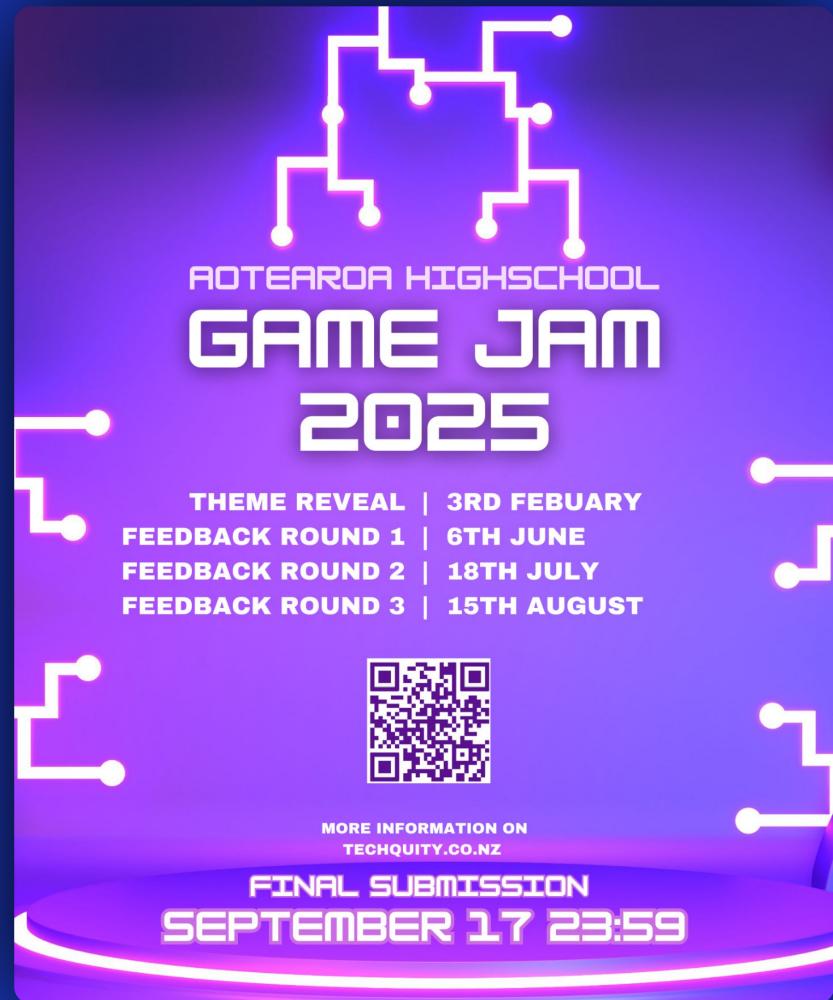


KING'S HIGH

GAMEJAM PROJECT

Design Portfolio
MR SMITH



Inspiration



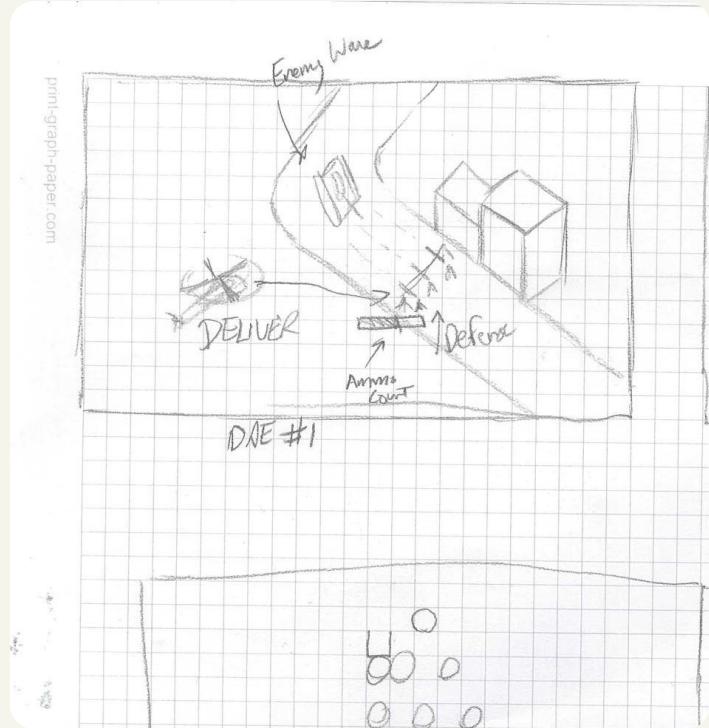
Initial Idea #1

Idea

My first idea is to have a game about a helicopter that delivers food and ammo to soldiers. The soldiers will be holding positions around a city and need ammunition to defend those positions. If they run out of ammunition, that defensive position will fall. If the player loses all three positions, the game will end. There will be multiple rounds that will get tougher. It's sort of like tower defense, except you are providing ammo to the towers.

Feedback

Jake wasn't sold on the idea. He didn't quite understand why I wasn't making the helicopter a killing machine but I reminded him of the theme. The teacher said it reminded him of an old game called Desert Storm, but with a unique spin. Adam and John both liked the idea and said it could be exciting if done well. Maybe by adding anti aircraft stuff to dodge, so the player had some challenge, otherwise it could be boring.



