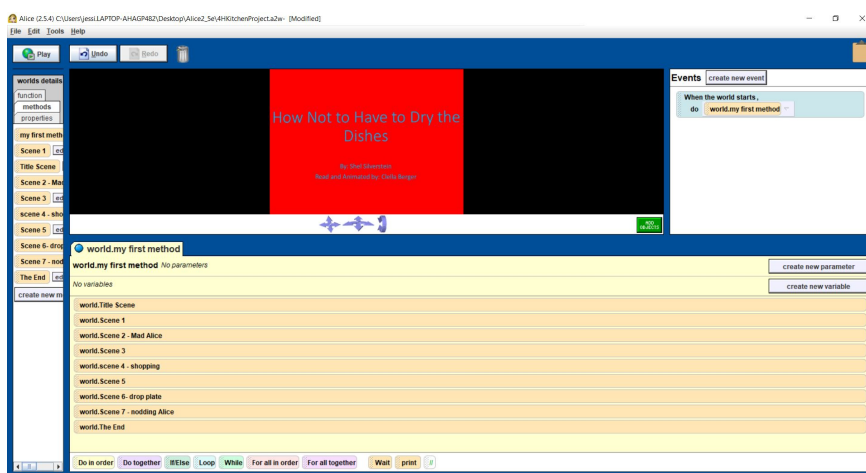
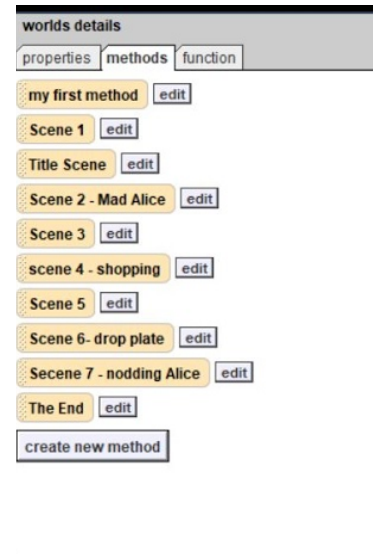
As you add objects to the world, they show up in the “object tree” where you can choose your object and then change their properties, see their methods, and use those methods to program the objects and their individual parts.



As I was setting up my scenery and objects to be used, I noticed when I clicked “add objects”, I was taken to this menu where I could use tools to move, resize, and duplicate objects. I also used it to create camera angles by dropping tripods for my camera, called “dummies”, in important locations throughout my world. These dummies can also be used to help you move back to the space you want if you got too far away from your original camera location.

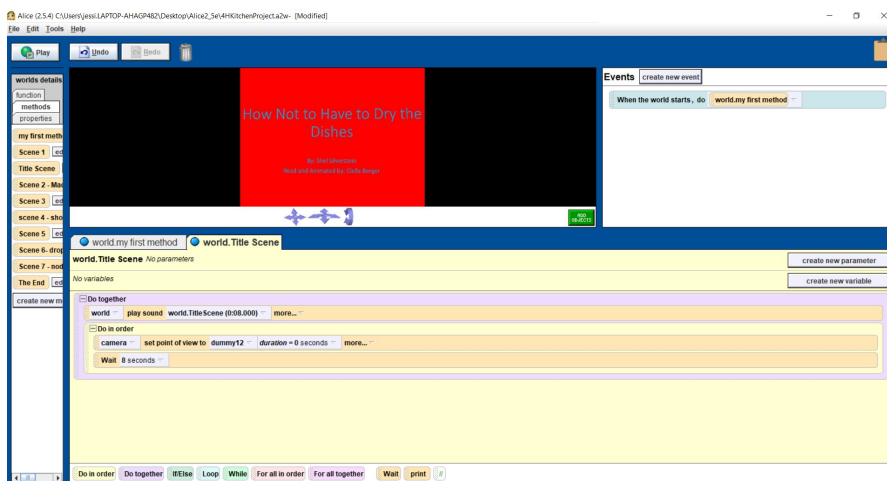
I added an “Alice” character to be my main actor in the poem.

