



**Commander Cluck**

An adventure platform game  
for mobile touch screen

by Nye Warburton

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## INSPIRATION

Please familiarize yourself by playing CANABALT, MONSTER DASH and BUMPY ROAD. They are all well designed side scrolling “run and jumpers” for the iphone. They have excellent production values and game play. These are the target level of refinement that I would like to shoot for.

Also, spending time playing these games will give a sense of pace and rhythm to pursue in our own game. I will also refer to these games in development as they have elements we are replicating.



This game also makes reference to high fantasy science fiction movies and television, especially from the 80s and 90s. Star Wars, Star Trek, Buck Rogers, Mars Attacks, Battlestar Galactica to name a few.



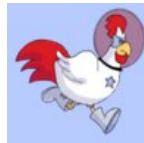
# SCALE



This is a unit. It is 32 x 32 pixels, 132 dpi, 16 bit color.  
The image format that will be used is PNG (with alpha.)

Everything in the game is built in terms of this unit. If the game needs a change of resolution, the number of pixels per unit will be adjusted, maintaining the unit relationships.

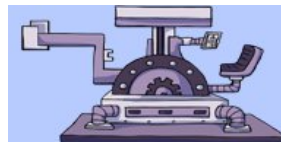
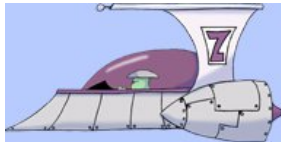
## SCALE KEY



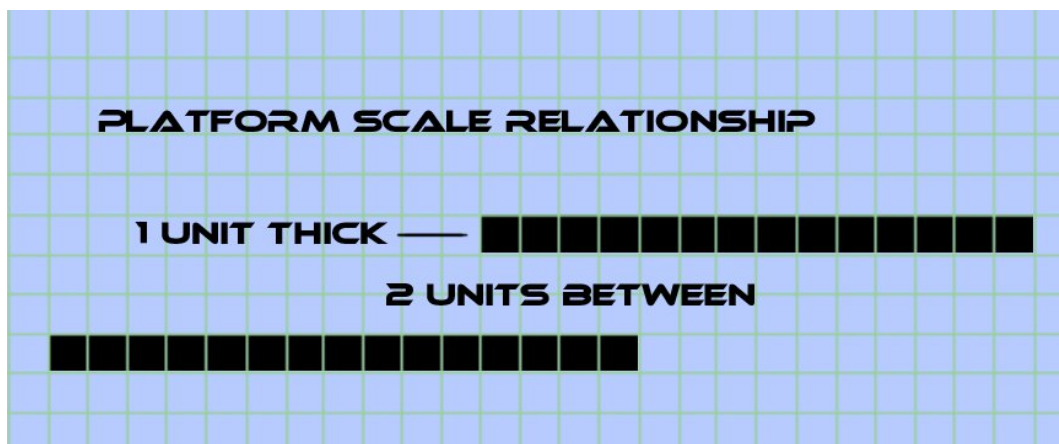
Commander Cluck is 3 x 3 units or 96 x 96 pixels.



The Zorcanian Attacker and the Zorcanian Sniper are 3 x 2 units or 96 x 64 pixels.



The Zorcanian Attack Ship and the Zorcanian Missile Launcher are 3 x 6 units or 192 x 96 pixels.



The platforms (that Cluck and the Zorcanian's interact with) are 1 unit thick. They are separated by 2 units between them.

The spikes and the missiles are 2 horizontal units or 64 x 32 pixels.



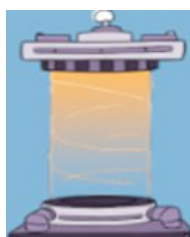
The smoke trail and stars are 1 unit or 32 x 32 pixels.



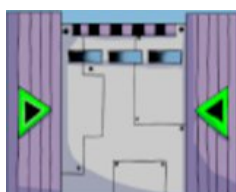
The power up eggs and Megastars are 2 x 2 units or 64 x 64 pixels.



The Transporter is 4 x 5 units or 128 x 160 pixels.



The Speed Chambers are 5 x 4 units or 160 x 128 pixels.



## Game Play Asset List

### \* Animation Note

All animation is based on playing 15 frames of animation a second. In the 60 fps game engine that means hold each action for 4 frames. So a 7 frame cycle will take under 30 frames to play. Cluck's animation cycle should play at roughly under 1 second for 2 loops of his cycle.

These are the elements of the game, put in order of implementation for building. I believe we work through these chronologically, refining and redeveloping game play as each element is implemented.

### 1. Commander Cluck

We will be starting with the mocked up source code. We worked out a basic run and jump play with Cluck. It will need to be modified, but is a good structural start point.

Cluck's new sprite sheet animations need to be connected and reworked to allow for the new frame ranges.

The animation for Cluck can be found in the dropbox folder at:

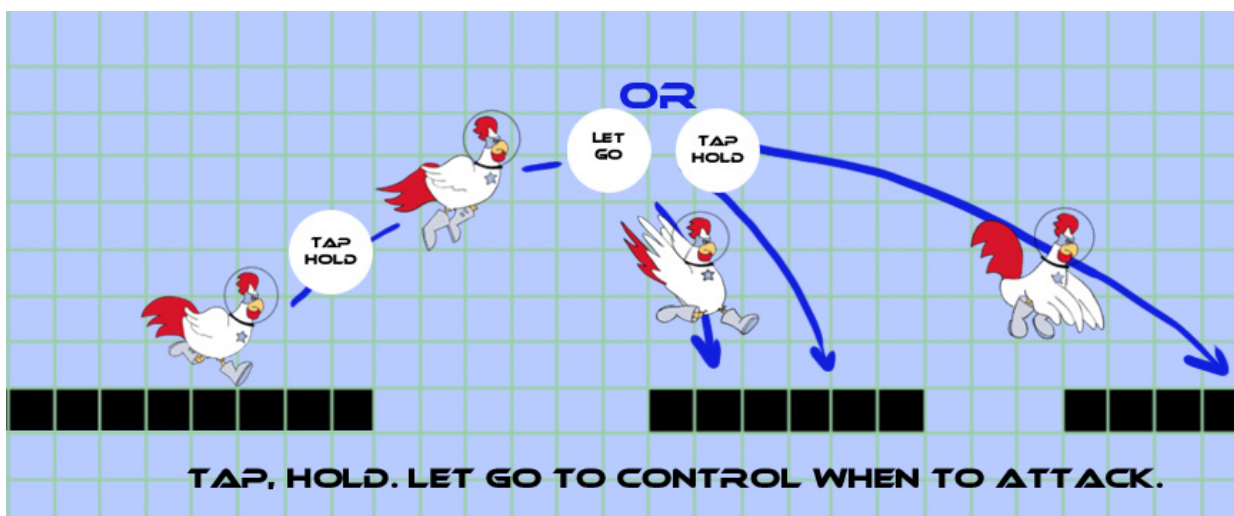
Art /Game/Animation /Cluck/cluck\_animation\_sprite.png

The sound effects will (eventually) be found in:

Art/Game/SFX

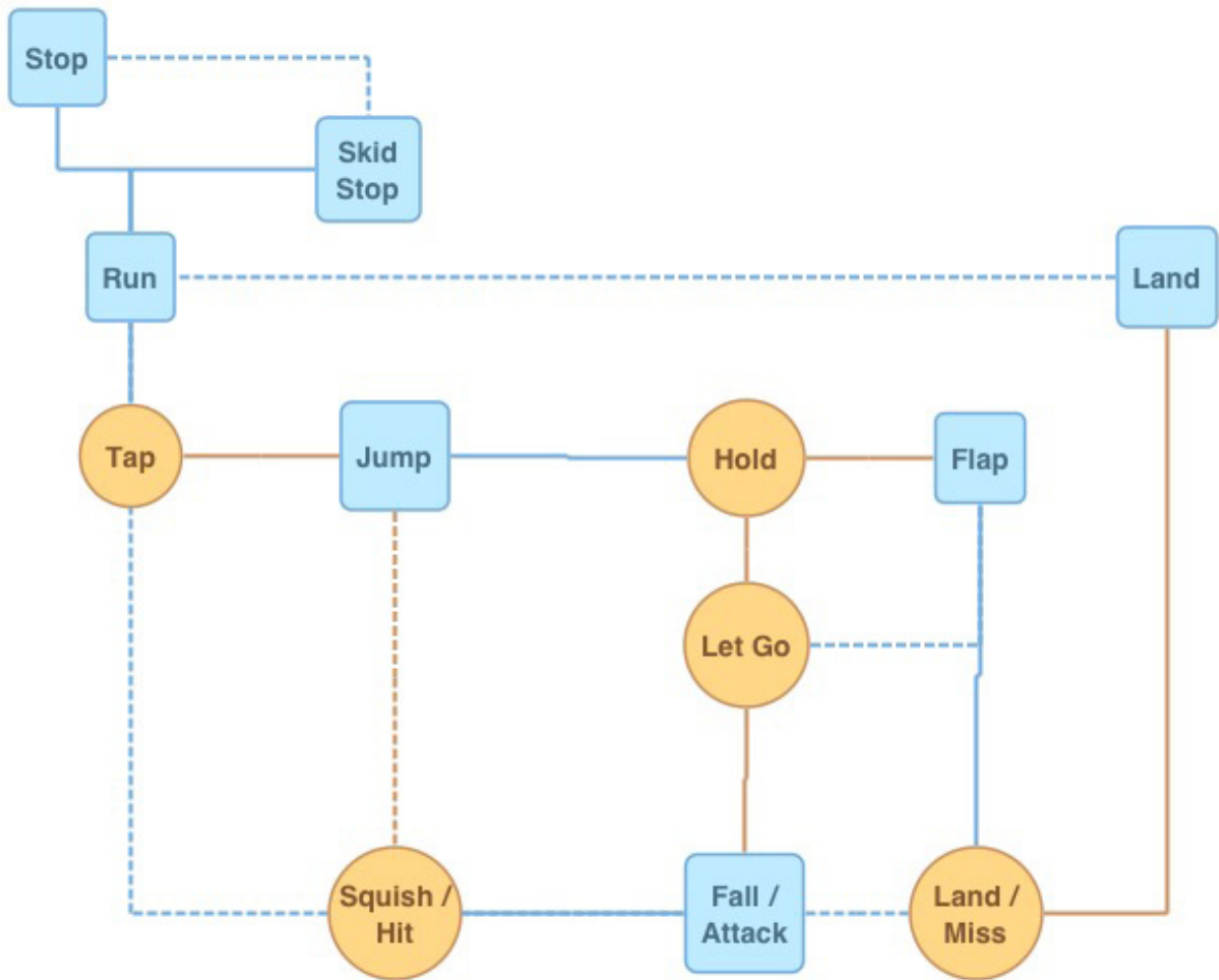
His animation includes:

- a. Cluck\_skidstop : This is the action of Cluck skidding to a stop.
- b. Cluck\_stop : Cluck held a complete stop
- c. Cluck\_stop2run : This is Cluck going from the stopped state to the run loop.
- d. Cluck\_run : the looping animation of Cluck running
- e. Cluck\_hurt
- f. Cluck\_jump
- g. Cluck\_flap
- h. Cluck\_attack
- g. Cluck\_land
- h. Cluck\_land2run

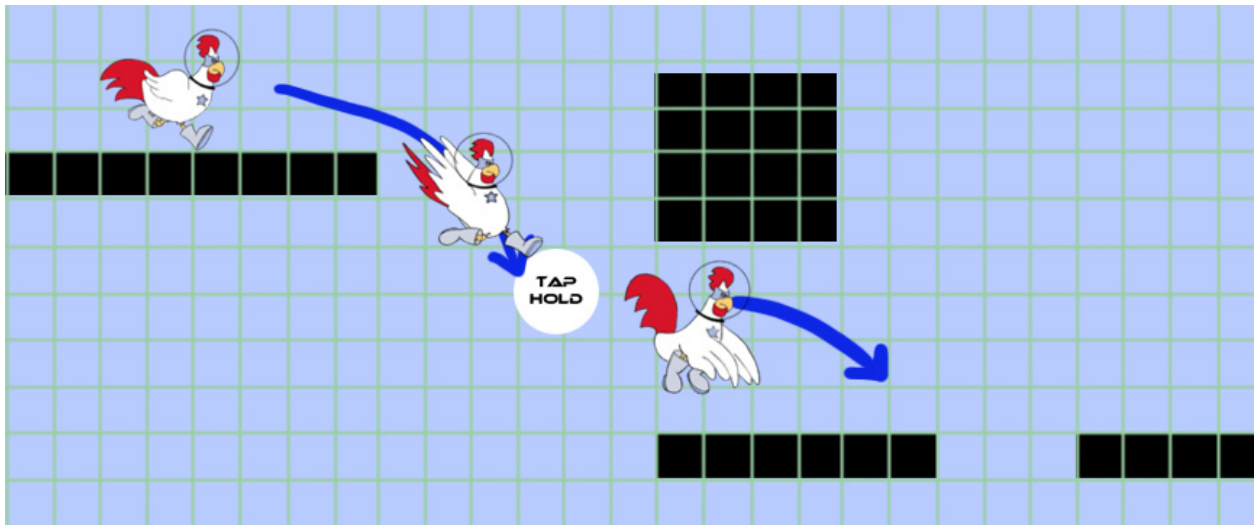


Cluck begins in stopped state when his ship lands, he begins running as the world scrolls. By tapping the screen he will jump. By tapping and holding he will flap at his apex delaying his descent and making his jump longer. By releasing the screen, Cluck will drop into an attack/land making him come down at a faster rate.

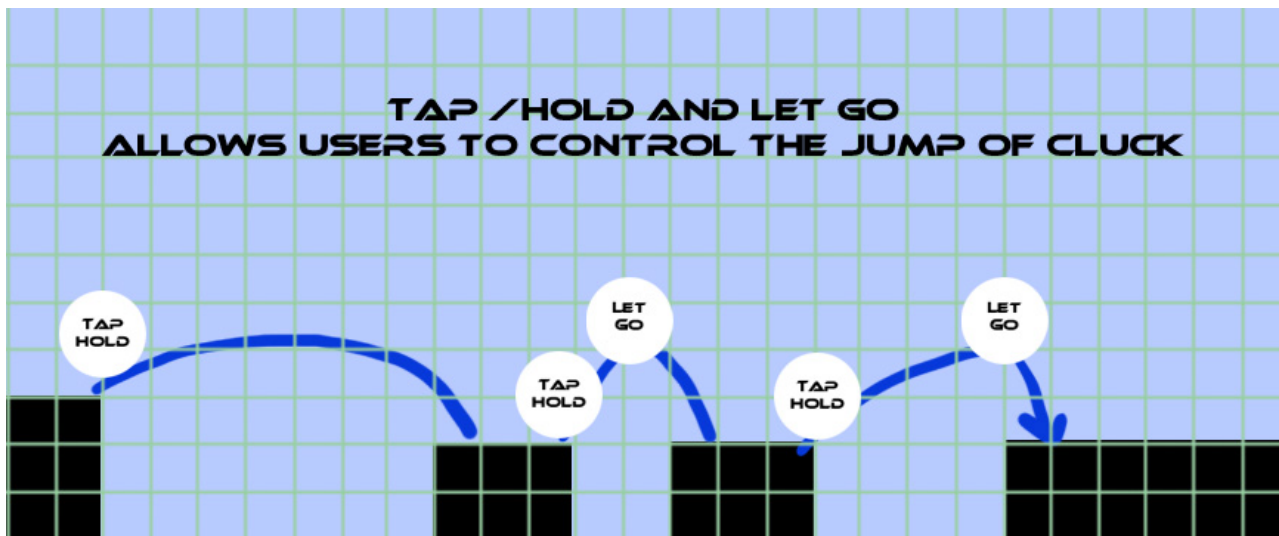
# Cluck Animation Schematic



While Cluck is in falling state, the screen can be (re)tapped causing Cluck to start flapping and slowing his descent. This allows Cluck to get into some tougher places later on in the game.



