

Colour Wars Rvj

Akshay Venkataramanan L6 - Game Art and Design

Game Ideas

Blind VR Game

In this fired person horror game you play as character in a dark mansion and can't see anything . The player must use his hands (USING LEAP MOTION CONTROLLER) to explore the world and escape . The way you do this that there is a small light around your virtual hands to simulate feel of touch .

Befor i started work on the game i did a trial of the technology that i'll be using .

The Leap Motion Controller had one limitation , It need the processing power of the PC and Cannot directly be connected to the Mobile .







To overcome this I was going to:

Run game on PC ---> Use a software like Rift Cat or Trinus----> Stream to the mobile-----> Send input info to PC from VR Mount.

After testing, i realised that even though the technique worked in theory the lag and lack in the ease of use would make it impracticable.

Even if i removed the leap motion controller from the equation and used sound only the equipment i needed to record Directional sound that is required in game was not available

The only way that i saw to solve my problem , was to invest in a high end pc and buy one of the vr headsets for the pc (Oculus Rift , HTC Vive).

I did not have the resources to invest in the above so went on to the next game

Platformer

The game is a fast Paced side scrolling 3D platformer where the player has the power to phase through walls for a short amount of time .

In the game the player is a person/alien who wakes up in a human research center. The story is how the player escapes the place and the planet to find his ship to leave the planet.

While Phasing The Character is invisible to both the Player and enemies in the game.

The player has a special power where they can Phase (Pass Through) certain walls and object and is not effected by gravity. The player just moves in the direction he was moving before.

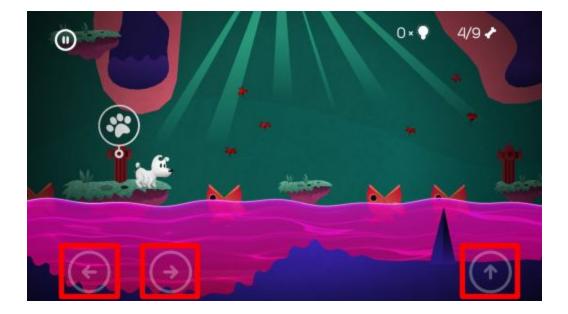
While in Phase the player has no control over the characters movement

The Target Platforms:

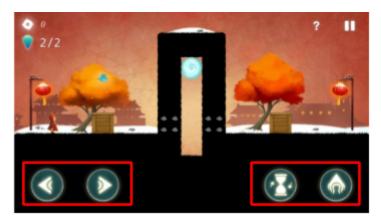
The Target Platforms are Pc and console .Even thought there are many platformer games for the mobile , most of these games have simple controls and don't depend a lot on timing like my game .

And most games have only 3 controls up ,left and right.





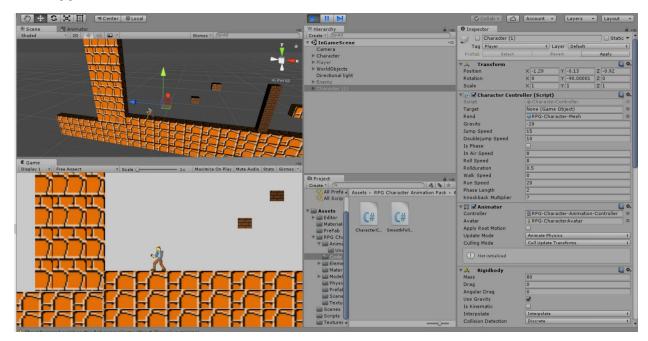
Games that have more 3 controls normally don't ask the player to use more than 2 at a time .

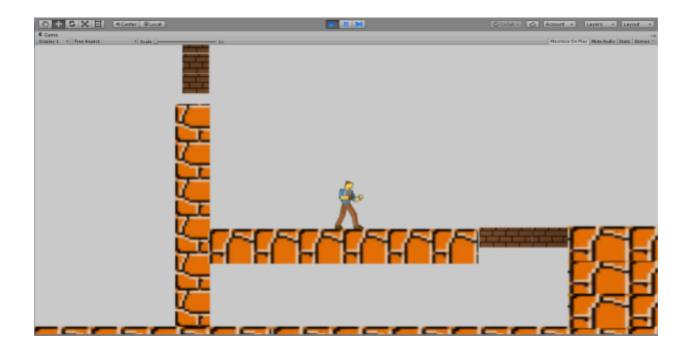




As my game was built around multiple controls being executed together and at the right moment , PC or console was my only choice.

Prototype:





Ater prototyping i realized that the game could not be completed alone by me in the allotted time .

- As i am not a Game artist and this game would heavily rely on art the production time would be increased and i felt it would not be able to finish it in the allotted time
- I started my dissertation work after the prototyping of the game and realized the amount of polish a game like this would take . Without this polish the game would seame boring.

I would need more than the given time to get all the polish in .

I would either need more time or team of a few people to complete the game. Since both the solutions were not possible i moved on to the next game idea.

