Scratch Project Design Notebook

PLTW | Computer Science

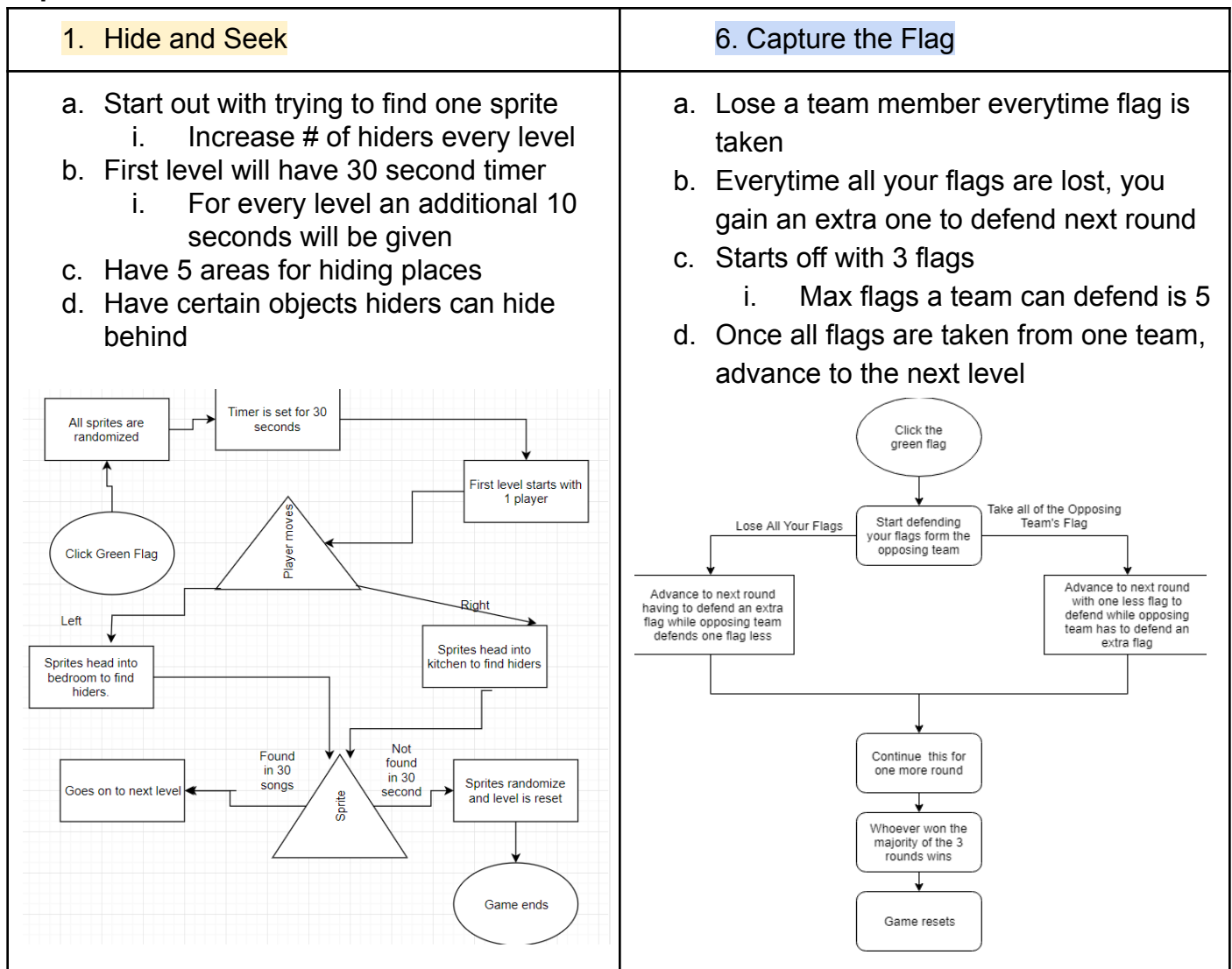# Hide & Seek

Developed by: Gracy Sutaria and Sai Thiruveedula

score 0   time 10

Brainstorm
1. Hide and Seek (G)
    a. Multiple sprites
    b. Number of players increase everytime someone is found
2. Runner game (G)
3. Car surfing(S)
4. Playground (S)
    a. Choose what to do
5. Predator Prey (G)
    a. Train to become predator
6. Capture the(G)
7. Maze (G)
    a. Get to the end first

Top 2

1. Hide and Seek	6. Capture the Flag

a. Start out with trying to find one sprite
  i. Increase # of hiders every level
b. First level will have 30 second timer
  i. For every level an additional 10 seconds will be given
c. Have 5 areas for hiding places
d. Have certain objects hiders can hide behind
	a. Lose a team member everytime flag is taken
	b. Everytime all your flags are lost, you gain an extra one to defend next round
	c. Starts off with 3 flags
	  i. Max flags a team can defend is 5
	d. Once all flags are taken from one team, advance to the next level