By playing a pattern of “tap/hold” and “let go,” the user can navigate Cluck through the environmental challenges.

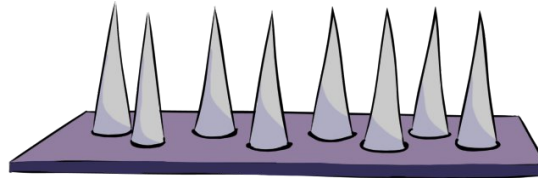




## The Zorcanians

Besides the environmental challenge of jumping over gaps and timing jumps, the other challenge is to avoid “the bad guys.” The Zorcanians are an evil race of little green men hell bent on controlling the systems energy supplies. There are 5 kind of Zorcanian threats that can come at Commander Cluck.

**1. Spikes** : Spikes are set to an “off” position until cluck hits a check point, to which they will go to the “on” position. They cause Cluck 1 point of health damage.

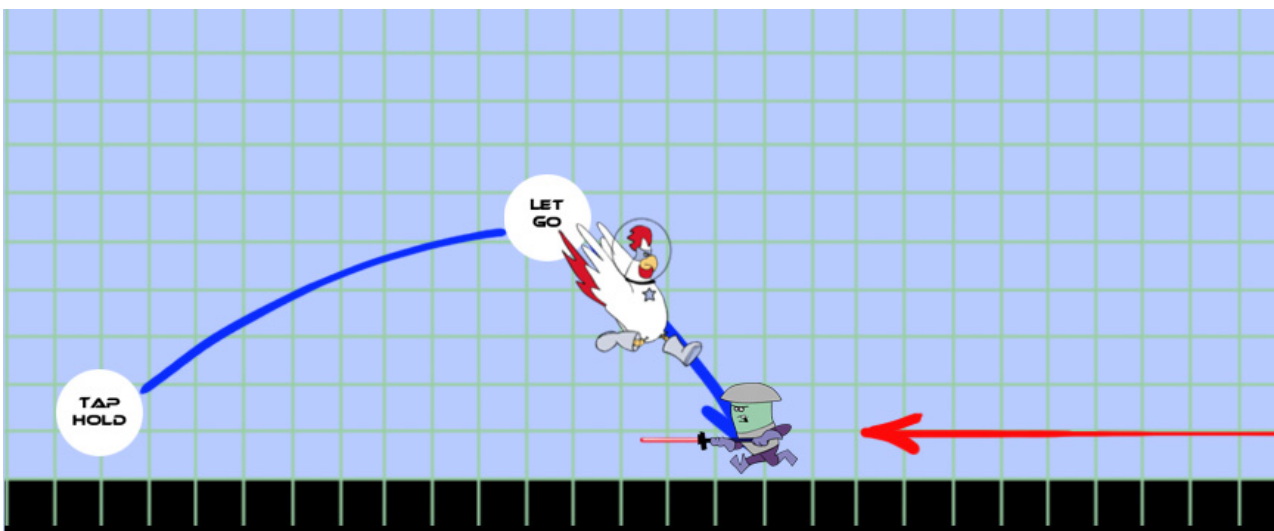
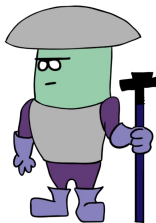


**2. Zorcanian Attacker** – The Zorcanian attacker charges Cluck with a plasma spear, which is much like a light saber. If the attacker's plasma spear hits Cluck it will cause 1 point of health damage.

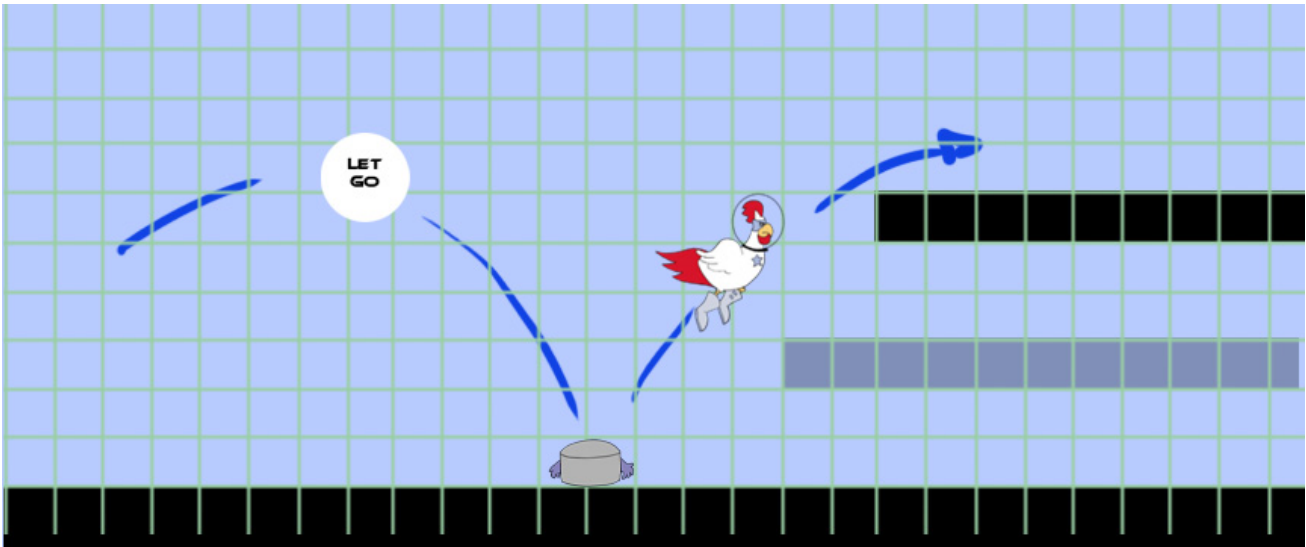
Cluck must either jump over the Zorcanian, but for more points and more reward, Cluck can jump on the Zorcanian's head. If successful in hitting the moving Zorcanian target, they will be squished like a goomba in mario.