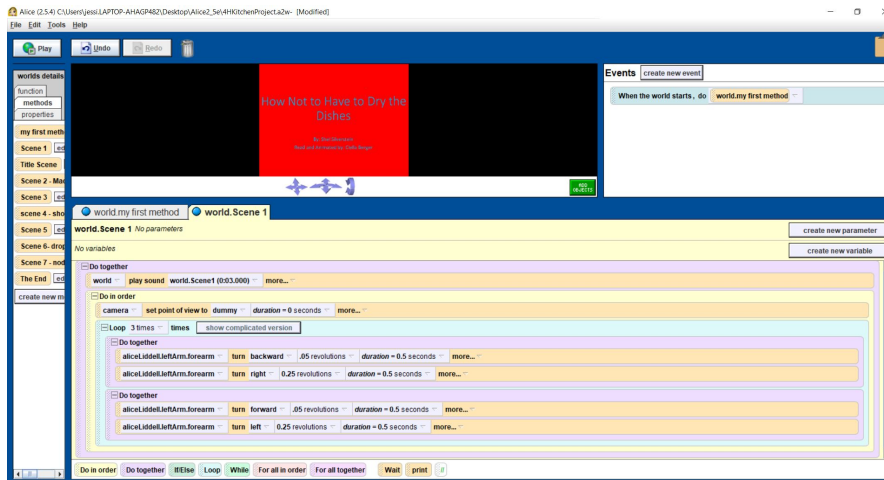
This section of the screen is what I used to make methods to go in my program. These are the methods for the whole “world” object. I learned that methods are kinda like actions that make things happen. Using methods for scenes helped me organize my coding into different sections of what is happening in those scenes. This follows the outline I made on my notebook paper, which you saw previously.



This photo shows my program with all the scenes. In the events bar, it shows that “my first method” is being called when the “play” button is clicked, and this is the method with all the scenes in it.

This shows the code it took to make the title scene. In this scene, I learned how to use “Do together” blocks, “play sound” method, “Do in order” blocks, “set point of view to” method, and “Wait” blocks that I used throughout the entire program. It was important to put the right blocks in the right places so that the sound would play at the same time as the action instead of having to wait for the sound to finish before the action started.





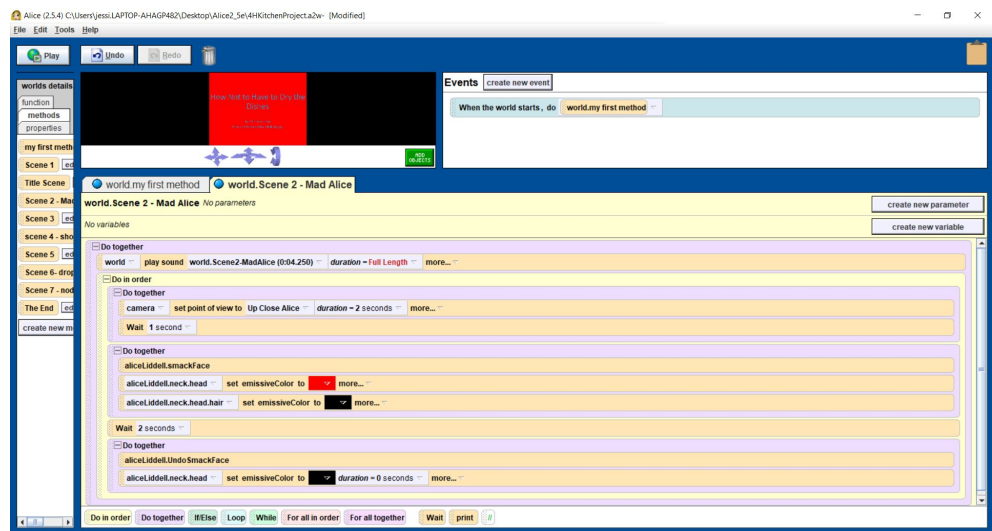
This shows the code I wrote for Scene 1. I learned how to use the “Loop” block and the “turn” method. The Loop was a good thing to learn because then you don’t have to code the same thing over and over, but you can put what you want to repeat and set it to how many times it should happen. The “turn” method was already in Alice, and helped me to control her arm to look like it was drying