Hide and Seek flowchart:
All sprites are randomized → Timer is set for 30 seconds → First level starts with 1 player
Click Green Flag
Player moves: Left → Sprites head into bedroom to find hiders. Right → Sprites head into kitchen to find hiders
Found in 30 songs → Goes on to next level
Not found in 30 second → Sprites randomize and level is reset
Game ends

Capture the Flag flowchart:
Click the green flag → Start defending your flags form the opposing team
Lose All Your Flags → Advance to next round having to defend an extra flag while opposing team defends one flag less
Take all of the Opposing Team's Flag → Advance to next round with one less flag to defend while opposing team has to defend an extra flag
Continue this for one more round → Whoever won the majority of the 3 rounds wins → Game resets

Feedback
- **Multiple disguises**
- **Bonus points for finding sprite faster**
- **Smaller every level**
- **Repeat the code**

Action Taken Upon Receiving Feedback

Disguises for sprites	We added objects to cover up the sprites so it was less obvious of where they were hiding.
Bonus points for finding sprite faster	Instead, we added points every time a hider was touched
Smaller size of sprite every level	We didn't decrease the size but we did make all the sprites of different sizes and color.
Repeat the code	To make the code easier to build, we added the same code for many of the sprites and connected them with very few variables.

Instructions: Use the arrow keys to move, to move onto the next backdrop touch either the left or right edge of the screen The objective of the game is to find the hidden sprites, in each level, as you would in normal hide and seek. You will start with 30 seconds, each level the time will reset and 10 will be taken from the time. In level 1, you must find one sprite, in level 2 your must find 2 sprites, and in level 3 you must find 3 sprites.	
Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.
Nice interactive features, spawn time of 10 second delay in the beginning	First part not really explained. Protagonist is hovering over the other objects so that makes it go through all the levels faster.
Good animations, good characters	Can't be sure when the level switches, too fast, sometimes glitches through scenes
Movement of the character is very solid, idea of switching backrops is interesting	Levels switching is very quick and sometimes does not come in chronological idea

Love the graphics and movement	Motive of the story is not very clear
Good idea	No idea what story is (not clear) Feet of player seem to levitate under legs
Good concept and the coding is really good	Game is confusing and instructions dont fully explain When you get to certain point, game stops and backgrounds glitch
● The concept is really nice and a lot of coding Sruti and Anmol	● After a certain point, the background completely glitches and flashes ● It is too easy as sprites constantly pop up
I like how smooth you can move the character	Your background glitches a lot. Once reached a point game just stops.
Alex and Calvin: Interesting concept, and the timer idea is good	The game breaks ridiculously easily. (going back and forth between left and right loading zones, for example, will shatter the game.) There's not much to do either.
James and bibek	Super easy to finish

1. **Reflect on the creative process you used. What was useful? Discuss your reflection with your partner and then write a reflection individually.**

Gracy: I think that the most useful part of the creative process was planning out some general ideas of what the game would include.

Sai: In the creative process, what I found useful was being able to map out the ideas we decided on, especially with the flowcharts. Just in general being able to have time to generate ideas and improve upon them by detailing them out was quite useful as well.

2. **Reflect on the team dynamic. What helped the team work well together? Discuss your reflection with your partner and then write a reflection individually.**

Gracy: Coming up with different ideas helped us work together because we got to share our thoughts and discuss possible views on the game. We also gotted to discuss if it was working as planned and coming up with solutions when there was a problem.

Sai: The main thing was communication. Communicating ideas and issues we came up with while working on the project helped us work together better while also being able to improve upon the game.

DAILY LOG

9/3/19

Today we discussed our team norms and started brainstorming ideas for what we want to do for the project. We've come up with a good seven options, and we have a vague idea of what two ideas we plan on detailing out further, but tomorrow we most likely will continue to brainstorm a bit more to see if we can come up with any more ideas.

9/4/19

We came to the conclusion of what our two top options are going to be and started the flowcharts for them in class. We got a good majority of them done in class, and what we didn't finish we finished at home.

9/5/19

Today we decided on our final game. We got to discuss with another group and get feedback as well as give them feedback. We then started to explore the tools Scratch provided and started figuring out how we would code this game. Gracy at home coded the walking animation for the player and selected some backdrops.

9/6/19

Today we got more done on the coding of the game. Gracy implemented the first sprite the player will have to find, and I started trying to figure out how we'd let the player know how many sprites they'll have to find in a level and how they'd advance to the next level.

9/7/19

At home, Gracy made level 2 and level 3 by adding new sprites and multiple backgrounds. A timer and variable score was added to complete the requirements.

9/8/19

At home, more coding was done on the game. Sai made sure comments were added for the blocks and implemented the third sprite the player would have to find and the backdrops for level 3. Sai also made sure the third level ran smoothly and added a "Congratulations" end screen.

9/9/19

In class we added comments on all the versions of the game. In the comments we added what each chunk of code was supposed to do.

9/10/19

In class we did a gallery walk for the projects, and both gave and received feedback on the projects.