Color Wars

Colour wars is a **tile based**, **isometric** game where you control a cube that has the ability to **paint tiles**. One of the main challenge is that **if you stop moving**, **you die!**

It is intended to be a **multiplayer party game** in which you have to paint more tiles than your opponent at the end of the timer to Win.

I had a idea and then went on to discuss it with my peers and teachers .

I used a long whiteboard to write down the all the variation of the game and did a paper tests.

After a long discussion i decided on the final mechanics.

I Went on to do simple prototype of the game to test the game's fun aspect .

Prototype:

A prototype is an early product built to test a concept,

Building prototypes can be largely educational and beneficial to the overall development process.

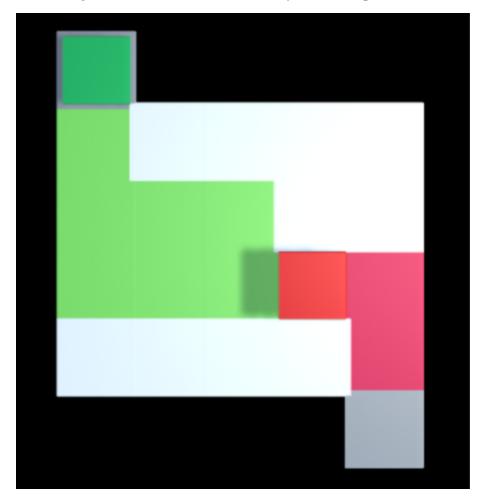
The easiest thing to test with a prototype is game design. This would be the key benefit for building a prototype. The early builds enforce design decisions and contributes to the

enhancement of the new design. It helps with the development process to move the prototyping stage close to the start of the initial design process.

Another advantage that spawns from prototyping is the reduction time needed for game development. Prototypes allow you to completely see the game, and the mechanics become defined as much as possible during this step. The key idea at this point is to focus on one main idea at a time. Your prototype should test one specific aspect of your design, and this is usually the core mechanic, or the "hook" of your game

When you are able to present users with a prototype, it gives them the opportunity to test the actual game. This allows them to provide feedback and suggestions based on their observations.

After prototyping the game i showed it to my peers , teachers and some Industry professionals and they all seemed to like the concept and the game .



I had also had a custom tool in place for the game that would allow me to rapidly create maps .

As the game was more Mechanics and GamePlay based than art, i as a game designer could more focus on the game play and game feel of the game and show my skills as a deininger.

The Map Design could dramatically change the feel of the game. This game would give me the opchunarty to learn about level design and game polish.

For the above reasons i choose Colors Wars as My Final Year Project .

Platform

I thought of multiple platform before selecting PC include Mobile and final chose PC.

The reasons for selecting PC :

- The controls are one of the main part of the game and and even though the game would work well on the mobile form a multiplayer point of view the controls are more important part of the game
- If the game was on the mobile the coding involved in getting a low lag gameplay would take more unnecessary production time

Art

As you may have considered, the concept of minimalism is of great

importance for video games because video games are one huge part of them just communication. Video Games are always of interactivity (richest form of communication) and most of the times about entertainment (taking as exceptions serious games and other similar forms of games). So now it leaves us with the question, why is simplicity more effective in communication and how can this simplicity be achieved?

Simplicity is an effective form of communication because it leaves less space for confusion, it transmits the idea more directly, it focuses in particular things exalting them from lesser complements and most important, it lets the individual concentrate in the perceived message better.

In videogames this translates as avoiding confusing interfaces, writing stories with bold messages, focusing in the most characteristic features of a games and letting other assets complement these, and finally letting the player have more fun from the game experience.

For this first part in the minimalism subject I will just summarize some of the ways in which simplicity can be achieved and will explain them in the next parts. The characteristics which can be enhanced from using minimalism as a design philosophy are the following:

- Simple Interfaces: interfaces with straight functionality. Each user interaction should go straight to the point described by the interface. Assuming the right things is crucial. - Strong Stories: stories with a coherent plot. The main subject of the story should be easily recognized by the player. Characters have strong personalities and its actions can be associated with the player's expectations.

- Centered Design: the design is centered in special features. All the game components act as a whole to enhance the most differentiating

characteristics.

(http://www.gamasutra.com/blogs/GabrielLievano/20090813/85150/Less_is_More_Minim alism_in_Games_Part_I.php)

My Thoughts : The Game being a fast paced Multiplayer game I have to communicate the idea behind the game clearly , If no the players can get confused.

Keeping the game Minimalistic in terms of art helps me focus the attention of the player to only the important aspects of the game .

As the game being tile based having the character in the same shape of the tile may be a good way to go .

Minimalism in Game Design: Examples, Tips, and Ideas

The Basics

The general purpose of minimalism in game design is to accentuate a game's specific elements by limiting the scope or detail of the other surrounding elements. For a simplified 'real world' example, imagine wearing a blindfold to place a greater emphasis on your sense of touch.

