Video Game Design

Hansel and Gretel: Through the portal

Conference City and State:

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Team ID: 22259-1

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Video Game link: https://clem1212.github.io/TSA-Video-Game-Through-the-Portal/

Through the portal

Hansel and Gretel: Through the Portal is a Two player fantasy game where players learn teamwork and problem-solving. Players control Hansel and Gretel as they navigate different fairy tale worlds with different unique challenges. The game blends storytelling and different game mechanics to create a cool experience.

The Purpose of Our Game

The purpose of our game is for players to learn the value of teamwork and friendship by working together as Hansel and Gretel through their journey. Players must use their abilities to overcome challenges and escape the dangers that happen through different game dimensions. The game has strategy, exploration, and problem-solving, emphasizing the themes of trust and teamwork. The game is designed for young players ,with the fairy tales being a main focus, making it good for families, young gamers, and gamers in general being E for everyone. It also introduces story elements of Grimm brothers with different elements of fairy tale stories in the game. The two players control Hansel and Gretel using the keyboard and Players must communicate to face challenges. It has Problem-Solving with the game encouraging critical thinking through decision-making and even social Connection by allowing players to bond between players, making it a great experience for families and friends.

The Rules of Our Game With game Mechanics

Each fairy tale has its own mini game and level. The mini games feature simple controls (using arrow keys for Hansel and WASD keys for Gretel even sometimes using the mouse and space bar for different games. Players need to perform tasks like dodging, collecting items, or activating special powers to move on to the next level or story.

The Pied Piper Rules:

- Use arrow keys and WASD to move
- Avoid rats and collect eggs
- Press the down arrow key or S key to activate powers (shield and arrow)
- Collect book pages to proceed to the next level
- Press SPACE to start the game

Golden Goose Rules:

- Use WASD and arrow keys to move
- Dodge enemies and collect all the eggs
- Use power-ups to gain an advantage (press SPACE to activate shield and arrow)
- Press SPACE to start and reload the game & activate power-up

Aladdin Rules:

- Use W key and up arrow key to fly
- Avoid clouds and try to get 20 points to win
- Press SPACE to start and restart the game

Jack and the Beanstalk Rules:

- Press W and up key to jump
- Jump on blocks to climb the beanstalk
- Reach the top to win
- Press SPACE to start and reload the game

Hansel - Robin Hood Training Rules:

- Use arrow keys to move around
- Click and move the mouse to shoot the targets for your training
- Train with Robin Hood for the witch fight
- Press SPACE to start the game and reload the game

Gretel - Rapunzel Training Rules:

- Use left & right keys to dodge falling items
- Press down key to activate the shield
- Train with Rapunzel for the witch fight
- Press SPACE to start the game and reload the game

Witch Boss Fight Rules:

- Use arrow keys and WASD to move
- Run from the witch and collect book pieces
- Find the full book to return home and fight the witch
- Press Space to continue
- Avoid falling witch spells and collect eggs
- Climb the platforms to defeat the witch and find the portal to go home

Audio and Video controls:

- Press the Play button (the first button in the top left) to play the music.
- Press the Pause button (the second button in the top left) to pause the music.
- Press the Stop button (the third button in the top left) to stop the music.
- Slide the notch in the top left to change the volume of the music.
- Press the spacebar to automatically play the music.

Game Collisions and interactions:

****When Hansel and Gretel collide with the rats in the first level, they lose. When they fall off the platform, they lose. When Hansel and Gretel collide with eggs in the second level, they collect points. When they collide with the geese, they lose. When Hansel and Gretel collide with the clouds in the 3rd level, they lose. When Hansel and Gretel jump on the blocks in the 4th level, they progress further up the beanstalk, and when they fall off the platform, they lose. When Hansel collides with the targets, he gets trapped. When Gretel collides with the flying objects, she loses. When Hansel and Gretel collide with the witch, they lose, and when they collide with the eggs, they collect points. When Hansel and Gretel collide with the spells in the boss level, they lose, and when they collide with the portal, they go back home. Whenever Hansel and Gretel collide with any of the book pages, they go to the next level or collect points in the boss level.****

The Story/ Lore

The plot revolves around Hansel and Gretel, who escape into a magical portal and get pulled into different fairy tale worlds, battling the witch along the way. They meet famous characters like Rapunzel and Robin Hood, who help them develop new skills to fight the witch. The game is designed around the shown narrative, with different mini-games inspired by various fairy tales and various retro games. Here's a breakdown of how it plays out: Main Story: Hansel and Gretel stumble upon a magical book in the witch's candy house and are transported to other fairy tales. They must defeat the witch and beat the different games to return home. Each fairy tale has its own game, such as: Pied Piper, Golden Goose, Aladdin, Jack and the Beanstalk, Robin Hood Training, Rapunzel training and the Witch Boss Fight. The players will need to perform tasks like dodging, collecting items, or activating special powers to move on to the next level or story. Eventually, the witch discovers Hansel and Gretel during their training, forcing them to get transported into another portal to the witch's furnace. They must navigate the fiery maze, evade the witch, and find the portal that originally transported them through the different fairy tale worlds—ultimately returning home! The overall theme emphasizes teamwork, friendship, and growing stronger by working together—something Hansel and Gretel learn through their journey. The combination of narrative and interactive gameplay makes this an exciting adventure!