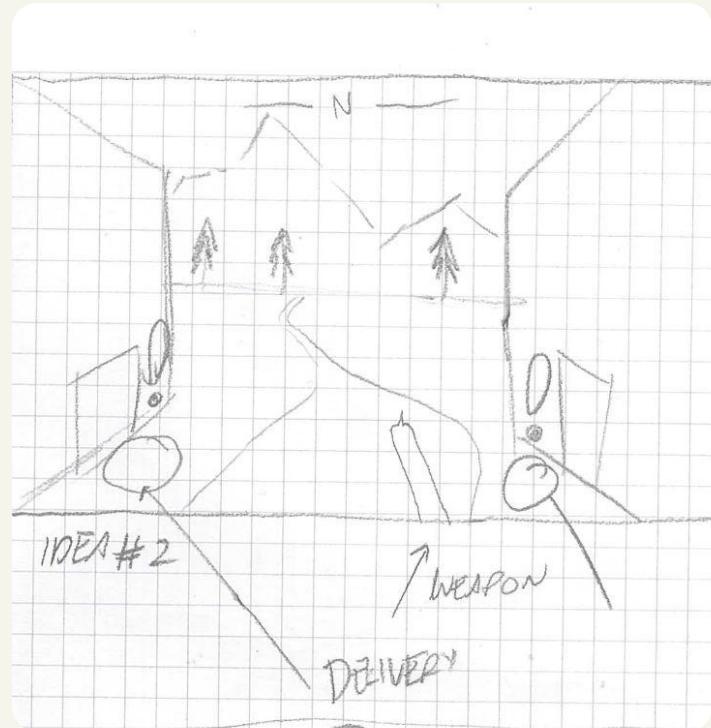
Initial Idea #2

Idea

My second idea is called The Postman. It is inspired by the book and the film of the same name (although you cannot copyright the phrase "Postman" so I am free to use it), where you are given a mission to deliver mail to a location, but there are enemies on the map trying to stop you. It is sort of a reverse extraction game, where you will deliver requested items to people and be rewarded with money to buy more items to make more deliveries. It would be a first person game

Feedback

Jake likes this idea as he is a fan of first person shooters. The teacher says that this idea will be too difficult for me to implement at this stage. Adam said it's a cool idea but a bit too complex (he has made games in Godot before and said he would find it difficult)



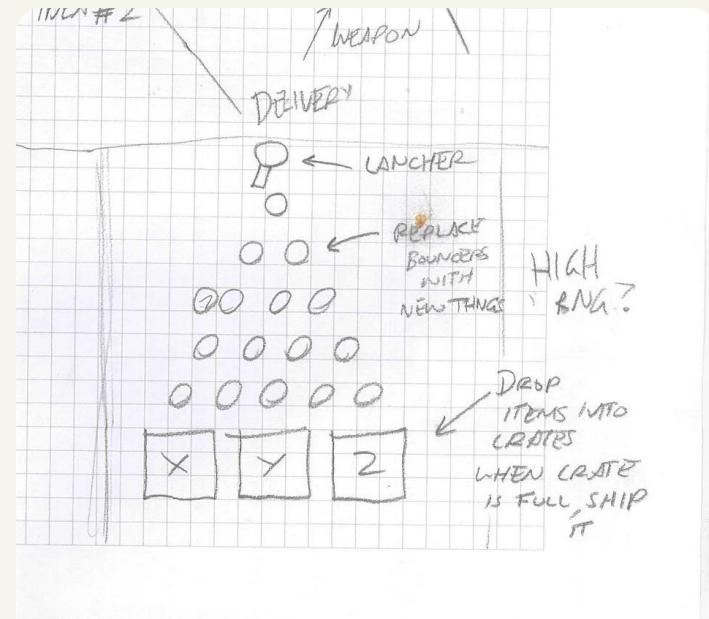
Initial Idea #3

Idea

My third idea is a pachinko style dropper game where you have to complete deliveries using a certain number of drops. There will be bonuses for each bounce, which might transform the initial item into another item. Combos can be made which will form "deliveries" which earn points. Will need more planning.

Feedback

Jake hates this idea, but he only plays Marvel Rivals and Valorant, so he doesn't really have good taste. Adam liked it, he is currently playing Nubby's Number Factory which is similar to this idea and it has potential. The teacher said this idea is more unique than the others and that it would be fairly straight forward to implement with potential for expansion



Chosen Idea

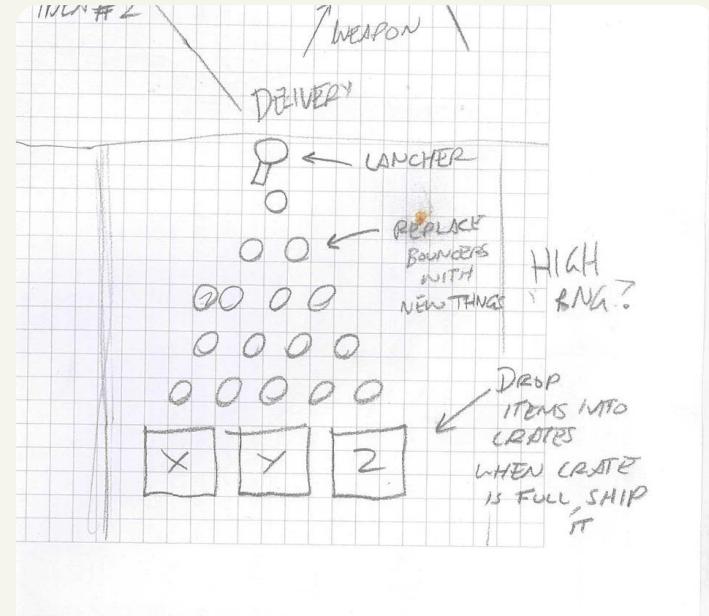
Chosen Idea : Pachinko Game (#3)

