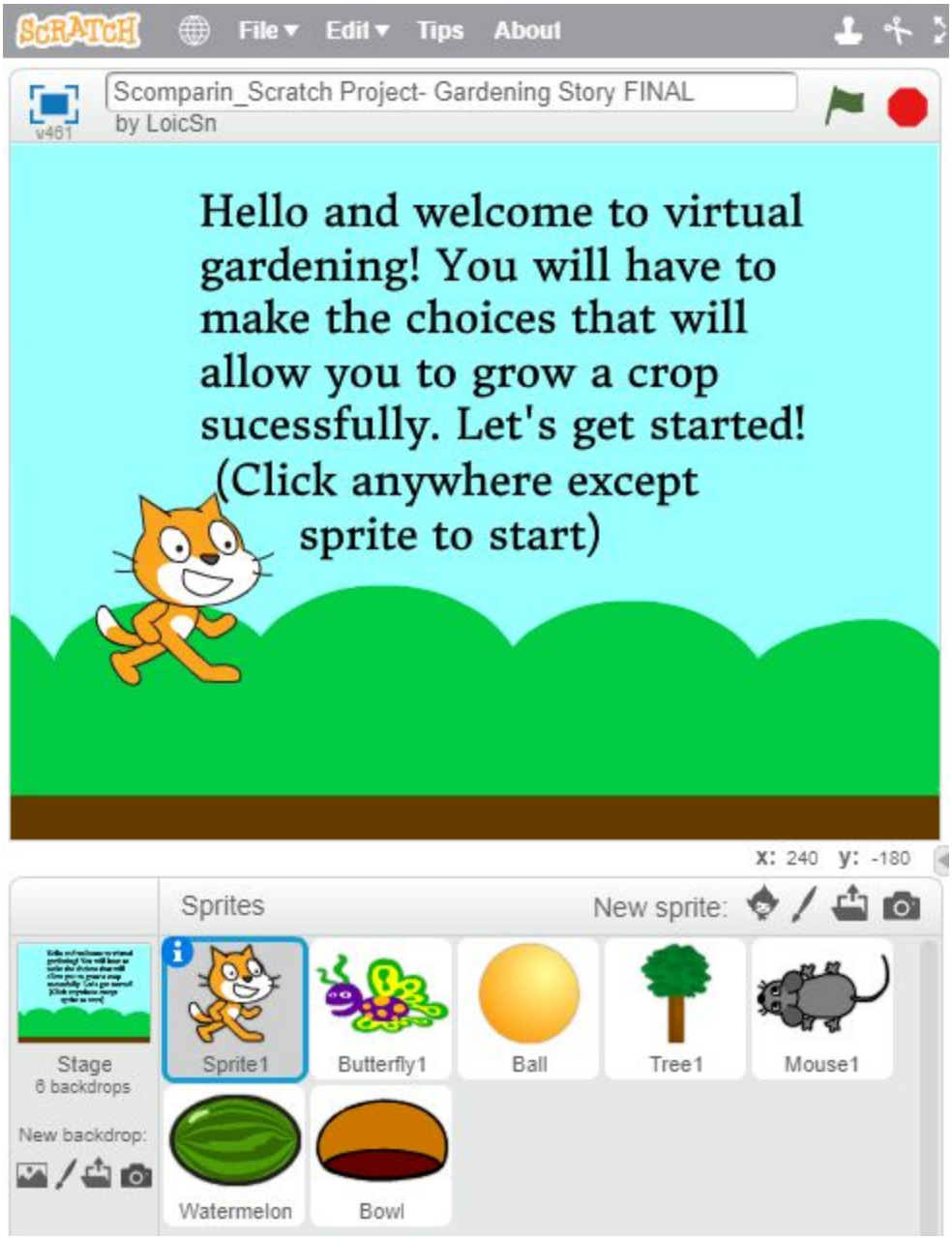
Scratch Gardening Story

By Loic Scomparin



Scratch Project Link	FINAL VERSION DRAFT (older) VERSION

Brainstorming Session

Games	Stories
• **"Bouncing ball" game where the user has to manipulate an object to avoid letting a ball hit predefined areas in the screen** • Money gathering: the user has to manipulate a sprite to pick up money in different areas before it vanishes, sprite experiences costume upgrades as time goes on • Enemy invasion- the user-controlled sprite must defeat enemy sprites that attempt to take over its territory • Maze- the sprite must navigate a landscape in order to attain a specific object. Both fulfillment of this goal and time needed to do so would count towards a score. Other moving objects are present that the sprite must avoid • Escape- help the sprite look around for a key to escape a cage. Different levels of difficulty, several non functioning keys can be added in to increase complexity	• **Trial and error gardening: the sprite is attempting to grow plants on a farm. The user must choose the correct options several times to produce a successful harvest** • The sprite is on a hike throughout the woods, and the user must choose to trust or distrust directions from different sources to avoid getting lost • Bridge building- the sprite is assigned to