Technology used

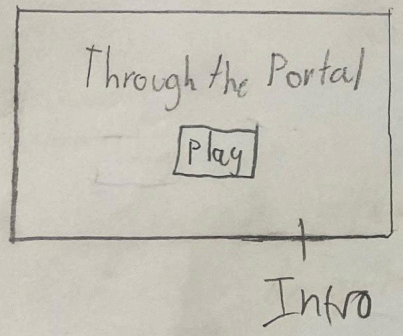
We used the following technologies to create this video game: Programming/Coding Languages: HTML, CSS, and JavaScript, using Kaboom.js and Kaplay.js as JavaScript libraries. Art and Design Software: Photoshop, Photopea, Piskel, DinoPixel, and pixel art. Music Software: FL Studio(for laptop), GarageBand and BandLab (for phone). Collaboration Tools: GitHub (for web hosting and code management), Google Drive (for artwork storage and project planning game in Google Docs), and Imgur (for image and art hosting using their API).

Copyright

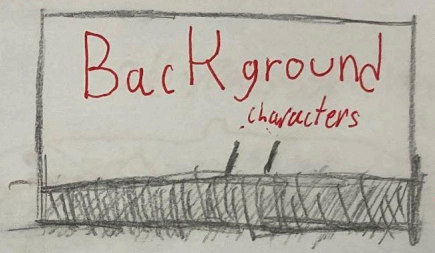
We are not using anybody else's trademark (all art is made by Dillon Smith and Dakota Manley and all code and music is made by Clement Amoah).

The Storyboard

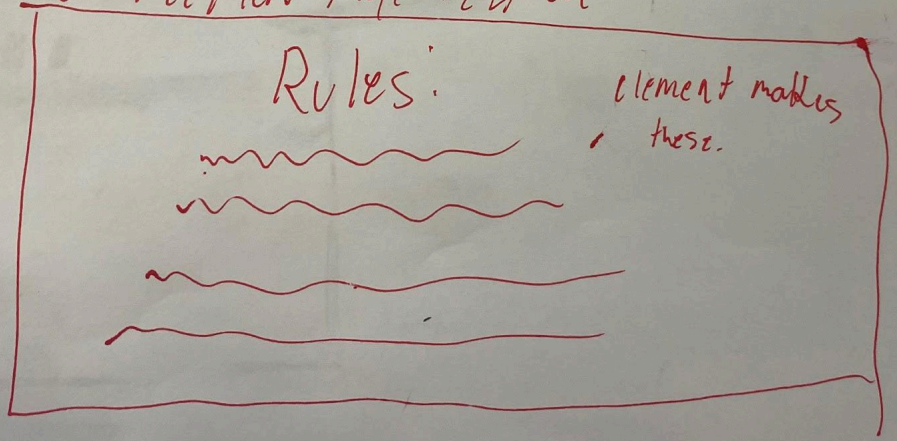
Scene 1 Opening segment.