His animation includes:

- Attacker\_Stand
- Attacker\_Attack
- Attacker\_Run



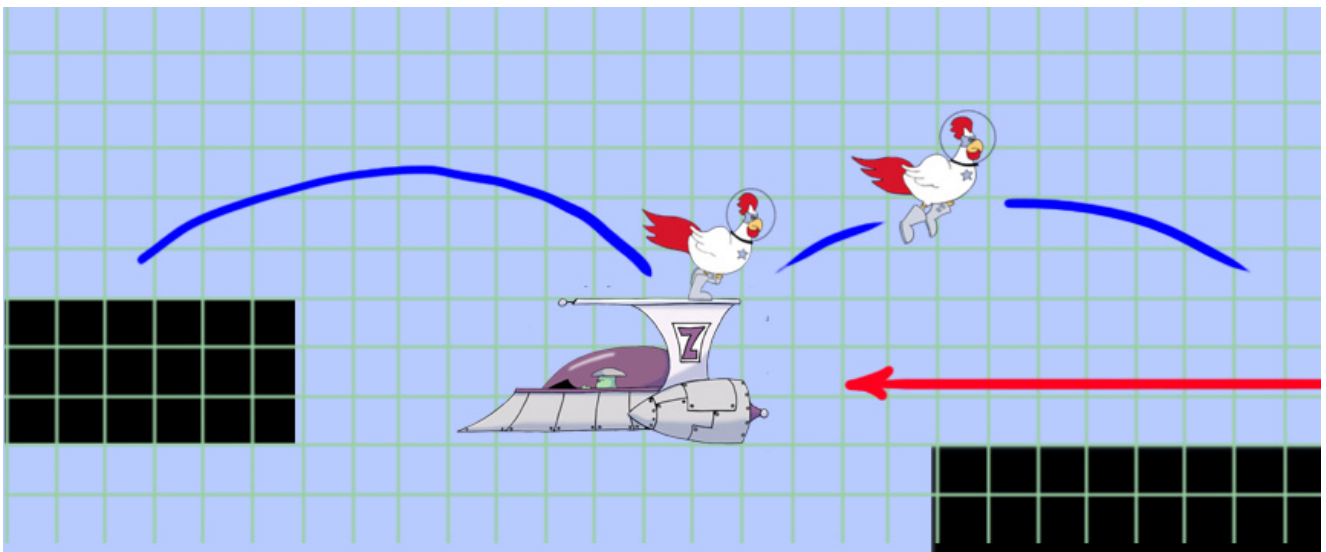
\* If Cluck successfully jumps on the head of the Zorcanian attacker, he will be flung up to the height of 2 platforms.



**3.Zorcanian Sniper** – The Sniper is situated in places where Cluck can not get at him. He shoots plasma blasts at Cluck which cause 1 point of health damage. If Cluck runs straight into a sniper, the sniper will also cause 1 point of health damage.

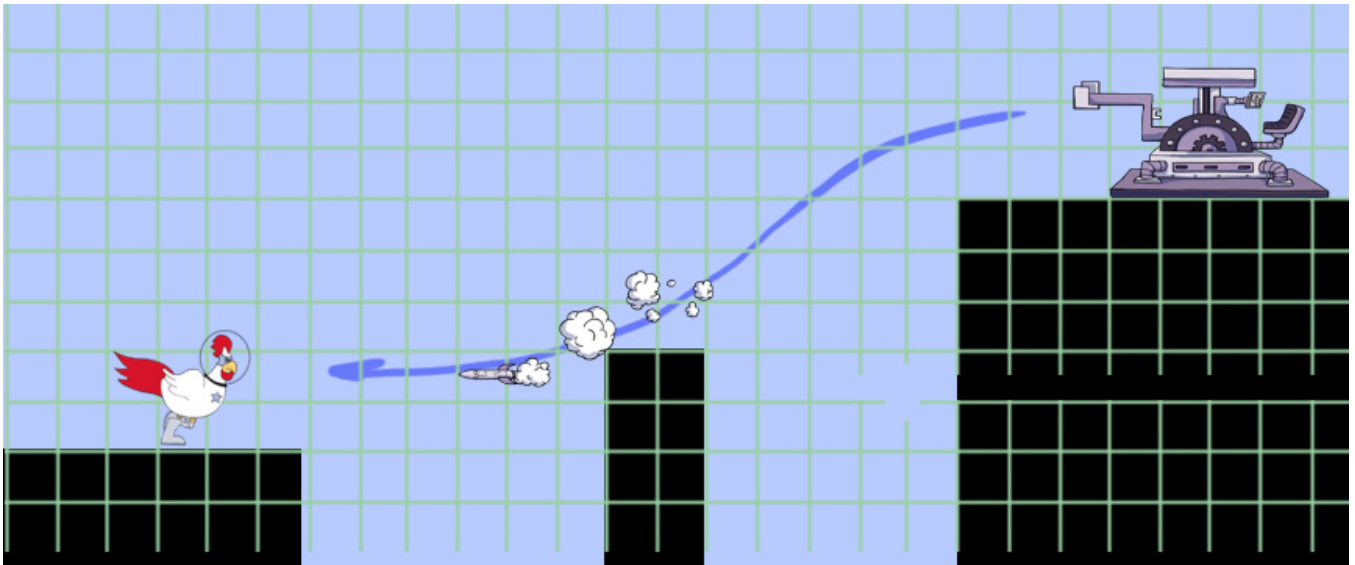


**4.Zorcanian Attack Ship** – The attack ship flies across the screen at a fairly slow consistent rate. If the front end of the ship hits Cluck it will cause 2 points of health damage.

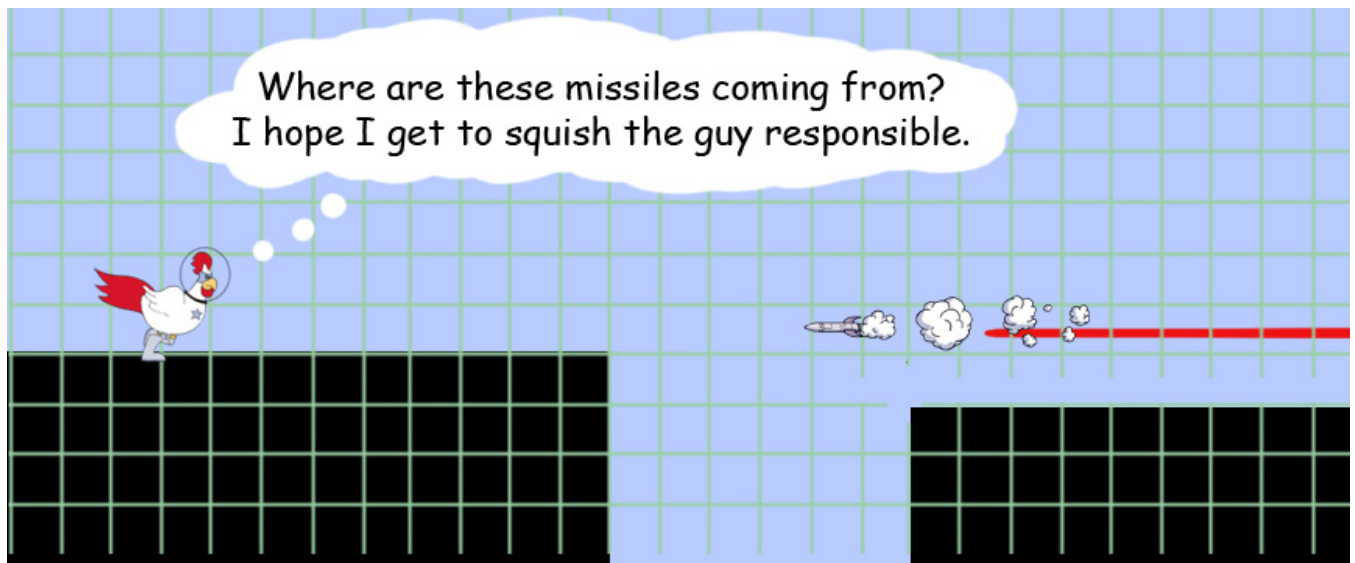


While the front of the ship causes damage, Cluck can run across the top of the ships fin safely. This small platform allows Cluck to do some tricky maneuvers later in the game.