build a bridge, and must select when and with what and whom this should be done. Different levels of difficulty with the final objective of finishing the bridge • Mountain climbing expedition- the sprite sets out to climb Mount Everest, and must make decisions to make it to the top in a limited amount of time without dying • The sprite feels ill and must find the doctor's office, and then follow the doctor's instructions to become healthy again

Further Development of Ideas

1. Trial and error gardening:

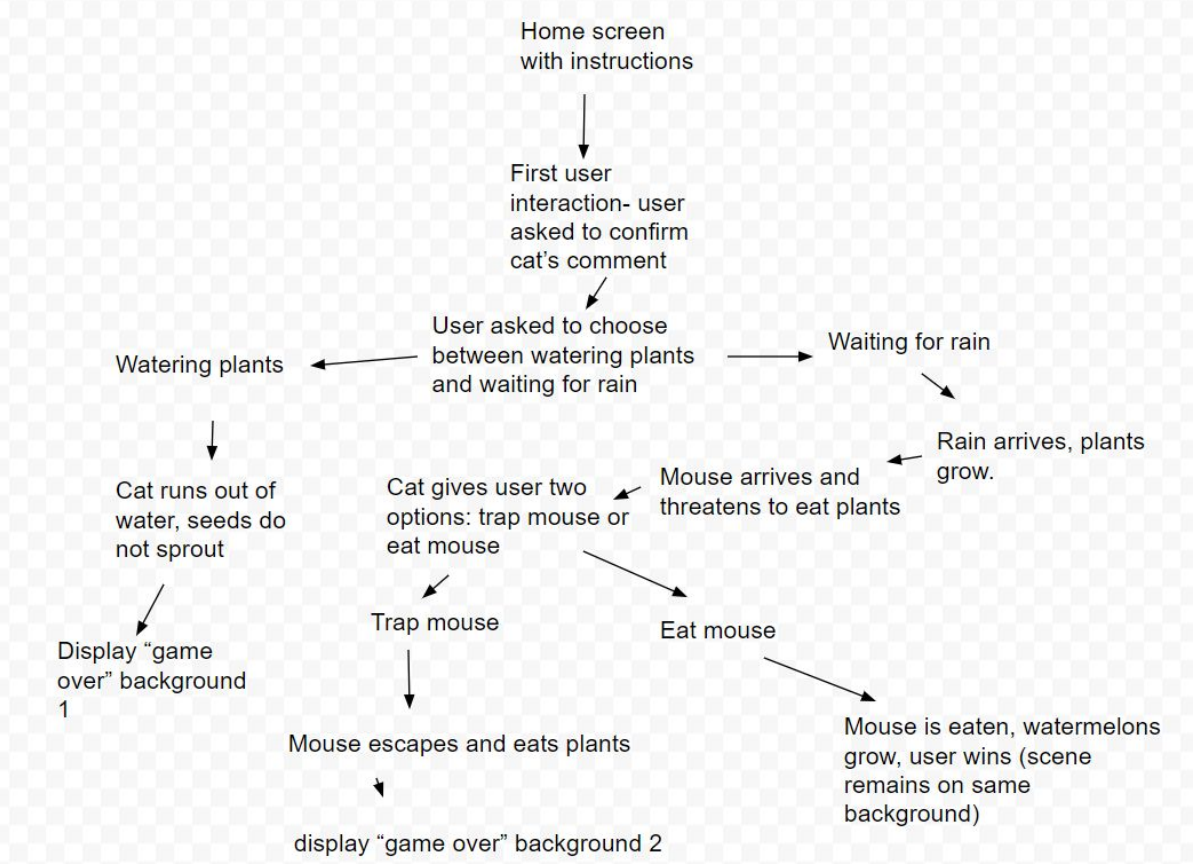
- The sprite is set up in an intro scene in a field that is ready to plant
- Another sprite comes and offers watermelon seeds to plant. The user-controlled sprite plants the seeds by touching the other sprite- controlled by user.
- Then, they are faced with the first challenge- lack of rain. They must decide to use their water, or wait for rain.
- For each decision, an alternate outcome develops:
- Us their water- not enough water, crops eventually die.
- Wait for rain is successful- rain comes and the crops are watered.
- If they chose wait for rain, they progress to protecting crops from animals (3 choices, each that result in the different outcomes).
- Only one of the outcomes is successful- maximum crop yield. Other outcomes partial crop yield, and third outcome is no crop yield.