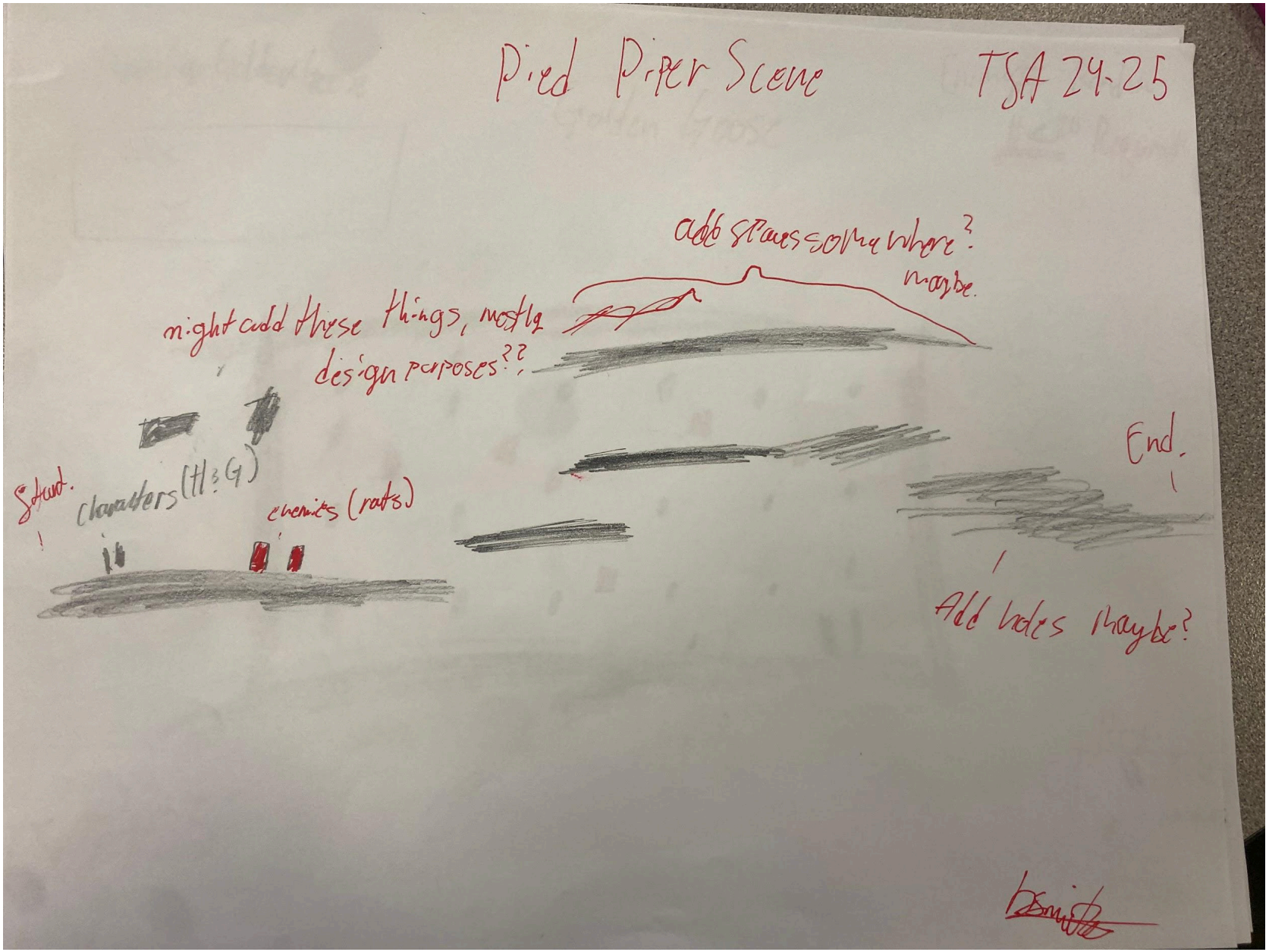


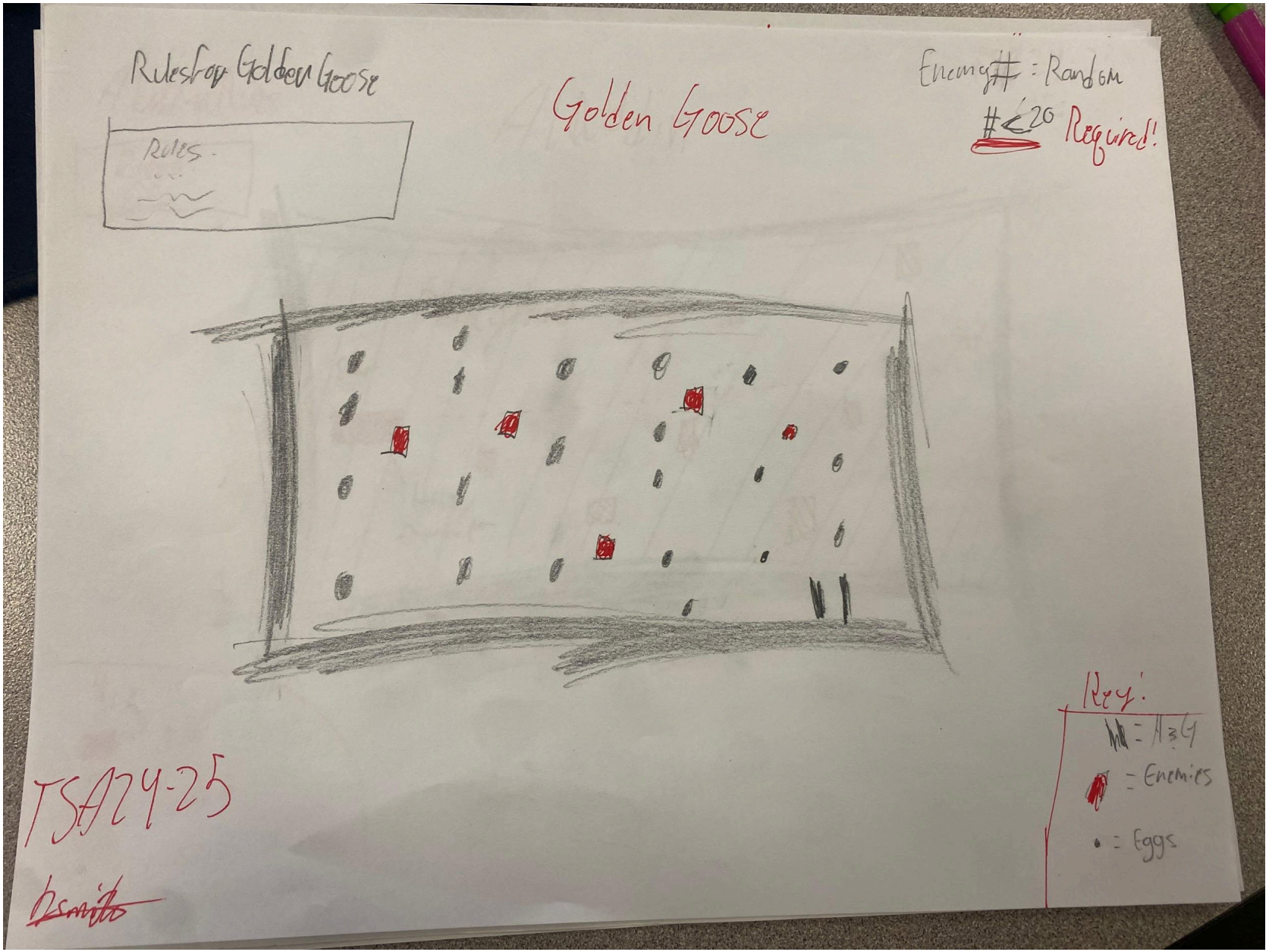