## 5.Zorcanian Missile Launcher.



Zorcanian Missile Launcher – For this build of the game, the missile launcher acts as a “Boss,” presenting the greatest challenge for Cluck. The missile shooter shoots missiles which will align themselves in the current of where Cluck is. Cluck must avoid the missiles. The missiles will begin to appear at a slow rate at the half point of the level, with their frequency increasing as Cluck approaches the shooter. This builds difficulty and hopefully and an antagonistic frustration for the boss at the end.



Each missile causes 2 points of health damage in earlier levels, but will cause 3 points of damage in later levels. If Cluck has the shield, the missile impacting him will only cause the shield to collapse.

## Other Game Elements

**Stars** – Stars are reward system in Commander Cluck. There is a point value system, but a (yet to be determined) number of stars will add a unit of health to Cluck.



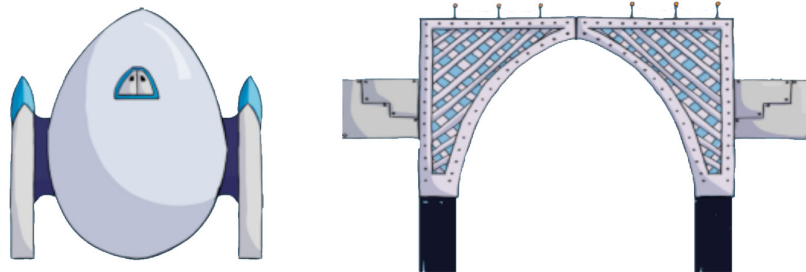
**Power Eggs** - Power Eggs bring a full unit of health to Cluck. In the event Cluck is already at 3 units of health, Cluck will get the power shield, which acts as a 4th hit point.



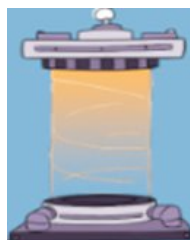
**Shield** – In event of 3 units of health, a power egg or star amount will give Cluck an energy shield acting as a 4th hit point. The shield will also allow the missiles to only cause the missile to dissipate, which is only 1 hit point, versus it's regular 2 or 3 hit points.



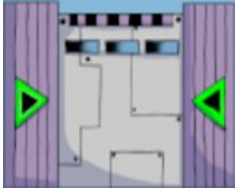
**Cluck Ship** – At the beginning of each level, Cluck's ship lands, the door opens and Cluck comes out. It is also waiting for him at the end of the level, where he boards it and it takes off. These animations play independently when the level starts and Cluck hits the final checkpoint.



**Transporter** – Cluck can run into a transporter which will temporarily take him to the power up world. He stays there while he collects stars in a safe environment, returning back to the point he entered the transporter after.

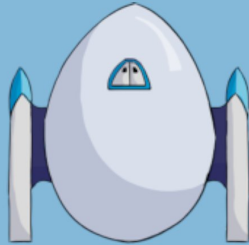


**Speed Changer** – When Cluck runs through the speed changers the game speeds up for 10 – 15 seconds.



# COMMANDER CLUCK GAME ASSETS

Cluck Ship



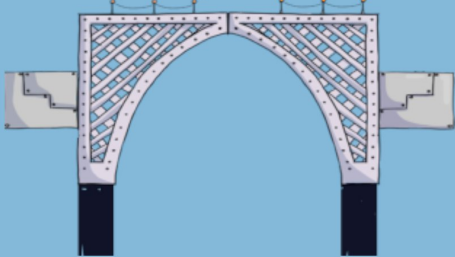
Cluck



Power Shield



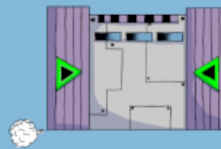
Landing Platform



Transporter



Direction Changer/Speed



Direction Sign



Stars



Story Powerup



Shield/Health Powerup



Zorcanian Minion



Minion Ship



Spikes



Minion Rocket Launcher



Game HUD:



Explosion



Missile Smoke



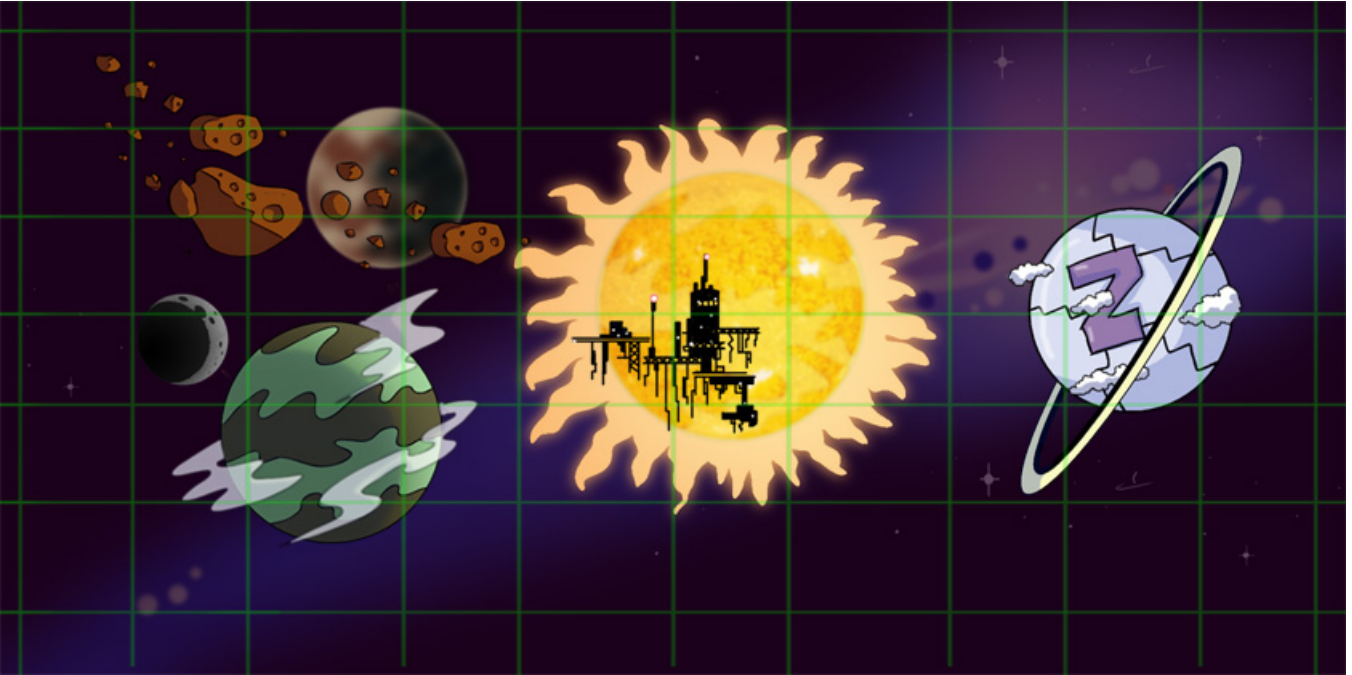
Steam



Game Structure:

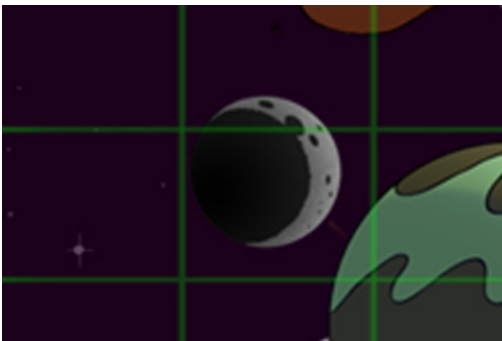


## Worlds and Level Select



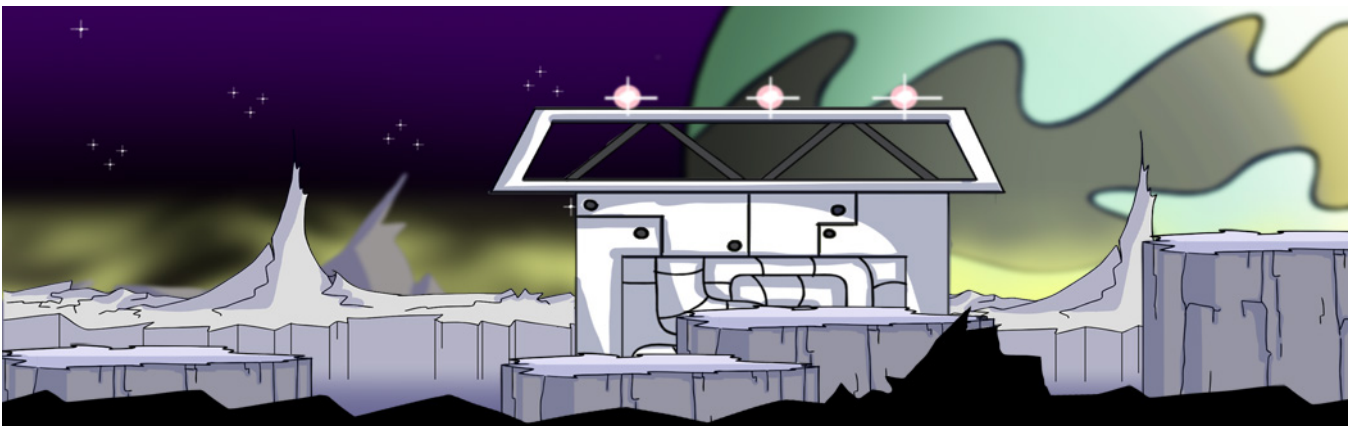
Over the course of the game, Commander Cluck will play all the worlds in the system. The whole level select is displayed above. The system is revealed over 4 level select points. The five worlds are Lunara, Okeefenokia, Azula, Hephaestus, and Zorcania.

### Lunara



The first level select screen will only allow users to select Lunara.

Lunara is the moon of Okeefenokia and Cluck's entry point into the system. It is the easiest level. It has two and a half minutes of game play content with a check points at the two transporter points.



The only challenges in Lunara are platform, zorcanian attackers, and a zorcanian attack ship.

Players will also be introduced to transporters and power up levels.

## Okeefenokia

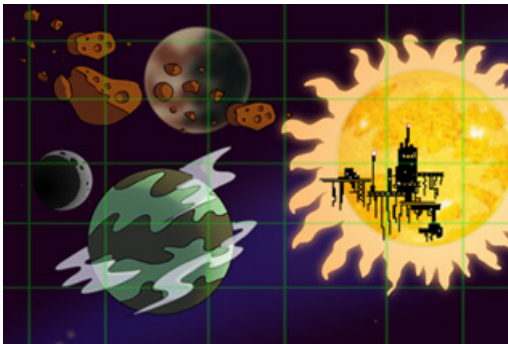


After beating Lunara, the next level select allows you to either play Lunara again, or play Okeefenokia.

Okeefenokia is the swamp planet, It has three and a half minutes of game play, with three checkpoints at the transporter points.



The challenges on Okeefenokia are platform, zorcanian attackers, zorcanian attack ships, and zorcanian snipers.

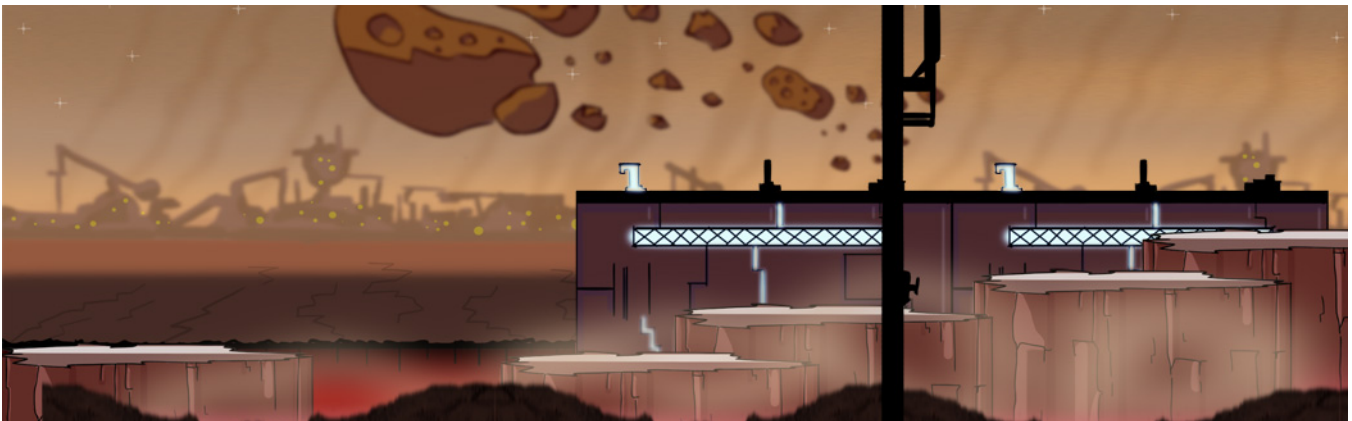


After beating Okeefenokia, the next level select screen allows the option to play Lunara, Okeefenokia, (the new worlds) Azula or Hephaestus.

## Azula

Azula is the Zorcanian mining colony. The challenges are platform, zorcanian attackers, zorcanian attack ships, zorcanian snipers and zorcanian missile launchers.

Azula is the most expansive level, with 5 minutes of game play and 4 checkpoints at the transporter points. There are two speed challenges in this level.

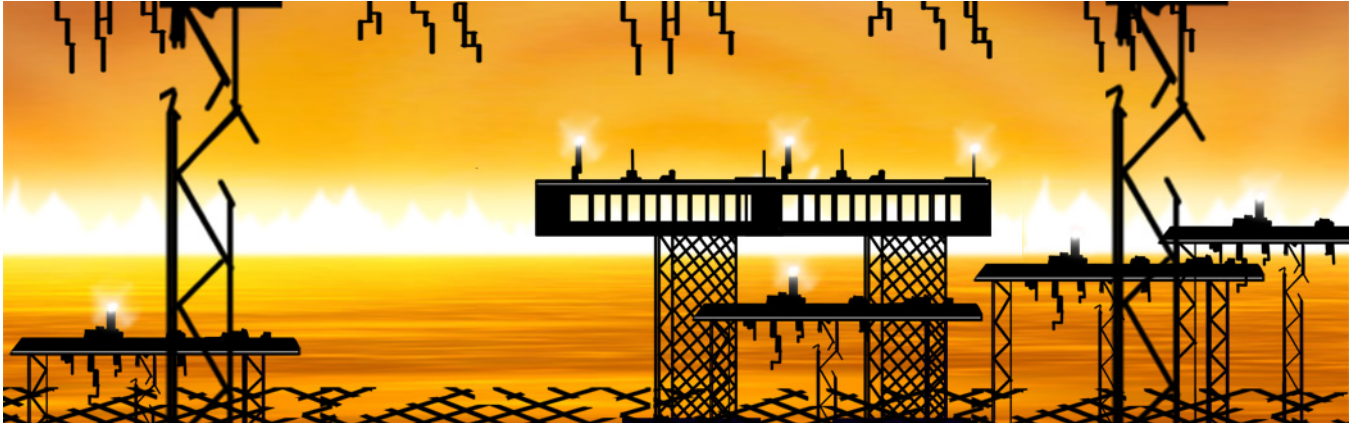




## Hephaestus

Hephaestus is a space station orbiting the system's sun. The challenges are platform, zorcanian attackers, zorcanian attack ships, zorcanian snipers and zorcanian missile launchers. Even though the challenges on Hephaestus are the same as Azula, the world makes everything in siloette. This is a more difficult challenge to overcome.

