

Opening Slide

Hi everyone! Thank you so much for taking the time to join me for my thesis presentation. I know some of the audience has come a long way to see this, and even if you haven't, I appreciate every single one of you.

Who Am I?

For those who don't know, my name is Jade J. Laidlaw and I'm an artist and game developer just about to finish my final semester here at PNCA. I'm passionate about many different art forms, and I hope to use my skills to someday work on my own games!

The Life of Jade

Before I get started with talking about the project, I'd like to show you how my life has led to this project.

Elementary School

It all started when I was just a child. Adults would always ask me what I want to be when I grow up, as they do, and I knew in my heart of hearts that the real answer was to just play video games all day, but I also knew from experience that adults never liked that answer, so I tried to think of things I could be that were related to games. In the end I usually would say I wanted to be a game designer or a game playtester, I had no clue what either of those jobs entailed, but they seemed to be cool enough.

Middle School

The first time I had an experience with game development wasn't until many years later, in 8th grade. I had a class that taught us the very basics of html and required us to create a game using scratch. Which, for those unfamiliar with it, is a browser based game engine that simplifies code to the point where it's fairly easy to read and create. When I was in this class, I made such classics as *Power Guy* and *Knight Fight*, both made under an alias. As you can tell from the names, these games were pretty awesome...

Sprites

I mean, where else could you play as a red circle holding a water bottle and a brick or as a turquoise circle that turns purple, orange, and sometimes even green? Needless to say I had to find a way to get my game making genius to the world, and while Scratch worked nice enough, it had its limitations, so I decided to try other options.

High School

In the coming years I messed around with Unity, at that point everyone was talking about how it was the best game engine to use, but I always found the tutorials confusing and could never get it to do what I wanted it to. I ended up deciding to try a different game engine called godot, and I still primarily use Godot to this day. During this period there were probably dozens of game jams I didn't finish, and plenty more game ideas that got scrapped, but in 2020 I found myself with a lot more time on my hands, and I finally was able to finish a game jam on my own. With this, came the creation of...

Up to Earth (2020)

Up to Earth, which followed a rock witch named Nina and her journey through a cave with switching gravity. This game was pretty poorly made but it was actually something I could publish. It definitely wasn't finished, but it was something other people could play, and I was pretty proud of myself. Just after the game jam submissions closed, I decided I would remake the whole game, which only lasted a couple weeks before I moved on to other projects. This wouldn't be a project I'd forget about though, because in my second year here at PNCA I decided to revisit it.

Second Year, First Semester

Originally I had planned on it being a summer long project that would be a remake of *Up to Earth*, as I already had plans for a different project for my thesis. However, doing something like that seemed sort of unrealistic, and since this was a project I really liked working on, I decided to promote it to being my thesis project. During this semester I took a class called character and identity, in which I made a lot of concept art of Sorrel and the other characters that might appear in this world. In fact, part of the reason I decided to give Sorrel a single arm was because of a conversation the class had about harmful tropes surrounding "curing" a disability through magic or science and I wanted her to be a rejection of this trope.

Second Year, Second Semester

Now that I knew that this would be my thesis, I decided to use my junior film as a way to continue work on it. I attempted to make a sort of opening cutscene to the game through my Junior Film project, but I chose to use a pixel art tool named Aseprite to animate the cutscene, which struggles with resolutions above 250 by 250 pixels, my film, on the other hand, was about 3 times that size.

I likely would have already struggled with this project, but using a program that was decidedly not created with this kind of animation in mind was the final nail in the coffin. Though while I didn't finish much animation for this film, it did give me some insight into how I would make these characters move and interact with the world and the personalities of Sorrel and her familiar Walnut.

Thesis Year

And so we've finally returned to the present, my thesis year. In the time that I've worked on this project its concept has gone all over the place, it's really been hard to nail down. In order to better explain it I'd like to break up this conversation into what I see as the four essential parts of my work on this project. The art, the mechanics, the themes, and accessibility.

Artistic Direction

Let's talk about some art! I've spent a lot of this semester really exploring where I'd like to go with the art of this game. In this section I'll be talking about some of the consideration I've given to what artistic direction I'd like to take this project in, starting with my artistic influences.