Scene 2/intro. TSA 24-25

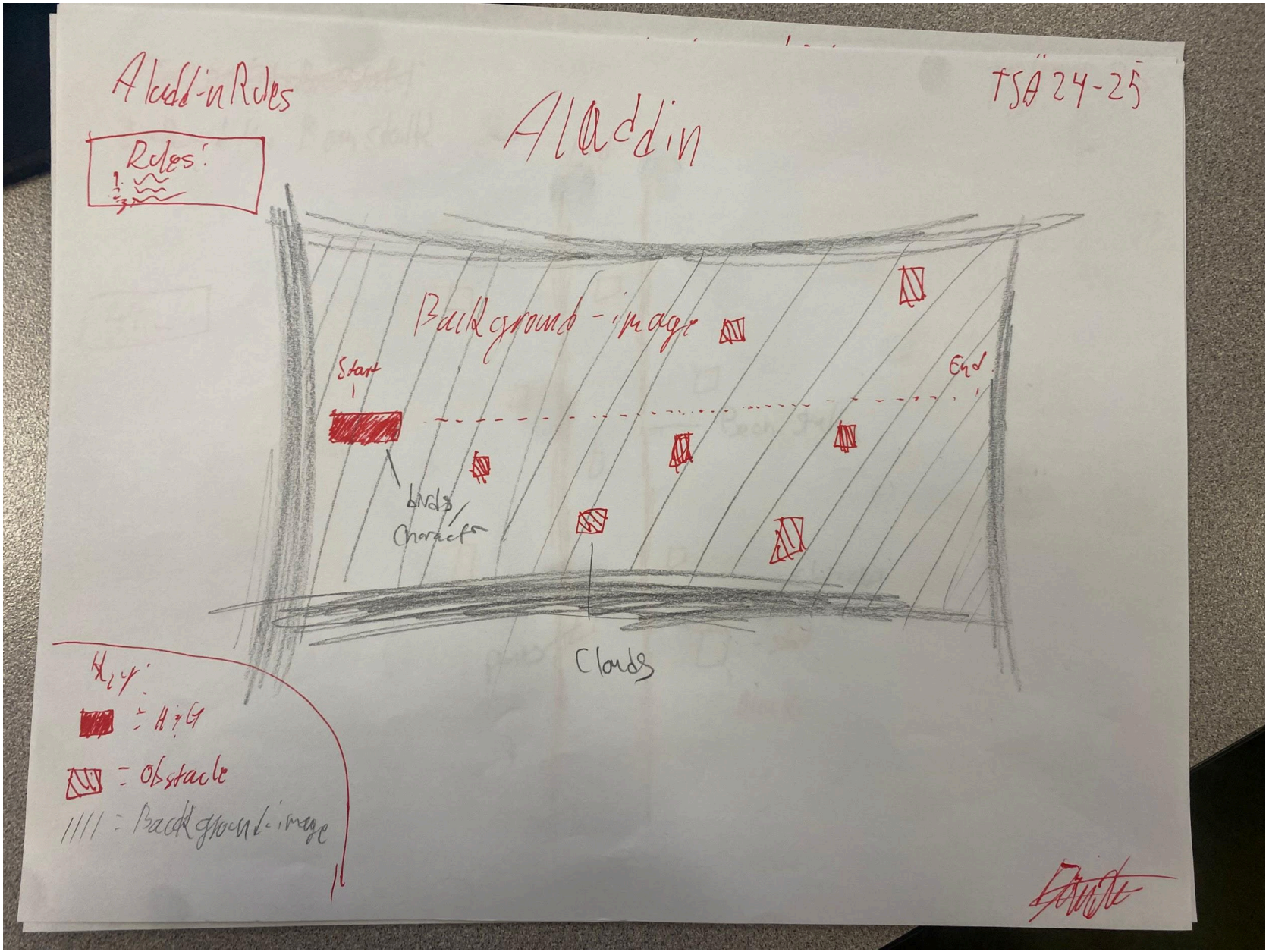