2. “Bouncing ball” game

- The sprite must physically block a ball that bounces on the edges of the screen from hitting a predetermined location.
- The user could control the sprite using the keyboard.
- Different levels would be present, with the ball traveling faster as the levels progress.
- The sprite would have several lives for each level, and loses a life if the ball hits a predetermined location.
- Points would accumulate after each level depending on whether the level was passed, and with how many lives lost.
- Less lives lost equals more points earned.
- If all the lives at a level are lost, then a “game over” screen appears and the user must start again from the first level- progress is not saved between games.
- If done with the essential coding, other forms of entertainment such as different backgrounds for each level could be added.

Why I chose trial and error gardening: Since I had no prior experience in Scratch before this class, I wanted to develop a story rather than a game, because it provided a challenging level of complexity without having too many elements all interacting together at once. As an avid gardener myself, I felt that this story was something I could develop well because I relate to it personally.

Flowchart



Peer feedback

Since I started this project (a story) late, I was not able to obtain feedback from other groups. I did ask DonYe what thoughts he had on the initial design idea, and he mentioned that while the core idea of the project was engaging, I needed to develop alternate ways for the user to experience a wider range of options. This gave me the insight to bring in additional sprites, such as the mouse, and having two different “game over” screens. I also added in more complex dialogue between different sprites.

Regarding the bouncing ball project, he mentioned that it would need a significant, original feature to distinguish it from the many similar games that already exist today. He proposed adding a maze aspect, in which the user would also have to direct the ball around certain obstacles, while still refraining from touching certain parts of the edges of the screen, as I had mentioned in my brainstorming.

Instructions

Instructions: Follow the instructions given in the background, or said by the cat as the story progresses. There are not additional instructions to give in advance. Please do not click or press any keys unless prompted to do so. The story has user-chosen options that will affect the outcome. It is your job to help the cat achieve the end goal, growing the watermelons. Good luck! Keep trying until you attain this goal!	
Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.
Absent- other groups were not able to review final project, because I was granted extra time and finished after the gallery walk.	

Conclusion Questions

1. In order to develop a more creative idea, I first decided what the initial idea and end goals of the story would be. Then, I developed interesting and engaging means to get from start to finish (in other words, to complete or fail to complete the objective). I added visual appel and additional complexity to this pathway with the incorporation of various statements that were different in tone, as well as additional sprites that filled all the major and minor character roles in the story. The design of the original procedure was useful in that it provided structure for the rest of the project to function, while leaving enough flexibility for new ideas and changes to be incorporated to enhance the project. However, the planning of the details, such which individual sprites would be used, did not contribute as much importance to the overall gist and outcomes of the story. Therefore, I feel that overemphasizing specific details, such as what sprites and backgrounds would be used, actually did limit the modifications I could do to the story in the later stages of development.

2. Since I worked alone on this project, there was not much team dynamic involved. However, I did talk with DonYe on how the initial design ideas, which helped me further

specify and develop the story's design before I began the actual programming. DonYe and I collaborated in a positive and constructive manner, but we were only able to collaborate for one class period before the entire class moved on to another assignment. I also exchanged several emails with Anika, who was originally supposed to be my partner, before knowing that I would be working on my own. I did review the ideas she had brainstormed in class but did not get to give feedback, as she told me soon after that she had been assigned another partner.

Date	Daily Log
9/4/18 in class	Brainstormed all game and story ideas, began elaborating on first idea.
9/5/18 in class	Continued elaborating and specifying on first idea (story). Elaborated on second idea. Chose first idea for the project and began writing the justification for the choice.
9/6/18 in class	Began the programming for the gardening story- finished the first two scenes and began to program the first user-controlled option.
9/9/18 at home	Finish programming the first user decision and added two new backgrounds and one new sprite (watermelon plant) to the story.
9/11/18 at home	Finished programming the scene with the cat and mouse leading up to final user decision.
9/12/18 at home	Began programming the two choices to the final decision; added the "game over" screen and final speech text for all sprites.
9/13/18 at home	Finished programming the two choices to the final decision, verified all comments, saved the final draft of the project, shared both drafts of the project, and completed the project design notebook.