The Legend of Zelda: Wind Waker

I find a lot of stylistic inspiration from *The Legend of Zelda: Wind Waker*. I mostly pull inspiration from the side characters of the cast, who often have big shape-y noses and goofy eyes, though I do like how expressive Link is throughout the game. I also find the visual effects to be something to strive for, the bomb explosions are still so satisfying to look at.

Bomb Explodion

I couldn't find a gif of the vfx though so here's a picture of Link getting bodied by a huge explosion.

Celeste

Next is *Celeste*, which I believe does a very good job of reinforcing its narrative with game mechanics and visual metaphor. But not only is its storytelling inspiring, I also find both its illustrated and pixel artworks to be really beautifully done. Pixel art is a style that can be seen in so many indie games, but the way that this team combines it with visual effects and illustrations really makes this game stand out among its peers.

Steven Universe

Lastly is *Steven Universe*, the backgrounds in that show are absolutely breathtaking. They feel so magical but also so grounded and lived in. With all that in mind, let's take a look at some of the art I'm made so far.

Colina

Colina is the name of the city that this game takes place, I took a lot of inspiration from Yoshi's island in its design, having a central spire of basalt columns that draws the eye. Colina is split into four districts, all of which are frozen in a single season.

Tulip Meadows

While I haven't been able to do concept art for every district, I knew I'd have time for one, and so I chose the first area of the game, Tulip Meadows. The concept for Tulip Meadows is heavily based on Wooden Shoe Tulip Festival, which I chose to take inspiration from because I think there's nothing that feels more like Spring than a big field of flowers. I really tried to make this place feel pretty welcoming both because I feel that Spring is probably the most chill season and because I want the starting area to put the player at ease, this will be a semi-safeplace to get comfortable with the game's mechanics.

Giant Wood Sorrel

Can't have a game about a plant witch without some magical plants! Here's a plant I created for the game. Since Sorrel's design is based on a real life plant, the oxalis tetraphylla, I thought it would make sense that a magical version of this plant would appear in the game. This magical version, called the Giant Wood Sorrel, would be almost exactly the same as it's real life counterpart, except it would be really big and push you high into the air. You'll be seeing this one in action a little bit later.

Sorrel

Last of the concept art is a turn around of Sorrel! You can tell that her design has come a long way, and likely has a much longer way to go. I fear I made a mistake when designing her hat, the brim is so iconic that it cannot be removed, but it is so relentlessly difficult to draw. Such is the struggle of an artist.

Animation Style Tests

Next we'll look at a few of the animations I made in order to see what direction I want to go in with this project. I originally was just going to use pixel art, but by doing these animation tests I hope to make a more informed choice on what style of animation I want to use in this game rather than reflexively staying in my comfort zone.

Pixel Animation

First is the aforementioned pixel art. This is the workflow I'm most comfortable and familiar with, and is an aesthetic I genuinely enjoy. Though unfortunately it's a really oversaturated market right now, and so I worry that it would drown in the sea of other pixel animated indie games.

Rig-Based Animation

Rig-Based animation is an option that I didn't have any experience with before this semester, but in my game animation class I was able to create quite a lot of different animations in a pretty short amount of time. I think there's a lot of pros to this method, it's generally pretty efficient and has a lot of the benefits of 3D without having as steep of a learning curve.

Overall I enjoyed this method more than I thought I would, but I'm not sure the style would be a great fit for the game, and while it doesn't take as much prep as 3D does, it still takes a while to get the character ready to animate.

Hand-Drawn Animation

Hand-Drawn animation would really give the game a unique look and feel, as it's a style that's fairly rare in game development. That being said, there's a reason that there aren't many games made with hand-drawn animation, and that's because it is the most expensive and time consuming of the four options. So while I really like the results that this method creates, it would probably lengthen the amount of time this game would take to make significantly.

3D Animation

As you can see I don't have an example for this one, this is because I've never made a 3D animation before. I've dabbled in 3D modeling as can be seen here **click**, and I've even made a couple of rigged characters before, but making a character that has the technical requirements to be animateable is a whole other beast. That being said... I do really like a technical challenge, and 3D has been something I've wanted to do for a very long time.

Though if I did decide to make this game 3D, I'd probably want to gain experience by making smaller games in the medium first.