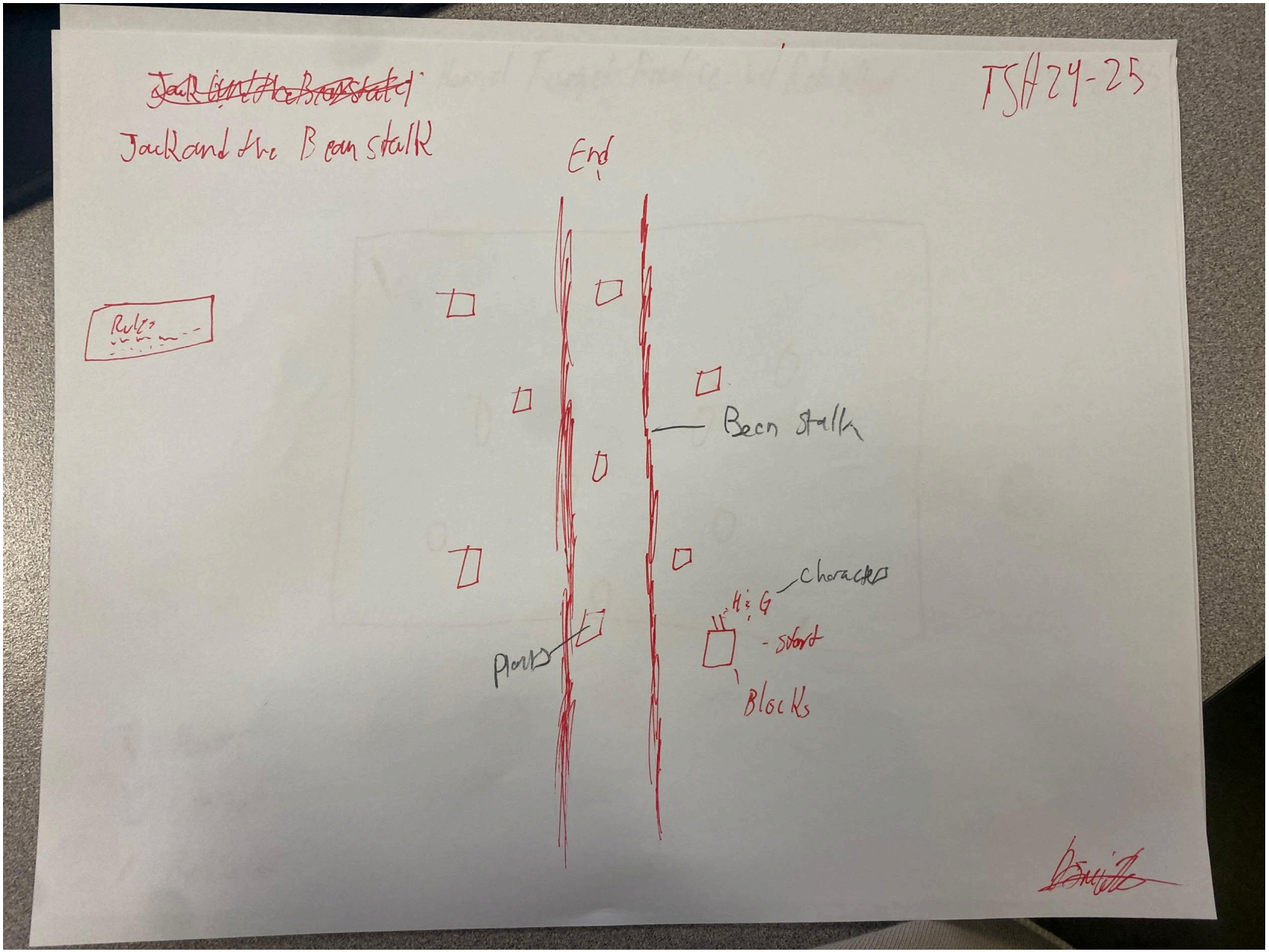
(for Pied Piper) Rule section, first actual part.