Why did you choose this idea : Pachinko style games have been getting more popular lately, with Ballionaire, Pegidle, and Nubbys Number Factory becoming quite popular. This is also an opportunity to tap into.

Define Potential Users : My potential players are mainly 14-18 year old high school students in New Zealand. I will be participating in a national game jam. Other contributors will be able to give me feedback. In addition, my teacher will also be able to give me feedback and my peers. I will also be putting my game on Itch.io and may get public feedback.

List 5 Basic Requirements (one must be accessibility/manaakitanga related) :

1. Must be a Pachinko Style Game
2. Must get incrementally harder and more rewarding
3. Must meet the theme of Delivery
4. Must have an attractive graphic style
5. Must have easy to use controls



Relevant Implications (Y12 Only)

Copyright/Intellectual Property

While making my game, I will need to ensure that I do not infringe copyright or intellectual property. This means that I cannot use audio, music, graphics or even characters that I do not own the rights to. However, I can use resources from sites like itch.io that are free or paid, as they are licensed to be able to use commercially. Also, parody is protected, but that doesn't mean I can steal Mario for a parody game. However, a game called "Dario, the Spanish Plumber", could be justified as parody, although it would probably be called racist, so I won't do that either. Ideas and Mechanics cannot be copyright.

Social

Game developers have, in the last 10 years, been hyper focused on inclusivity and being sensitive to all kinds of social ideas and movements. However, the players hate this approach, and would rather have freedom of ideas in their games. Since I'm making a game for players, I'm not going to worry too much about specific inclusivity, but I'm also not going to be purposely offensive. My game is going to be a pachinko/plinko style game about packing crates with fruit, so its potential to offend the easily offended is minimal.

Functionality & Aesthetics

Does the outcome work as intended? This is of the utmost important. If it doesn't, it won't be fun. The Aesthetics are bound to the functionality here - big numbers flashing on screen is key to the fun. The bigger the numbers, the bigger the dopamine hit.

Accessibility

Provide high contrast between text/UI and background

After text size, contrast is one of the most common UI complaints. There are common vision impairments that specifically result in a loss of contrast sensitivity, and others such as colorblindness that can be affected by contrast too.

Ensuring a good level of contrast also benefits many other gamers who have situational impairments, such as playing on a mobile device, in direct sunlight, or on a poor quality display.

Ensure controls are as simple as possible

More complex control schemes require higher degrees of both motor and cognitive skill, so avoid using buttons/keys just because they're there. Having to remember complex combinations of controls, being required to reach every single button on a controller or even just having to press multiple buttons at the same time can all easily result in unnecessary exclusion.

“ I have arthritic hands. I have chronic tendinitis. The mechanics make assumptions about gamers my body can't support. How could it have been improved? Reduce the number of buttons required to do shit.

Andrea Chandler, via [Twitter](#)

“ The reason why I praise this so much is it allows a player like me who isn't able to execute all these moves to still participate. It takes away this whole barricade of “will I be able to do this move or will my hands not do what I want them to do”. Due to this feature I can compete, have fun, and do crazy stuff!

legs0fsteel, via [YouTube](#)

Convention #1 - Clear Goals (Y12)

A Clear Goal

The player needs to know what the goal is. Without the goal, they will be randomly filling crates with no purpose, so I can make sure that the targets are clearly displayed, as well as how many drops they have left in that round. Other things that need to be clearly displayed are the players money and the upgrades/bonuses and penalties from mutators.

As an example, Nubby clearly shows how much money the player has, the goal for that round and other information like upgrades and multipliers. While the game looks messy it's very easy to comprehend when you are playing the game.



Convention #2 - Audio (Y12)

Audio

The audio experience is essential in the players enjoyment. Due to the light hearted nature of the game, as well as the casual aspect, relaxing music with a hint of irony might be suitable. I could use AI to generate this but I would rather find hand crafted audio. It should border on being slightly annoying while being catchy.