Hephaestus is a very difficult four and a half minutes of game play with three checkpoints at the transporter points. There are three speed chamber challenges on this level as well.



## Zorcania



After the player has beaten all of the other worlds, the last planet is Zorcania, the home world of the Zorcanians.

Zorcania is five minutes of content. It is the most difficult planet, combining all of the previous challenges: platform, Zorcanian Attackers, Zorcanian Snipers, Zorcanian attack ships, Zorcanian Missile Launchers, Spikes, siloetted area. There are 4 checkpoints at the transporter points. There are three speed challenges.



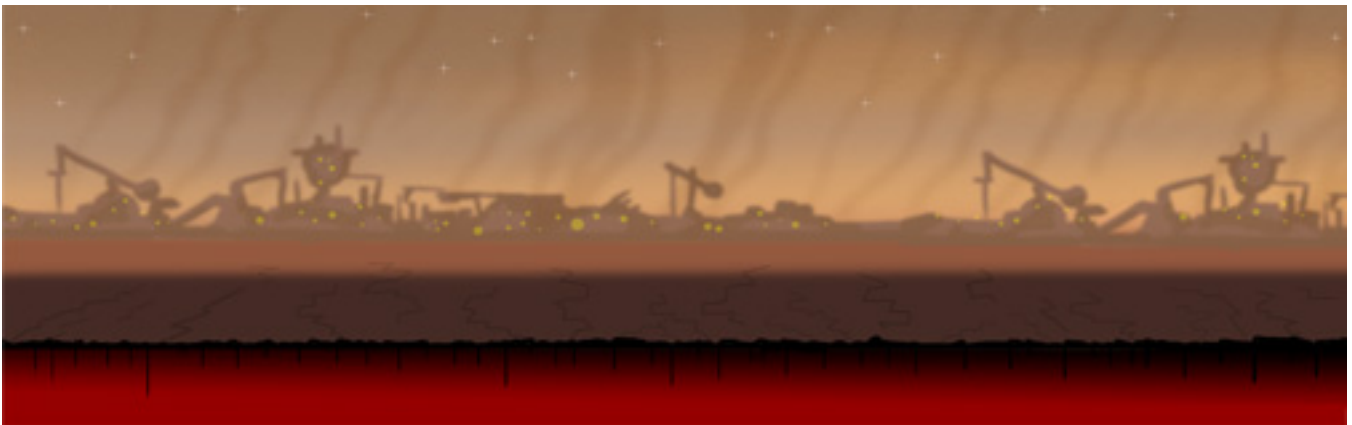
## World Construction

The Level design of each world will be done in Tiled. Mock ups of each world should look something like this:



Game play will be refined in this stage. For Each level there are different images, but each use the same hierarchy and naming convention. That means, for each world, construction should be exactly the same. In this example, I am going to build Azula.

Each world has a Background plate, that slowly moves from left to right over the course of the entire level play.



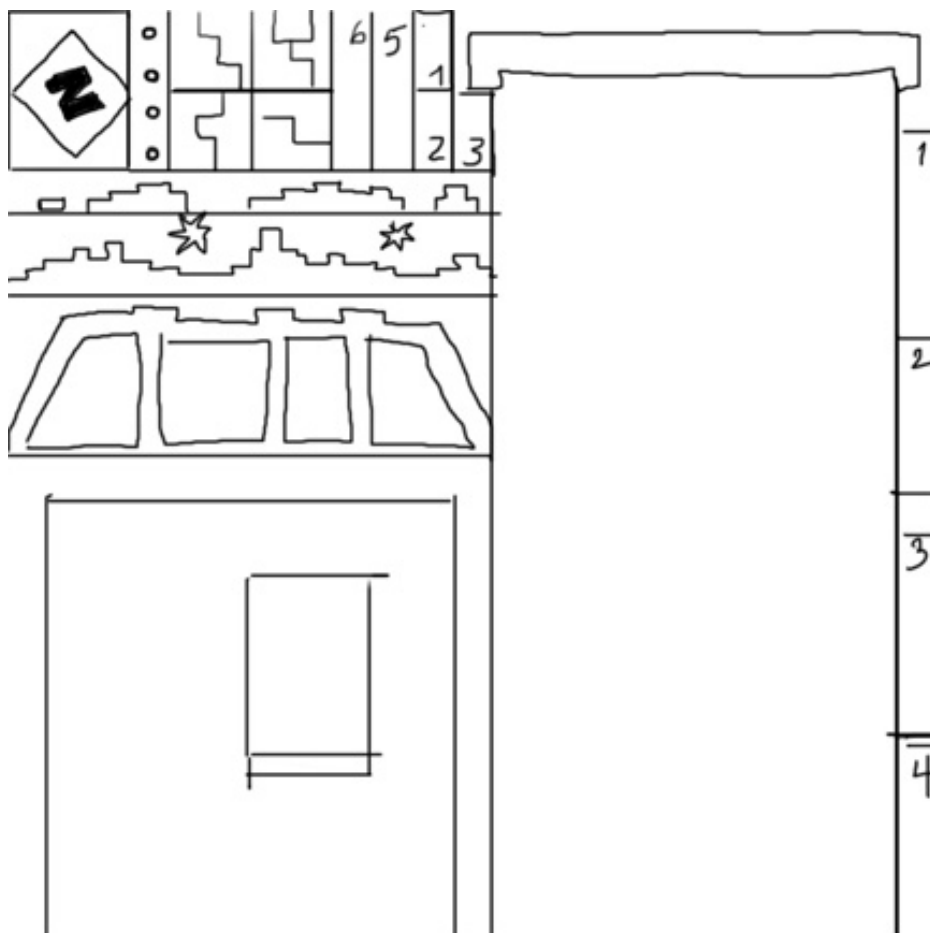
For each world, there is a middle Background image with alpha. That scrolls by to give a parallax effect to the background image.



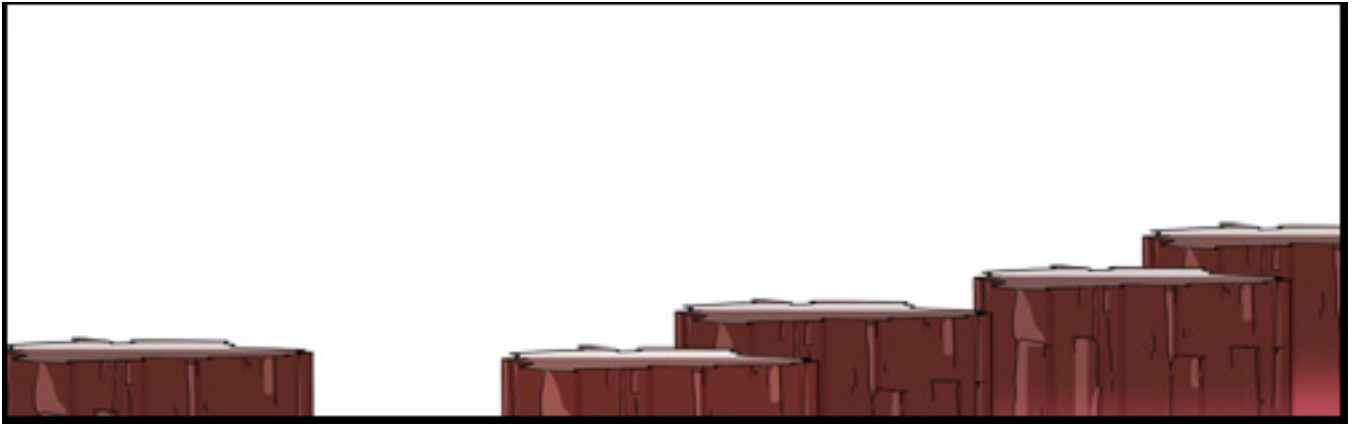
The Foreground elements are in front of everything else (except the HUD). It scrolls by at a fast rate as it is "closest" to camera.