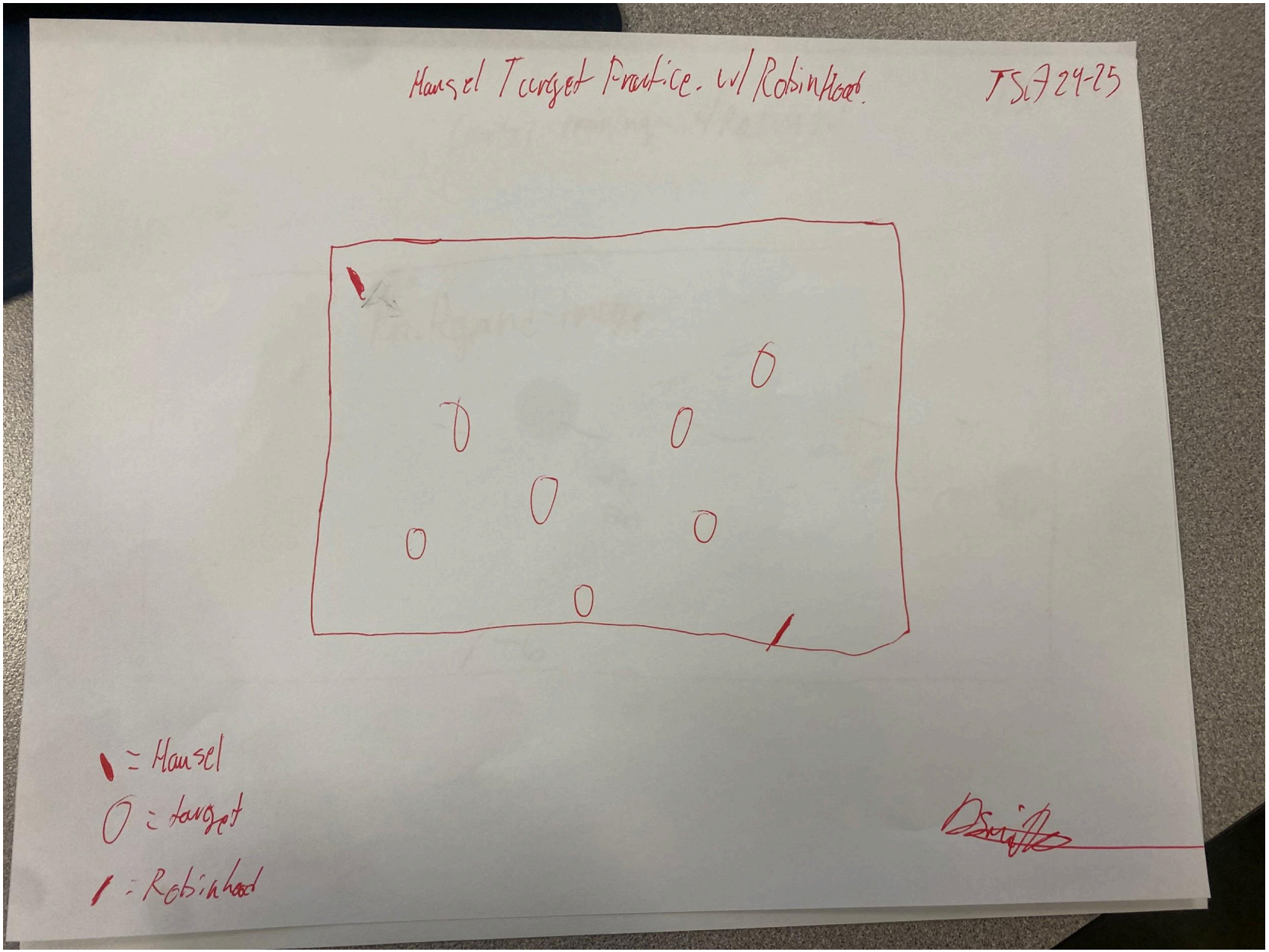


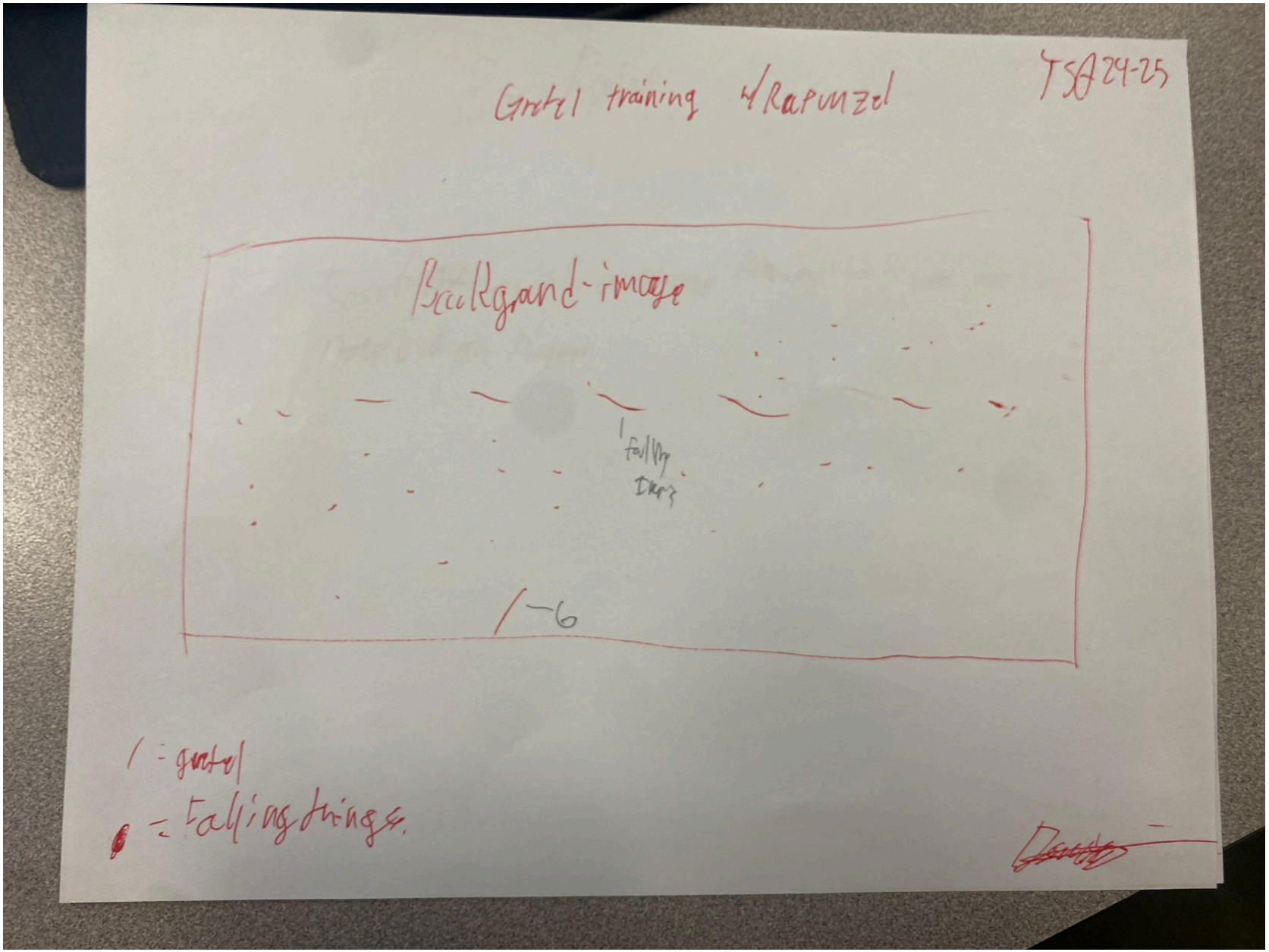

Pied Piper Scene
TSA 24-25
add stairs somewhere?
maybe.
might add these things, mostly
design purposes??
Start.
characters (H & G)
enemies (rats)
End.
Add holes maybe?