In addition, in game interactions need sound effects, bounce sounds, bonus sounds, explosion sounds, shipping sounds. I will need to some system to make sure it doesn't just become a cacophony of sounds with the amount of stuff happening on screen

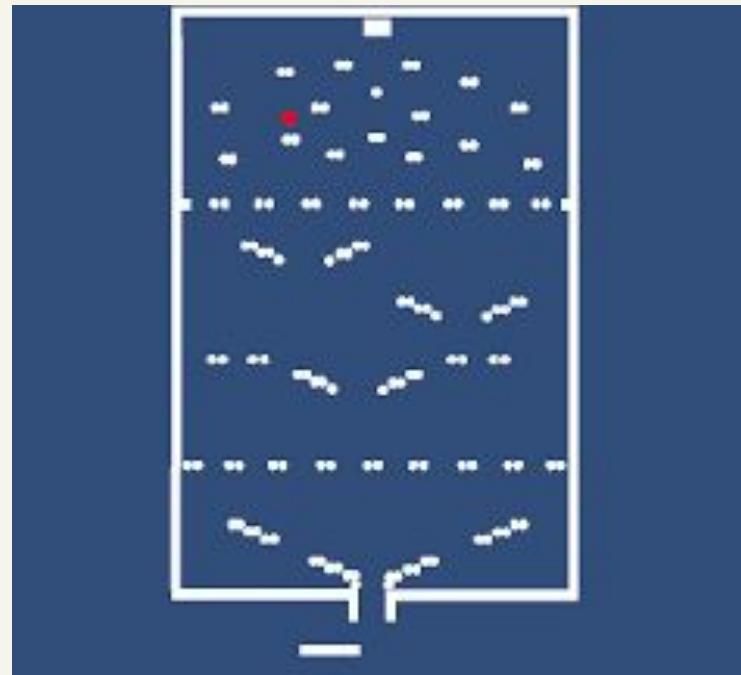
<https://www.udio.com/songs/siRQnm7BstaZ2Aw4FULNkW>

Convention #3 - Challenge

Challenge

The challenge will come from the increasing requirements of each crate and how many you have to ship per level. This will mean the player needs to build a peg engine, but is still bound by the will of RNG. Certain pegs will help mitigate it, like magnets etc and only effective forward planning will help them win.

Mutators will also introduce negative effects into the game.



Convention #4 - UI (Y12)

User Interface

The user interface needs to be clear and uncluttered. In addition, I will need to make sure that the user understands what icons on the interface represent, especially since a lot of my game is UI based (selecting upgrades, mutators etc).

I will need to make sure the UI is responsive as well and respond as a player expects - so if they push escape, a menu should open etc.

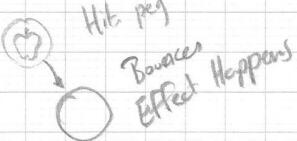
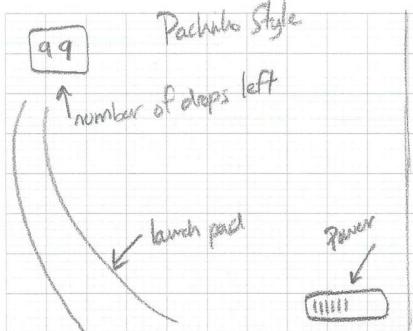
Refining Idea

Use the next couple of pages to add sketches and ideas for the following

- The Title Screen
- Main Game UI/HUD
- Level Layouts
- Game Mechanics and how the game works

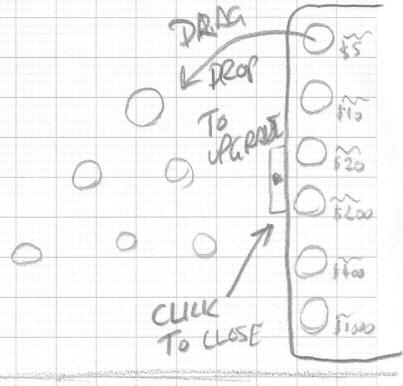
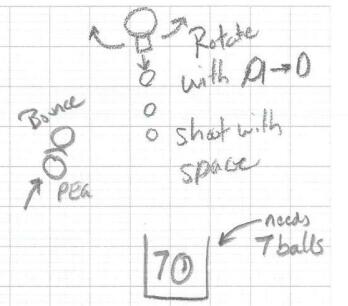
You will need multiple sketches and feedback for each so you can make an informed decision. Add textboxes as needed for feedback

Label Each Idea Clearly



Feedback indicates that the shooter mechanic would be better than the launcher, as you get more control. The mutators screen looks good, very similar to other incremental games where you pick an upgrade.

The peg upgrade system will need some iteration to ensure it works properly.



Having manually designed levels like on the right is important, as they can be thoroughly tested. Jake liked the idea of having different sized crates at the bottom of the level.

The title screen is a point of contention. Jake hates the kiwi, and says the other minimalist one looks better but Brad and Chad both thought the kiwi design looked fun, and charming. The ideas for the power ups had positive feedbacks and they both suggested other ideas too, (on the next page)

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LAUNCHER

KIWIENKO

MUTATORS

- x2** Doubles value of pinko ball
- t1** Splits ball into two
- ★** Randomly triggers a different peg power
- III** Collector - collects & then releases all at once.
- T** Teleport peg

3. Peg Upgrades

Pegs can be upgraded to add dynamic effects. Below are 20 peg types:

1. **Splitter Peg:** Splits a fruit ball into two smaller balls.
2. **Spawner Peg:** Spawns an extra fruit ball when hit.
3. **Transformer Peg:** Changes the fruit type to match the nearest crate's requirement.
4. **Magnet Peg:** Attracts fruit balls toward it.
5. **Speed Boost Peg:** Increases fruit ball speed.
6. **Slow Down Peg:** Decreases fruit ball speed.
7. **Grow Peg:** Increases fruit ball size (easier to hit crates).
8. **Shrink Peg:** Decreases fruit ball size (harder to hit crates).
9. **Bounce Peg:** Boosts fruit ball bounciness.
10. **Sticky Peg:** Holds the fruit ball briefly before releasing.
11. **Multiplier Peg:** Multiplies the fruit ball's value (e.g., x2 money).
12. **Coin Peg:** Awards bonus money when hit.
13. **Shield Peg:** Protects the fruit ball from negative effects briefly.
14. **Teleport Peg:** Teleports the fruit ball to a random spot.
15. **Gravity Peg:** Alters gravity's effect on the fruit ball.
16. **Wind Peg:** Pushes the fruit ball with a wind force.
17. **Freeze Peg:** Pauses the fruit ball momentarily.
18. **Duplicate Peg:** Creates a copy of the fruit ball.
19. **Randomizer Peg:** Randomly changes the fruit type.
20. **Combo Peg:** Boosts a combo multiplier for consecutive peg hits.

4. Mutators

Mutators are selected every 5 waves, blending risk and reward. Below are 50 mutators:

Positive Mutators

1. **Extra Fruit:** +3 fruit balls per wave.
2. **Time Extension:** +15 seconds to the timer.
3. **Money Boost:** +50% money from crates.
4. **Rare Fruit Chance:** +20% chance for rare fruits.
5. **Peg Discount:** -25% peg upgrade cost.
6. **Crate Reduction:** -1 fruit required per crate.
7. **Launcher Speed Boost:** Launcher moves 50% faster.
8. **Rotation Boost:** Launcher rotates 50% faster.
9. **Fall Speed Boost:** Fruit balls fall faster.
10. **Bounce Boost:** +50% bounciness.
11. **Magnet Strength:** Magnets pull harder.
12. **Splitter Efficiency:** Splitters create 3 balls instead of 2.
13. **Spawner Boost:** Spawners trigger twice as often.
14. **Transformer Accuracy:** Always picks the best fruit type.
15. **Shield Duration:** Shields last 5 seconds longer.
16. **Teleport Control:** Teleports aim toward crates.
17. **Low Gravity:** Slower falls for better control.

The game is a plinko dropper game. The player has a launcher at the top which can move left and right, and also rotate. They click to fire a fruits ball. They have a limited number to pass a wave. If they fail, it is game over. To pass a wave, they need to fill crates at the bottom of the screen. Each crate requires a certain number of fruits in balls (eg, 5 apples, 6 cherries, 7 pineapples etc. Crates CAN be mixed, but only at high levels).

When the crates are full and the level is done, the player earns money. They can spend the money on peg upgrades. Pegs can be upgraded so they do things like split the fruit into multiple, spawn new fruit balls, change the fruit ball into something else (closest crate etc), magnets, speed, grow, shrink, bounce etc. Every few rounds players will pick a mutator, something bad and something good can happen.

Some pegs will give money and multipliers etc. Some fruit is rarer and worth more money. There is a timer each round so players can't take ages lining up perfect shots.

Art Assets

Identify at least three different resources
for character art, three different resources
for level design and three different
resources for UI design

Label each and get feedback.

CHARACTER SPRITES

The Universal Game Kit costs money but I like the eclectic art style that seems mismatched but is consistent in its inconsistency. It looks like 90s windows games. The fruit is nice, but there is nothing but fruit there. .

The plinko pack could be useful but it is \$25USD and that is prohibitive. Kenney's pack might be useful for creating my own graphics for the peg powerups and mutators.

Chosen Asset :

I will purchase the Universal Game Toolkit, it's only a few dollars and has a large variety of icons and symbols that I can use. In addition, I may use some of the fruit icons, and Kenney's icons if I need to. The Plinko pack looks nice but also looks very mobile/casual and I don't like its style.

Universal Game Toolkit (600+ Items!!!)

This package includes **600+** various **sprites** which can contain more object variations in one frame. And the asset also contains **+5 assets** of it. That's why it's called "Any Game Toolkit". You can make almost any kind of game with it in 2D. This is the first version of a very useful toolkit. All the objects are in a **80x80 frame**. Images are all separated, **transparent PNG**, cropped, centered.

For example, you can find:

- walls (lot of different variations)
- powerups (also a lot)
- characters (little faces, mini ship, etc...)
- bullets (and rocket, laser beams, etc...)
- weapons (missile, mine, detonator, etc...)
- sequenced objects (like animation frames, or permutations)
- environment items (for example tree, stone, grass)
- selection tools (for example: arrows, cursors)
- HUD and UI elements (dice, block, check, X, bars, etc...)
- and sooo many objects, items, sprites...

Top down, and side view objects are also included.