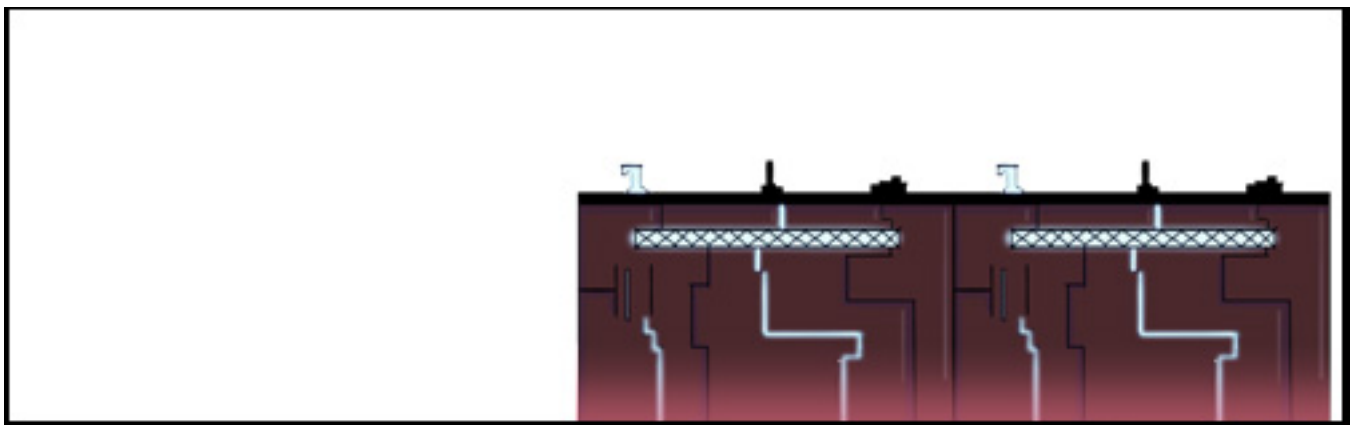
Platforms and elements are constructed with a single sprite sheet. This sprite sheet will be modified (painted over) for each world, but it's construction will remain consistent. This way, one sprite sheet can be used to build all the platform challenges.



Every platform and in-game element can be created with this sprite sheet mock up.

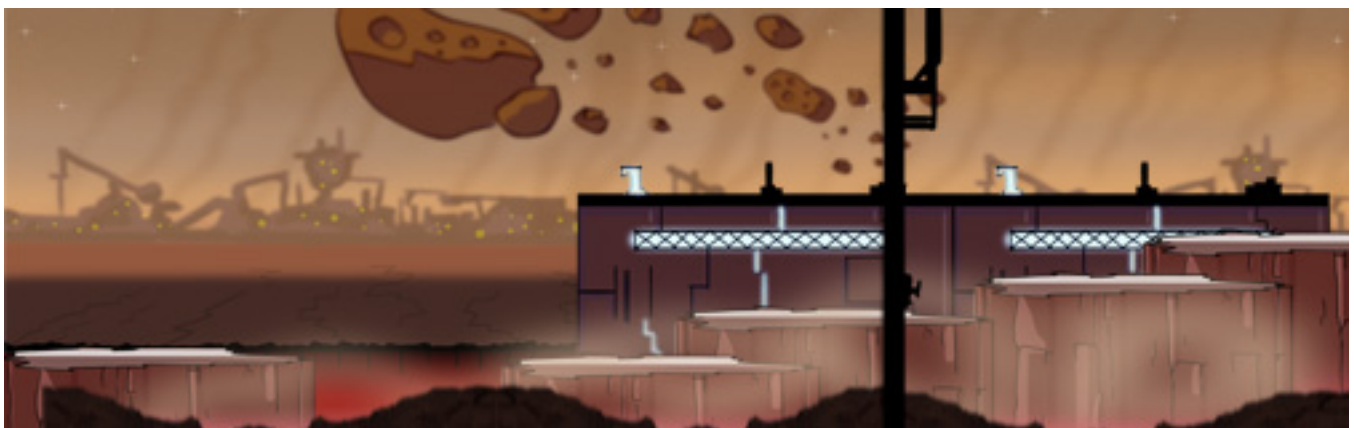


First tier platforms created from the sprite sheet in tiled.

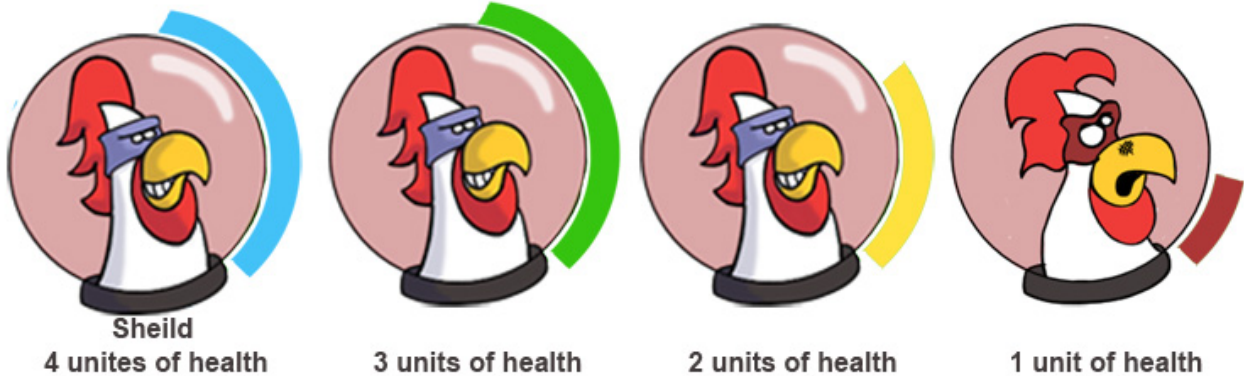


Second Tier platforms created from the sprite sheet in tiled.

And the completed world:



## Health, points and scoring



Commander Cluck has 3 units of health to start the game.

Health can be acquired by collecting a (yet to be) determined amount of stars, or by collecting a power up egg.

If Cluck is already at full health when he collects the required stars or the power egg, he will get a shield.

The shield acts as a 4th hit point, however, more powerful attacks like the ship or the missile will only cause the one point of damage to lose the shield instead of the 2 or 3 points of damage.

### Damage

- Spikes hit Cluck. - 1 HP
- the Zorcanian attacker hits cluck. - 1HP
- the sniper hits him with a plasma burst or cluck runs into him. -1HP
- the Zorcanian attack ship hits him. -2 HP (unless he has a shield, then its only -1HP)
- the Zorcanian missile launcher fires a missile and hits Cluck. - 3 HP (unless he has a shield, then its only -1HP)

\*Cluck will die if he falls off a platform or flaps off the bottom of the screen.



## Scoring

Cluck gets a point for every unit he runs on a level. So if the level is 1000 units long, Cluck gets 1000 points.

Cluck gets 100 points for every zorcanian attacker he squishes.

Cluck gets 10 points for every star.

Cluck gets 50 points for difficult environmental challenges or long jumps.

Cluck gets 500 points for every power up egg or megastar.

Cluck gets 1000 points for jumping on a missile launcher.