Gameplay Direction

Now let's get into the direction I'll be going for the gameplay mechanics.

A Game Design Problem 1

So! This semester it has become increasingly clear to me that I have a huge game design problem on my hands. As a lot of game developers will tell you, it's pretty typical to approach creating a game by first creating a good gameplay experience and then to create the art and assets based off of that gameplay experience. The reason this is, is because if you get too into the art stuff, you never check if your game concept is actually any fun to play, and if it isn't fun to play then you just wasted your time working on all this art that can't be used. It's really easy to get precious with certain ideas when working this way because it hurts a lot to have to throw away finished assets. However...

A Game Design Problem 2

I'm doing exactly that. To be fair to myself, of course I couldn't have come here and shown you all some grey box prototype, I go to an art school and so I made the decision to approach it this way with that audience in mind. But now I have created a bunch of assets for a game that does not yet exist, and so I'll have to somewhat structure the game around the assets I've created and by extension, around Sorrel as a character.

Though I think I've found a way to deal with this problem, and it's keeping in mind a simple question:

If Someone Got to...

"If someone had the opportunity to play a game as Sorrel, what would they be excited to do?" And I think because she's a plant witch the main fantasy would be *click* the ability to interact with and cultivate magical plants.

Gameplay Idea

With that in mind, there's a lot of different prototypes you could make and you'd eventually find one that felt fun enough to develop into an actual game. The current one I'm prototyping is what I gave you the elevator pitch for. It involves two stages, in the first, the player chooses where they'd like to place their plants. So for example you could choose to place the giant wood sorrel, and in the second stage you play through the room like a platformer, using the plants to navigate. By doing this I hope to create a unique blend of a garden management game and a platformer.

Wireframe

A wireframe is a demonstration of the different windows in a software and how they'll connect to one another. This is used in both software development and game development to better understand how buttons should be laid out and to better plan the users experience. I made a wireframe at the recommendation of one of my midterm panelists. I decided to create an interactive wireframe, which is pretty hard to read like this so I'll show you how it works.

Wireframe 2

Here's a video of the mock-up, I didn't go through every screen because that'd take far too long, but as you can see it works pretty much the way it would in the actual game. Overall I think this has been a helpful guide to look back to while I code the menus in the actual game.

Conceptual Research

Now onto my conceptual research, and before I start this section I want to be honest with you guys. When I first had to start doing conceptual research surrounding a topic relating to my game, I thought it was just a waste of time. The game didn't really have any themes to speak of so I didn't feel like I had any reason to be doing research instead of working on the project. But it was required, so I did it anyway, and I'm glad I did.

Conceptual Resources

I originally decided to start doing research into disability studies for one simple reason, I figured since Sorrel is a disabled character, that I should be doing research into the representation of people like her to avoid any sort of stereotypes or harmful tropes. Even if there weren't any themes to worry about, this could help me make sure my character is good representation of disabled folk.

How Disability Studies Affected Me

Doing this research led to a lot more than I thought it ever could. For those who don't know, I'm a disabled person, though it's taken me a long time to realize that was the case. Even after I was diagnosed with Periodic Paralysis and ADHD, it's not like someone came up to me and told me definitively, "by the way you're disabled and you have been disabled for most of your life," and with invisible disabilities and neurodivergence it was hard to know that my level of functioning was at a lower place than anyone else's. Doing this research really opened my eyes though, I feel as though my whole life has been recontextualized, so many things make sense that didn't before. So even if it hadn't affected the project, it still wasn't a useless endeavor.

Accessibility

Of course as I did this research into disability studies, it became more and more important to me that I make the game as accessible as possible.

Accessibility Research

These three resources have been essential in my research of how to make my game more accessible. They've been made by 3 different organizations all dedicated to making gaming a more accessible space, these resources give a detailed list of best practices when it comes to game accessibility. Two of them also split their lists into difficulty levels to let you know how much time and money each option might take to implement. Using these guidelines, I've been developing this game with accessibility in mind from the beginning. With that in mind, let's look at some of the efforts I've been making during this phase of development.