[More information](#) ▾



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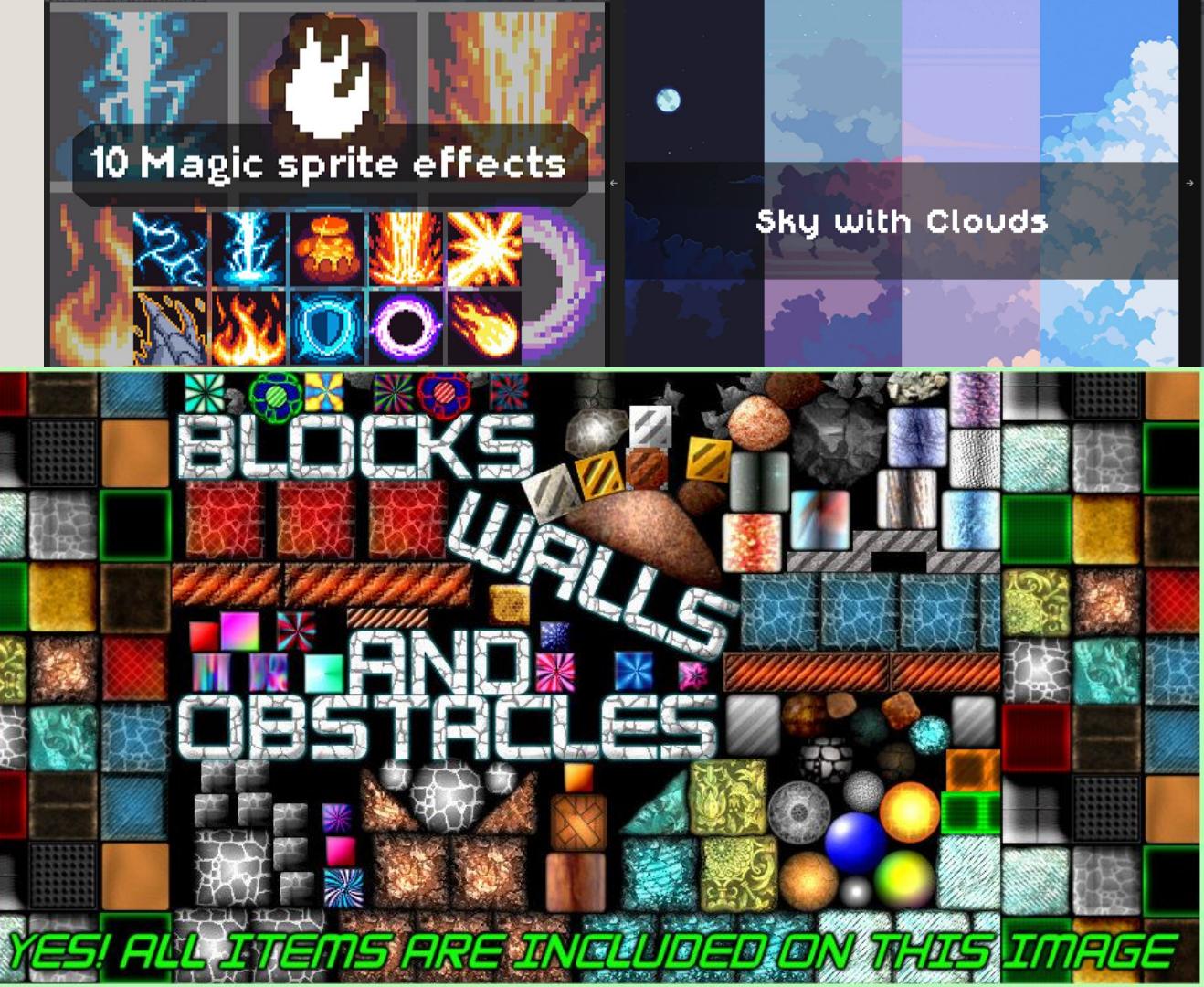
KENNEY



WORLD DESIGN

Jake says the clouds are boring and out of place for a Plinko game, though they might work as a faint background. He notes, "Those flashy magic effects are perfect for pegs," and adds about the blocks, walls, and obstacles, "This variety is gonna blow level design out of the water"—his top pick, especially with magic effects on the pegs. Brad states the clouds are, "Too dull for any real action," but says of the magic effects, "These bring some serious excitement to the pegs," and calls the blocks and walls, "A strategic goldmine"—his choice for a base, with those effects added. Chad mentions of the clouds, "They've got no depth and don't hold the level together," but notes of the magic effects, "These vibrant touches are spot-on for pegs," and says of the blocks and walls, "The textures here are perfect for killer levels"—his pick, with magic flair added.