the plate that she was holding. By using the “Do Together” block along with the methods for her arm movements, I was able to get her arm to move to look like it was drying the plate. The “Loop” block made it happen a few times in a row. Also, this is the first scene that I learned to use the clipboard in the upper right hand corner of the screen. I copied the first arm movement, and then pasted it and reversed the motion instead of having to drag all the method blocks over to the programming workspace again.

In Scene 2, I learned how to adjust the duration of movements.

Sometimes objects or the camera moved too fast or too slow, so by making the “duration” longer or shorter, it helped make it look more like what I wanted. For example, in this scene, for the camera movement that zooms in on

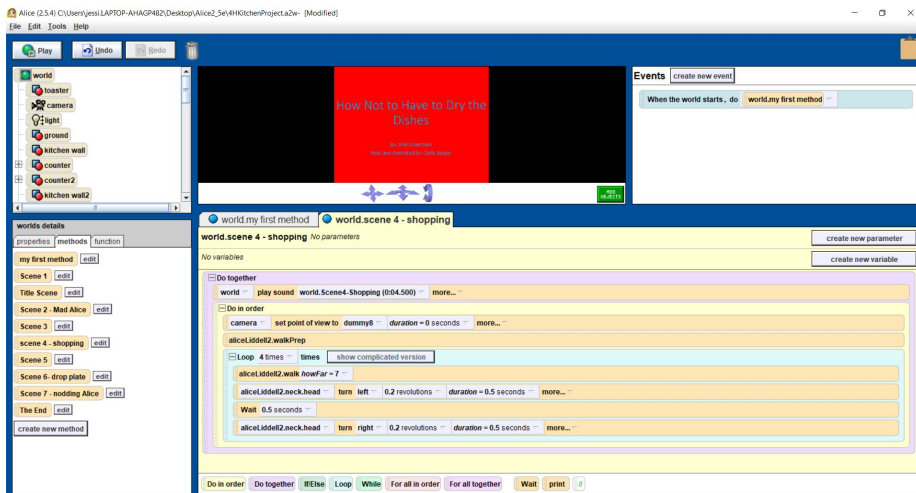
Alice’s face, I changed the duration from 1 second to 2 seconds, making it a slower movement and I liked how it looked better.



Also in this scene, I learned how to change the properties of an object. I changed the property of Alice’s face color to red to make it look like she was mad. I also had to figure out how to keep her hair the same color as normal because her hair was a part of her head, and was another layer deep in the object tree. I figured out that if I changed the color of her head to red but at

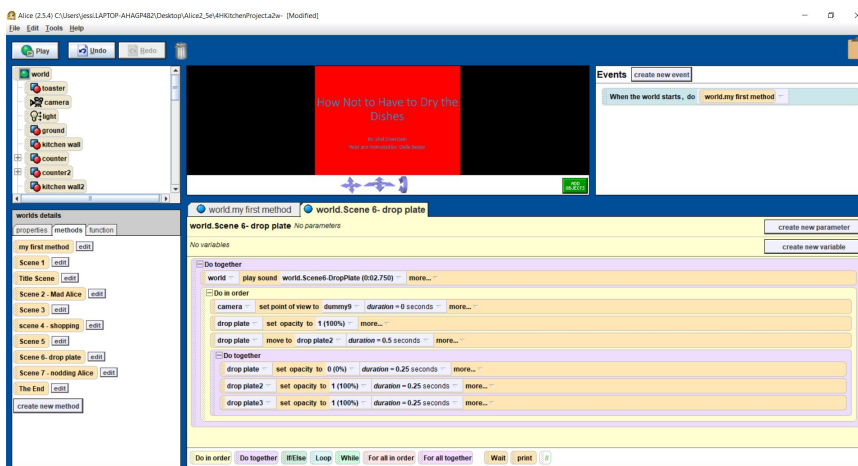
the same time, using a Do Together Block, changed the color of her hair to black (the normal emissive color), it kept the hair the same while letting her face look red.