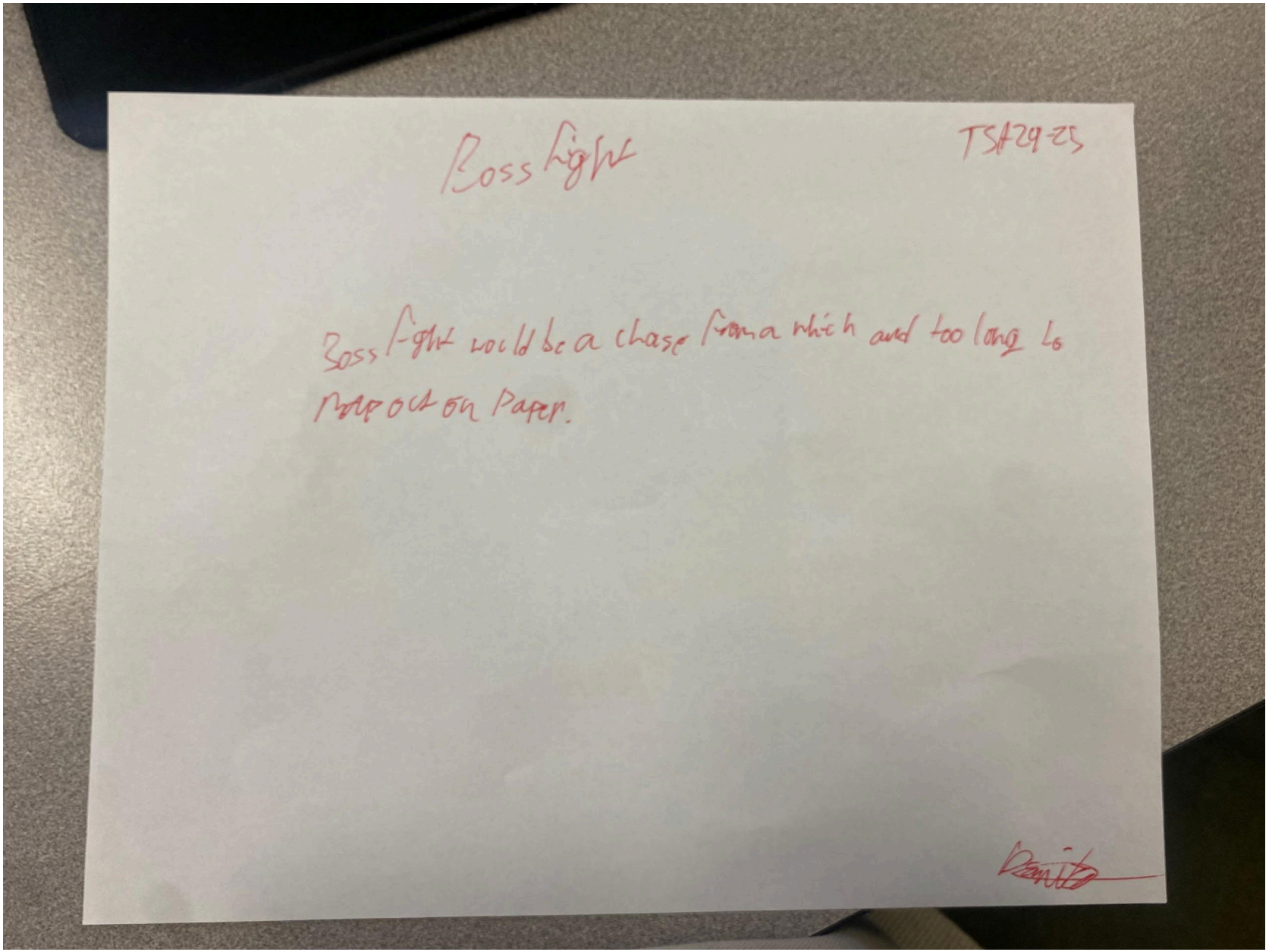

Rules for Golden Goose
Rules
Golden Goose
Enemy # : Random
< 20 Required!
Key:
= H & G
= Enemies
= Eggs
TSA 24-25


Aladdin Rules
TSA 24-25
Aladdin
Rules:
1.
2.
3.
Background - image
Start
End
Lands
Clouds
Key:
= High
= Obstacle
//// = Background image


TSH 24-25
Jack and the Bean stalk
End
Rules
Bean stalk
Characters
H & G
- start
Blocks
Plants


Hansel Target Practice. w/ Robinhood.
TSA 24-25
= Hansel
= target
= Robinhood


Gretel training w/Rapunzel
TSA 24-25
Background-image
falling
Items
1-6
1 = gretel
= falling things.


Boss fight
TSt29-25
Boss fight would be a chase from a which and too long to
map out on Paper.

Work Log

Date	Task	Time	Comments
09/10	Video Game Design	1 hour	Finding fairy tales to use for the design and planning out video game -D.S
09/17	Video Game Design	1 hour 30 min	Made music (Dillon & Clement,), drawn out levels and planned levels (Dillion, Cody Adam and Clement) made art (Cody,) -D.S
9/24	Video Game Design	1 hour 40 minutes	Made music (Dillon) made code (Clement) Made background (Adam) Made art (Cody) -D.S
9/26	Video Game Design	1 hour	Made background art (Adam) made character art (Cody) helped with art and made code (Clement) -D.S
10/1	Video Game Design	1 hour 30 min	Cody made art, Clement and Adam made names, and Dillon organized a portfolio. -D.S
10/15	Video Game Design	4 hour 20 min	Cody made art for hansel, Clement made music and finished all levels to the game but boss level, Dillon made music, -D.S
10/22	Video Game Design	1 hour 40 min	Cody made art for Gretel and Clement Fixed Bugged Code and made music -C.A