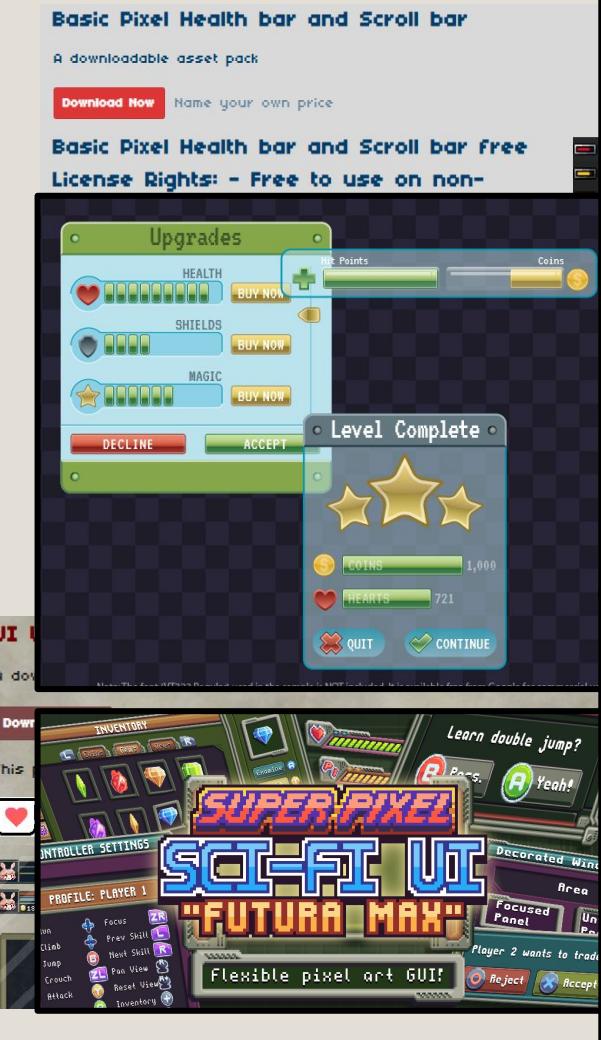
Chosen Asset - based on the overwhelming totally real feedback, I will be purchasing the blocks and walls package. It is by the same guy as the previous page assets, so this is perfect.



UI DESIGN RESOURCES

Jake says the health bar and scroll UI is functional but basic, noting, "It gets the job done for a Plinko menu." He adds about the button pack, "These buttons look clean and versatile for navigation." For the level complete screen, he states, "Simple design, works fine for quick feedback." About the Super Pixel UI, he remarks, "Lots of options here, could clutter a Plinko interface"—his pick is the button pack for simplicity. Brad says of the health bar and scroll, "Basic but effective for tracking progress." He notes the button pack, "Solid variety, perfect for interactive menus." For the level complete screen, he says, "Straightforward, good for clear results." About the Super Pixel UI, he comments, "Overloaded with features, might overwhelm"—his choice is the button pack for balance. Chad mentions of the health bar and scroll, "Useful base, but needs more flair." He says of the button pack, "Great selection, ideal for dynamic UI." For the level complete screen, he states, "Clean layout, fits well." About the Super Pixel UI, he notes, "Too busy, hard to focus"—his pick is the button pack for its adaptability.

Chosen Asset: The top right pack seems most useful as it contains many features like buttons and sliders, without being overwhelming. This may change during development, but it is currently the most preferred for simplicity and visual clarity. This will help with accessibility.

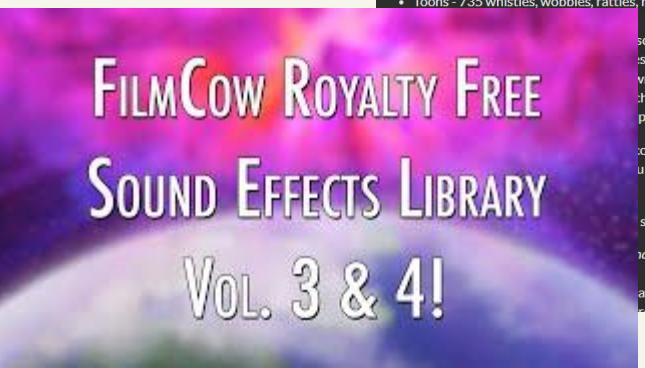


Audio Assets

There are really only two options I could find. Filmcow Royalty free pack has hundreds of silly sounds, and SFXR lets me create retro sound effects. I will be using a combination of both of these. There were many other audio packs but so many of them cost money, and I am already buying the graphics packs.

For music, there are two free packs I found which have a collection if bizarre music tracks, which will suit the game I am making. I prefer the Music Loop Variety Pack because it has such a strange otherworldly sound to them, and very retro. They are also very small, 30 seconds loops.

The minigame pack is one I found later. It has some cool tracks in it, although I don't think they are suitable. They are more hi-fidelity than the others.



This fourth volume of sound effects from FilmCow contains more than 2,000 wav files across three high-res 192kHz specialty libraries. Available completely free.

- Hits & Crunches - 803 sounds of punches, slaps, metal hits, wood hits, assorted crunching sounds, and much more.
- Toons - 735 whistles, wobbles, rattles, honks, bonks, springs, and numerous

scribbles, marker squeaks, asses, typewriter dings, and more. Download in either 192kHz / 24bit (dither manipulation) or 48kHz / 24bit plan on using the sounds as-is.)

completely royalty-free basis. You can u like, either personal or commercial.

sounds are:

national government projects

aw enforcement projects.

sound categorized as a hate group by

Game Design Document

Name of Game :

Kiwinko

Summary of Game & Mechanics

Play a Plinko Style game where your goal is to fill crates with fruit by dropping plinko balls (containing fruit) from the launcher at the top, and hitting pegs on the way down to increase the score.