Another thing in this scene is that I learned how to write my own method for the Alice character. I wanted her to smack her face in frustration during the line “such an awful, boring chore” so I learned that I could make a method to control these movements of her arm, so it could be called later if I needed it. I named it “Alice.SmackFace”. I also wrote a method called “Alice.UndoSmackFace” so that her arm would do the opposite motion to return to its original place. These methods could then be used in “Do Together” blocks as I needed them.



In Scene 4 as well as some other scenes, I learned how to create “billboards” as things like backgrounds, floors, signs, and pictures when there were flat objects I wanted to use but the Alice program didn’t have them in its available objects. In Scene 4, I used the billboards to make the floor of the grocery store and the background that looks like shelving. I also used a

totally different “Alice” character, kind of like a body double, so that I didn’t have to move the same Alice character from one scene to the next but just have a different Alice in each scene. I ended up using three different Alice objects as my main character!



When animating, I learned that I had to be creative with what I had available. Scene 6 is where the plate needed to drop and break, but I only had whole plates, so I had to come up with a way to make the plate look like it was broken. I made the dropped plate move down and then changed the “opacity” to 0%, making it invisible. At the same time, using a “Do

Together” block, I had two invisible plates (opacity 0% initial property) that I had placed in the world at weird angles under the floor change their opacity to 100% by calling that as a method, making it look like the dropped plate had broken. This shows the difference between changing the properties of the object initially or calling it as a method in the programming window.

Once I had all the animation done for each of the scenes I wanted, I had to record myself saying the lines of the poem for each scene. I then called the method for the sound recording for each scene, putting it in a “Do Together” block with all my animation. At first, that didn’t work well because it played EVERYTHING together. So I learned to use the “Do in Order” block for my animation and then put that into the “Do Together” with my sound clip for each scene. The end scene didn’t need to do that because it didn’t have a lot of animation or programming.

I learned that you should always make a plan before you start coding. At first I didn’t make a note sheet/plan so it was hard to keep track of what I had already done. I also learned that you have to experiment with methods in Alice because you never really know what they are going to make your character look like. Lastly, I learned that even adults don’t know everything and they also have to keep trying and making mistakes to learn from them. Overall I think I learned a lot using Alice programming.

Some failures that I had include adding sound, moving Alice’s body, and recording my animation. When I added sound to my animation it played the sound and then the rest of the animation. I wanted it to have the sound play at the same time. So, I put everything in a “do together” block. When I did that EVERYTHING played at the same time. So I put a “do in order” block around everything except the sound method. Then I put everything in a “do together” block with the sound and it was just what I wanted. When moving Alice’s body I ran into some problems trying to make it look like I wanted it to be. For example, when I made her do her arm pump I needed to rotate her shoulder. The problem was there wasn’t a move to do that. I made my own method to make her arm pump up and down. I had to experiment with what each thing did to make it look like what I wanted it to look like. Lastly, when we tried recording my animation in the Alice program it wouldn’t work and it kept loading and trying to merge the sound with the video. So my dad tried a different recording app. When he tried it didn’t record the animation, just the background behind it. I told my dad about an app at school we use to record things and send them to our teacher called Screencastify. I tried it with my mom and it worked!

Two things that helped me are my parents, Jessica and Mikel Berger. My mom helped me get set up with Alice and worked out problems with me since she used to teach about Alice to other people. My dad helped me by trying to figure out how to record my animation. They were both very helpful and taught me a lot.