10/29	Video Game Design	1 hour 30 min	Cody made carpet, and blocks. Clement, Adam, and Dillon made 3 sections of the story. -D.S

11/7	Video Game Design	1 hour 30 min	Cody made art, Clement helped Cody, Adam tried making background, Dillon Worked on portfolio. -D.S
11/12	Video Game Design	1 hour 15 min	Dillon made art and worked on portfolio, Clement coded. -D.S
11/19	Video Game Design	1 hour 15 min	Adam made up a story. Clement coded, Cody made art. Dillon worked on portfolio -D.S
11/21	Video Game Design	1 hour 40 min	Adam made a story, Dillon made art/worked on a portfolio. -D.S
11/25	Video Game Design	1 hour 30 min	Clement code video game and Dillain and Clement made background art for first 3 levels-C.A
11/26	Video Game Design	1 hour 40 min	Clement code video game/ ,made music and Dillanl made background art for the 4th and 5th level-C.A
11/27	Video Game Design	2 hour 40 min	Dillan and Adam made background art for 6th level and helped Clement on background level for the last level. Clement code video game and made music

			for the game -C.A
12/12	Video Game Design	2 hour 45 min	Clement photoshop title screen and coded intro with cut scene and made music -C.A
12/17	Video Game Design	1 hour	Testing Video Game -Dillon, Clement. - C.M
2/19	Video Game Design	3 hour 50 min	Clement edited the portfolio, recorded game play, added video game play in a website for a how to play instructional video and concluded/ edited script for the game -C.A
2/22	Video Game Design	30 min	Clement edited and worked on the portfolio -C.A
2/25	Video Game Design	30 min	Adam Worked on script for the video game informational video-C.A
2/26	Video Game Design	30 min	Dillon worked on art for a rock replacing the arrow for a rock -C.A
2/27	Video Game Design	48 minutes	Dillon and Clement tested the video game -D.S
3/4	Video Game Design	2 hours 50 min	Adam made and edited the informational video while Cody, Dillain and Clement tested and spot checked the video game-C.A

Video game

STUDENT COPYRIGHT CHECKLIST *(for students to complete and advisors to verify)*

STUDENT: Answer question 1 below.

1) Does your solution to the competitive event integrate any type of music and/or sound? ☑ YES ☐ NO
   If NO, go to question 2.
   If YES, is the music and/or sound copyrighted? ☐ YES ☑ NO
   If YES, move to question 1A. If NO, move to question 1B.
   1A) Have you asked for author permission to use the music and/or sound in your solution and included that permission (letter/form) in your documentation? If YES, move to question 2. If NO, ask for permission and if permission is granted, include the permission in your documentation.
   (OR) 1B) Is the music/sound royalty free, or did you create the music/sound yourself? If YES, cite the royalty free music/sound OR your original music/sound properly in your documentation.

CHAPTER ADVISOR: Sign below regarding your student's answer(s) to the use of music/sound in his/her competitive event solution. Even if your student answers "NO" to question 1, please sign below noting that you have evaluated the competitive event solution and the student answered the question(s) accurately.

I, W.G. WALKER (chapter advisor), have checked my student's solution and confirm that any use of music/sound is done so with proper permission and is cited correctly in the student's documentation and/or the solution has been found to have no music/sound included.

STUDENT: Answer question 2 below.

2) Does your solution to the competitive event integrate any graphics/videos? ☑ YES ☐ NO
   If NO, go to question 3.
   If YES, is(are) the graphics/videos copyrighted, registered and/or trademarked? ☐ YES ☑ NO
   If YES, move to question 2A. If NO, move to question 2B.
   2A) Have you asked for author permission to use the graphics and/or videos in your solution and included a permission (letter/form) in your documentation for graphic/video used? If YES, move to question 3. If NO, ask for permission and if permission is granted, include the permission in your documentation.
   (OR) 2B) Is(are) the graphics/videos royalty free, or did you create your own graphic? If YES, cite the royalty free graphics/videos OR your own original graphics/videos properly in your documentation.

CHAPTER ADVISOR: Sign below regarding your student's answer(s) to the use of graphics/videos in his/her competitive event solution. Even if your student answers "NO" to question 2, please sign below noting that you have evaluated the competitive event solution and the student answered the question(s) accurately.

I, W.G. WALKER (chapter advisor), have checked my student's solution and confirm that the use of graphics/videos with proper permission and is cited correctly in the student's documentation and/or the solution has been found to have no graphics/videos included.

STUDENT: Answer question 3 below.

3) Does your solution to the competitive event use another's thoughts or research? ☐ YES ☑ NO
   If NO, this is the end of the checklist.
   If YES, have you properly cited other's thoughts or research in your documentation? ☐ YES ☐ NO

CHAPTER ADVISOR: Sign below regarding your student's answer(s) to having integrated any thoughts/research of others in his/her competitive event solution. Even if your student answers "NO" to question 3, please sign below noting that you have evaluated the competitive event solution and the student answered the question(s) accurately.

I, W.G. WALKER (chapter advisor), have checked my student's solution and confirm that the use of the thoughts/research of others is done so with proper permission and is cited correctly in the student's documentation and/or the solution has been found to have all original thought with no use of other's thoughts/research.

Student Name: Dillon Smith, Clement Amoah, Adam Richardson, DaKota Manly

Chapter Advisor Signature: W.G. Walker