Scratch Project Design Notebook

A Small Story

Created by: Nathan Kantorov
&
Elizabeth Koh

Scratch Project Links	

Brainstorming Session:

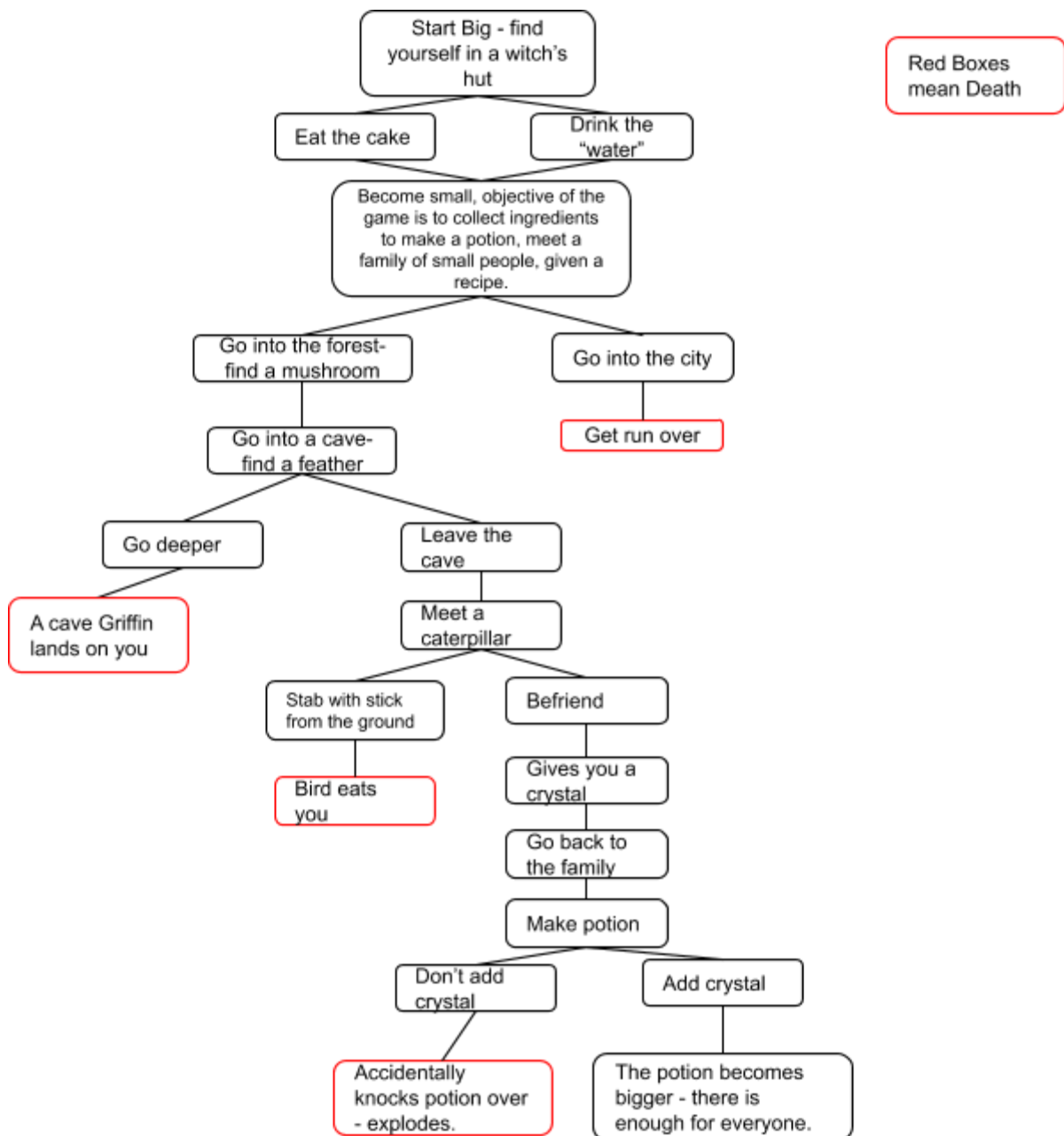First Choice   Second Choice

Game Ideas	Story Ideas

● Platformer game, like Red&Blue
 ○ Multiple small levels, common 'doorway' that brings to the next level
 ○ Could follow a storyline
 ○ Limits to movement, use problem solving elements
  ■ E.g. boxes as steps
 ○ Barriers
  ■ Sprites that will attack you
  ■ Timers
  ■ Spikes
● Puzzle game
 ○ Mazes
  ■ Obstacles
   ● Moving
   ● Spikes
   ● Timed buttons
   ● Touching certain colors will kill you
   ● Water
   ● Disappearing objects
  ■ Things that give special attributes
   ○ Power boost
   ○ Speed boost
  ■ Multiple levels
	● A Small Story
	 ○ Became small, objective is to become big again
	 ○ Can start off as a regular choice,
	  ■ Either way you become small
	 ○ Collect items to make a potion
	 ○ Meet another small friend
	  ■ Have to make the choice between staying small or becoming big
	  ■ If choose big, you get hit by a truck
	  ■ If you choose small, you find another potion and both get bigger