Target Audience

Insert text here

Requirements:

1. Must be a Pachinko Style Game
2. Must get incrementally harder and more rewarding
3. Must meet the theme of Delivery
4. Must have an attractive graphic style
5. Must have easy to use controls

Specifications

Pachinko Style Game

1. I will create the pachinko board
2. There will be balls that drop onto pegs
3. There will be crates that collect the balls at the bottom

Incrementally Harder

1. Each crate will get harder to fill
2. This can be offset by buying upgrades to pegs which increase the ball value
3. At some point it will get so hard you need to "prestige" in order to get permanent upgrades

Delivery Theme

1. The theme will be based on delivering fruit to the crates, which get shipped to the fruit eating Kiwis. They eat a lot of fruit
2. The graphics will fit the theme too, as there will be fruit and crates. When the crate is full, an animation will play and a new crate will appear

Attractive Graphic Style

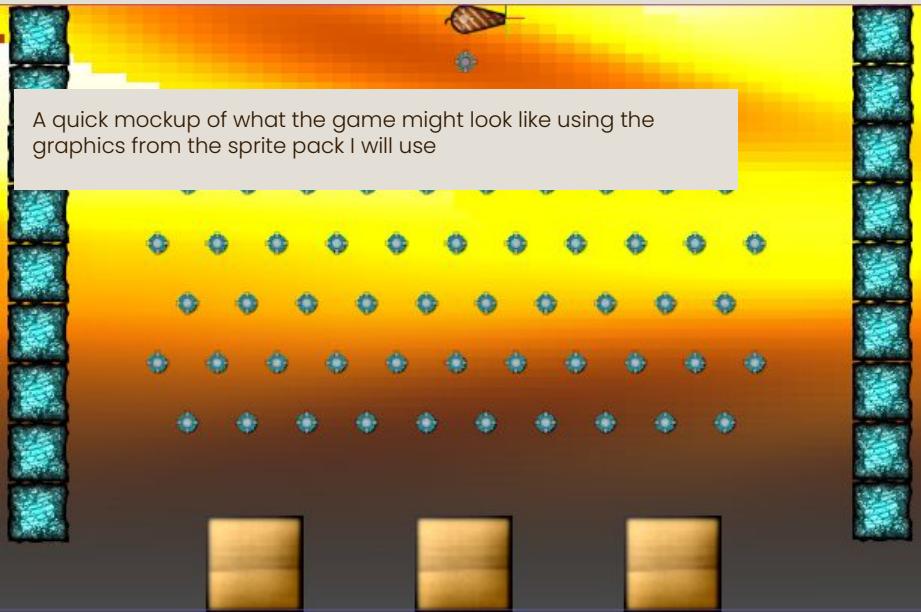
1. I am using the asset packs I mentioned earlier. I am going for a specific era and style of graphics which was popular in Windows 3.1 games during the 90s. It's looks partially hand drawn.
2. The difficulty I am going to have is making the graphics work together.

Easy to Use Controls

1. The controls will be simple - A and D will move left and right
2. Mouse will aim
3. Mouse click will shoot and select. This is all the controls.

Final Sketches:

Update your sketches to final versions, showing Level Design, Main Menu, HUD and Win Lose Screen.



AI Representation of what the game might look like. Lots of flashing particles on a plinko style board with different symbols in the pegs.

UPGRADES

UPGRADE

CBET. 600 Pegs attract

SHRINK FRUIT -10% fruit size

FRUIT T

BUY

BUY

BUY

WINKO

Final Audio Assets

Link the final audio assets you will be using below



Final Art Assets

Link and attach screenshots of the final art assets you will use below



Universal Game Toolkit (600+ Items!!!)

This package includes **600+ various sprites** which can contain more object variations in one frame. And the asset also contains **+5 assets** of it. That's why it's called "Any Game Toolkit". You can make almost any kind of game with it in 2D. This is the first version of a very useful toolkit. All the objects are in a **80x80** frame. Images are all separated, **transparent PNG**, cropped, centered.

For example, you can find:

- walls (lot of different variations)
- powerups (also a lot)
- characters (little faces, mini ship, etc.)
- bullets (rocket, laser beams, etc.)
- weapons (missile, mine, detonator, etc.)
- sequenced objects (like animation frames, or permutations)
- environment items (for example tree, stone, grass)
- selection tools (for example: arrows, cursors)
- HUD and UI elements (dice, block, check, X, bars, etc..)
- and sooo many objects, items, sprites...

Top down, and side view objects are also included.

[More information](#)



Accessibility/Manaakitanga

Explain how you will address Manaakitanga in your game

Explain how your game design or process reflects Manaakitanga (e.g., using accessibility features from your research) and write a short statement (100-150 words) with a specific example (e.g., "I added colorblind-friendly art to show manaakitanga")

As my research indicated earlier, I will make sure that my graphics are High Contrasting, so that the user can see what is going on. As there will be a lot of things flashing on the screen, visual clarity is important, so the fruit balls, and the UI need to stand out from all the particle effects.

Game Mechanics & How They Work

Describe the main game mechanics (rules of the game) (eg A description of key features (e.g., how players deliver items, win conditions like completing deliveries in time, enhanced by your assets, controls).)

Final Reflection & Justification

Reflect on your design process and write a justification
(200-300 words) answering:

... more space

What key decisions did you make? (e.g., "I chose pixel art and chimes for a cohesive feel.")

How did these decisions improve the game's quality? (e.g., "Clear art makes deliveries visible.")

How does your final design suit the "Delivery" theme and game jam purpose? (e.g., "Fast mechanics and assets fit the jam's energy.")