Value Checking 1

Since I've been spending most of my time creating art for this project, a major accessibility issue I've been considering is ensuring that my designs are easily readable to those who are colorblind. On the screen you can see a piece of art that hasn't been optimized for different kinds of color blindness, for those with tritanopia or achromatopsia her right arm would be pretty difficult to distinguish from her overalls. This problem is pretty easily solvable though, because as long as the colors are different enough in value, they should be distinguishable to someone with any kind of colorblindness. Because of this, my coloring process includes very frequently switching a greyscale filter on and off, which I can do really easily through a keyboard shortcut.

Value Checking 2

Here you can see the result of a design where I used this method. While her arm isn't crossed over her chest in this one, it's clear that the colors are much more distinguishable here! Lines can also be an easy way to distinguish two different shapes, though depending on the style that may not be a choice. This method works perfectly in theory, but you can't be sure until a colorblind person tests it themselves. That being said, it will definitely mean that there won't be as many tweaks needed during playtesting as there would be otherwise.

Simple and Adjustable Controls

I've also been coding the game's main mechanics, and so I've had to consider how to make the game's controls more accessible. Games as a medium are unique in their interactivity, and this interactivity presents new challenges in accessible design. The audience plays an active role in this art form, and has to be able to interact with it, preferably without any barriers. Because of this, making sure that the controls are flexible and simple will make this game accessible to as many people as possible. It's also important that the game doesn't require the use of uncomfortable hand positions like the vile and disgusting claw grip, if a player needs to contort their hands like this to play your game, then it's probably not very accessible.

Definite Elements of *A Guide to Floramagy*

Now that we've examined the four core elements of this game, I think there are four essential truths that will be the case no matter where I take this project. The first is that Walnut and Sorrel will be there, they're inextricably linked with each other and with this project. If they were gone I feel like it just wouldn't be the same.

The second is that the gameplay will center around the fantasy of being a plant witch, no matter the genre, this will be a central element.

Thirdly is that the project will center its narrative around disability studies and disabled experiences. These ideas are core to the projects identity.

Fourth is that the project will focus on accessible design, which will likely be the case for all my future projects.

What's next?

So considering that, What's next for this project?

The Future of *A Guide to Floramagy*

Before I continue any sort of work on this project, I'm going to be taking a break. I have a lot of homework to do and after working on this project almost exclusively for the last year, I need to leave it alone for a bit. I've been in an eternal loop wherein I can't make any decisions about where I want to take it and I don't have the time to test any of the ideas I have out, and it's really made it difficult for me to figure out what I want this project to be.

So if I ever return to this project, I think my first priority would be working on the game mechanics. Ignoring the story and art and really focusing on what could make this game fun. In the event that that plan works out and I end up making the game, I imagine it would appeal to a more adult audience. I'd like to release it on itch and maybe even on steam, if it gets any sort of audience I'd also consider porting it to console.

The future of this game is unsure, but even if I don't ever come back to this project, I'll still remember it fondly while I move on to other things. When I did a meeting for my professional practice class a while back, I interviewed an alumna named Marlowe Dobbe, and something that's really helped me get through the stress and pressure of thesis was this:

Marlowe Dobbe's Sage Advice:

"I feel like there's a lot of pressure when you do your thesis that it has to be, like, your magnum opus, and that it has to be like something that you do when you graduate. But it's actually okay if it's not... it's fine if it's a stepping stone and it's fine if everything you do in school is a stepping stone." So while I worked my ass off on this project, I've come to terms with the fact that it may just be a stepping stone. I may never return to this project, and if I do, knowing that I didn't have to will make it feel less like a burden.

What's next for me?

What's next for me you ask? Well I'm going to graduate and keep working on games of course. I'll be attending as many community events as possible with groups like PIGSquad, and I'll be participating in game jams and doing personal projects to fill out my portfolio. All of this will hopefully lead to being able to do game work full time!

Conclusion

In conclusion, game development is hard to do in so many ways that I didn't even know about. While I'm not sure that I'll ever return to this project, there's so much I've learned about the organizational and scope issues a game in development often faces, and the way that it's helped me to grow to understand more about myself and my career is something I'll always look back on fondly. I want to say a few thank yous before I finished. Thank you Robin for being my emotional rock through this stressful time, thank you to my friends for being there to make me

laugh, thank you to all you in the animation department for what you've taught me and for supporting me even in my worst moments, thank you to my family for being there to support me, and of course, thank you to all of you that came.