○ Escape the room
      ■ Different levels with different rooms
      ■ Use objects to 'unlock' levels or other items	

Final Project: "A Small Story"

We ended up choosing this option because we felt it was more doable, as well as better developed. We wanted something more creative and original, to make an interactive story that was engaging.

"A Small Story": Plot Flowchart

Feedback:

Story	Game
- More choices, make decision paths longer - More characters - Village - save everybody - If you choose to become big, eventually become small again - Positive outcome if you say yes - Easter eggs - Secret elements, small mini quests - Can add to the potion at the end to make it bigger - Everyone has enough to drink - Only a certain combination of ingredients will make the potion - Others will kill/turn you into a shark - Can make you smaller - Even more Easter eggs - Option to go back to the witch's hut - Has more ingredients - Could have a hidden recipe	- Make a bank of items to collect at the top - Intro at the beginning to introduce the objective of the game - Add a storyline

Gallery Walk:

Pro:	Con:
- I like the sprites. - I like the background. - I liked the choice of backgrounds. - I like how the sprites were positioned to look like they were actually standing on the ground in the room instead of just floating. - I like the background of the codes! - The story line is really good! - I love the story line, it is very unique! - The story was unique I liked it.	- Let me skip the Dialogue takes way too long. - This takes a long time. - Really slow. - Takes a pretty long they walk a little slow lose interest after some time. - It's kind of slow, but other than that it's pretty good. - It's not letting me go deeper.

Conclusion Questions:

Nathan:

1. **Reflect on the creative process you used. What was useful?**

    While coding, I would look at the existing code and mentally run through what it does. That way, I know what does what and if it needs some work or not. It also helped me understand what was going on and how it would be executed. I would finish a segment of code and then test it. I would test it once or twice, edit the code if I did not like, and then test it again. I repeat that a couple of times before moving on. If the code involved a for loop with a motion related block, I would use the default setting and click on the block to manually find out the number of repetitions for the code. I would repeat this one or two more times just to be sure I counted right, then implement it into the code. If it was necessary, I would alter the number and then repeat it again until I became satisfied. It

2. **Reflect on the team dynamic. What helped the team work well together?**

    We would agree on what we would do before the class ended, so both of us mostly knew when and on what we would be working on. For example, on Friday we agreed that Elizabeth would work on the code on Saturday and I would work on Saturday. We would also email each other if something was wrong and the other was not on the notebook. Otherwise we would just ask each other questions by typing them out on the notebook somewhere and deleting them once we get an answer.

Elizabeth:

1. **Reflect on the creative process you used. What was useful?**

    While working on the project, a lot of it was trial and error. As I was coding a specific part, I would run the code over and over again, making small changes each time until it was at a level I was satisfied with. It was also very useful to take a look at the various blocks available, in order to find more efficient ways to do something. In one instance, I was using broadcasts for every background change, until I happened to discover that there was a "Change backdrop to" block. By using that, I was able to significantly cut down on the number of broadcasts we were using. It also helped if, before I started coding, I scrolled through all the blocks and thought about the purpose of each one, as well as experimenting with a few.

2. **Reflect on the team dynamic. What helped the team work well together?**

    Nathan and I got along well together, and we were able to communicate efficiently with each other. When we were unsure how to continue, had a question, or simply wanted to let the other know something, we would email or type a note somewhere. We also made a point of delegating work before we left the classroom, and when one person was working on the code, they would type "Working on it" next to the link. Our ability to communicate smoothly also helped tremendously with brainstorming, as we could build off ideas quickly. Also, instead of having one person work on the code and one person work on documentation, one person would code while the other helped, which increased our cohesiveness as a team.

Daily Work Log		
Date	**Nathan**	**Elizabeth**

Wednesday, 9/4	• Brainstormed ideas
	  ○ Games
	    ■ Platformer
	    ■ Maze
	    ■ Came up with obstacles fro maze an platormer
		• In Class
		  ○ Typed ideas in Digital NB
		    ■ Mainly ideas for games
		  ○ Contributed with potential obstacles

Reflection:	I could have looked at the code for a platformer to see how the jump mechanics work, how the special effects (this color does this, that color does another thing) etc. I could have contributed more ideas for the brainstorm..	Could have contributed a bit more to the discussion, but otherwise worked well with Nathan to build up on the game ideas.

Thursday, 9/5	• Brainstormed ideas
	  ○ Games
	    ■ Escape room
	      • One thing done in one area affects something somewhere else
	  ○ Story
	    ■ "Small story"
	      • Started to develop plot line
		• In Class
		  ○ Typed ideas in Digital NB
		  ○ Added some to Game ideas
		    ■ Escape Room idea
		      • Decided together it wasn't that great, ruled it out
		  ○ Came up with the "Small Story" plotline - semi-developed

Reflection:	I could have done some research to see how other people do escape rooms on scratch. One thing that we would look at would be storyline, backgrounds,etc.	Came up with a few good ideas, even though the escape room idea wasn't practical in the level of complexity we wanted it at. Was the main creator of the story plotline, talked with Nathan on how to extend the plot and add more details.

Friday, 9/6	• Gave feedback to Kaustubh and Bridget
	  ○ Ideas on how to make their story idea and game idea more complicated
	• Started to program the story in Scratch for a bit.
	• Worked on the flowchart for the Digital NB while Elizabeth coded.
		• In Class
		  ○ Gave feedback to Kaustubh and Bridget
		    ■ Extend their choices so the storyline is more complex
		  ○ Typed in feedback
		    ■ More choices
		    ■ A lot of "easter egg" ideas
		      • Can be used to extend the project
		  ○ Helped a bit as Nathan programmed in Scratch, discussed various ways
		• Didn't work on anything at home

Reflection:	I could have added to the code after I got home.	Had a productive discussion with Bridget and Kaustubh, but our first feedback session wasn't very long or in depth, so we had another round of feedback that was more specific. After the feedback Nathan and I had a smaller discussion to add onto the ideas Kaustubh and Bridget gave us.

Saturday, 9/7	●	● Worked on Story
		  ○ Created new version
		  ○ Started at the first choice(cake or water)
		  ○ Added new sprites - family members and recipe
		  ○ Extended the story part
		  ○ Choice 2:
		    ■ City Option: gets run over
		    ■ Didn't do Jungle option

Reflection:	I could have worked on the notebook for Wednesday,Thursday, and Friday.	Spent a decent amount of time coding, but could have shortened the story aspect, because it is a little bit tedious if you have to restart. Making the city option was a lot of fun.

Sunday, 9/8	● Worked on story
	  ○ Added the "go deeper"
	  ○ Added a little code for the "go out"
	  ○ Added a comment for the "go deeper"
	  ○ Changed the recipe so that is said feather from griffin instead of feather from toucan
	● Worked on Daily log for Friday and Sunday
		● Worked on Story
		  ○ Polished City Option
		  ○ Rewrote some parts to use less broadcasts
		  ○ Made costumes of Caterpillar, Mushrooms, and Feather
		  ○ Added 2 or 3 comments
		  ○ Finished Jungle and Cave Option, up till "go deeper" or "go out"
		    ■ Completed the dialogue portion of "go out"
		    ■ Didn't start go deeper
		● Worked on Daily Log from Weds to Sun

Reflection:	I could have added more comments to the code as I worked.	I discovered a "change backdrop to" block, so I rewrote the code to use that instead of broadcasts to change the background, excluding the death scene because that one would be used more often. I had to be creative when making the caterpillar, mushroom, and feather sprites by either drawing them or using parts from premade sprites.

Monday, 9/9	● Continued to work on code
	  ○ Got the stabbing the caterpillar scene to work, added sprite for the roosters
	  ○ Added comments to existing code
		● In Class
		  ○ Worked with Nathan to program on his computer
		● At Home - Worked on Project after Nathan finished commenting
		  ○ Started from befriending the caterpillar, finished death by roosters
		  ○ Did the last choice- add crystal or not
		  ○ Finished the Win Scene
		  ○ Refined and added comments for the code

Reflection:	I could have added more code for befriending the caterpillar or for the chicken.	Finished the story well under time constraints, organized and commented out the recently added code, including the backdrops.

Tuesday, 9/10	● At home
	  ○ Worked on log for wensday,
		● At Home
		  ○ Worked on Design Notebook

	thrusday, and friday. ○ Worked on the second conclusion question	■ Cover page ■ Formatting ■ Work Log ■ Conclusion Questions ○ Submitted Design Notebook
Reflection:	I was productive and managed to cut down some of my work load for the next day.	Productive, communicated well with Nathan on what needed to be done.