An entire game can be designed with minimalism as a core concept, but minimalism can also be invoked only when needed. Art, sound, gameplay, and narrative can all be subject to minimalist interpretations.

Aesthetic Design

The visual style of your game is incredibly important. A single screenshot is often a potential player's only first impression, so it's vital that your game is readable at a glance. Minimalism can both help and hurt you in this regard due to the possibility of abstraction, so be careful.

Below are a few ideas to get you thinking about ways to introduce minimalism into your aesthetic design:

- Use a limited and deliberate color palette. Colors can represent emotions, moods, locations, temperatures, and personalities. Being consistent and tasteful in your choice of color is far more important than using a certain variety of colors.
- Contrast is your friend. When using limited visual assets, the contrast between those assets becomes just as important as the assets themselves. Blank space between items should be used to your advantage when dealing with a limited number of on-screen elements.
- Use simple and recognizable shapes. If you're not familiar with the intricacies of art and design, you should at least learn about the importance of silhouettes. Take the most detailed element in your scene and reduce it to a single color. Is it still readable? By working with limited colors, you can build recognizable scenes that will remain readable as you increase the fidelity of those elements over time.
- Lighting is more important than poly count. A low-poly scene with superb lighting is a beautiful thing.
- Use colors or light to direct players towards a destination rather than HUD elements, maps, and markers.
- Integrate potential HUD elements into the game's environment where possible. Think of a digital readout on the side of a gun to represent

ammo, or an inventory system that exists in physical space within a player's backpack rather than in a menu screen.

- High quality animation on a less detailed character is far more valuable than a badly animated photo-realistic character.
- Use real-time lighting to represent time, rather than an on-screen clock.
- Use damage models or other unique environmental solutions to represent health instead of on-screen meters. Think of an enemy moving more slowly or walking with a limp to represent low health.
- Use animated GIFs to advertise your game if your minimalist aesthetic design results in unreadable screenshots.

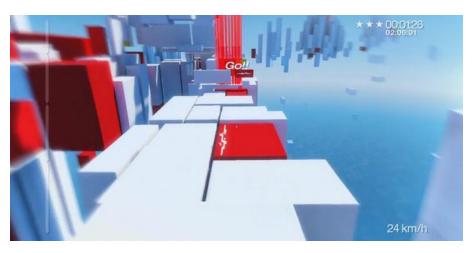
My Thoughts : being a party game and based on paint i can use the colour to provide the required feel, this needs more research to be done on colours and how to use them

Using Simple shapes other than complex one. As my game is more focused on the mechanics than the story, Characters shapes like a Sphere , Cubes etc can be use as it will not infringe on the narrative .

Having a minimalistic HUD can also helps allow for more emphasis on the game play.

Some Inspirational Games :

Mirror's Edge



The city that the player runs around in is full of bright, sharp edges and the buildings stand like white monoliths against a blue sky. Rather than following screen-cluttering HUD elements, players are instead led through checkpoints by running towards certain actionable environmental objects that have been painted red.

Thomas Was Alone



Thomas Was Alone, by Mike Bithell, is a game that you will never understand just by looking at screenshots. On the surface, Thomas Was Alone appears to be a typical puzzle platformer with simple, polygonal characters devoid of personality. What lies beneath that minimalistic coat of paint is a deceptively deep and captivating experience full of character.

Monument Valley



Monument Valley is a puzzle game built on Optical illusions . Having the gameplay/ Puzzles being difficult to grasp it helps a lot to keep the

minimalistic art and the end point is clearly indicated by a flag and which is simplistic and effective

Conclusion : After some thought i decided to go with a Cube for my character as i wanted to Minimalistic art and and the Floor/Tiles are squares and the the character can move only in the basic 4 Directions.

The World will also be Minimalistic, The only thing that the player will see is the Character's , Floor as any other assets are not required for the gameplay and the game doesn't have a major Narrative Part

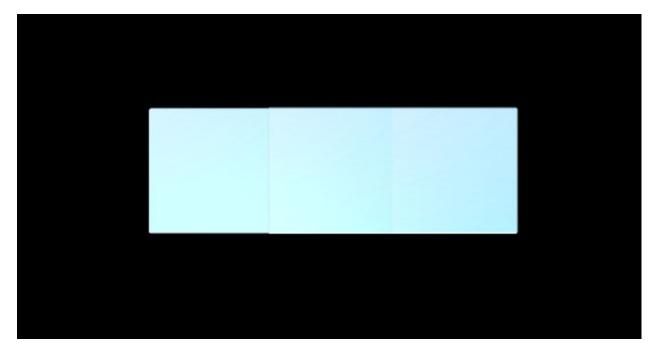
The HUD Will contain only the Timer, Pause Button and Paint Level. The paint level can also be removed if the i find another way of convey the Paint Level, by using something like saturating and desaturating the character them self or transferring the paint level on to the character itself.

Tiles

The tiles shape and form affect both the mechanic and the look & feel of the game.

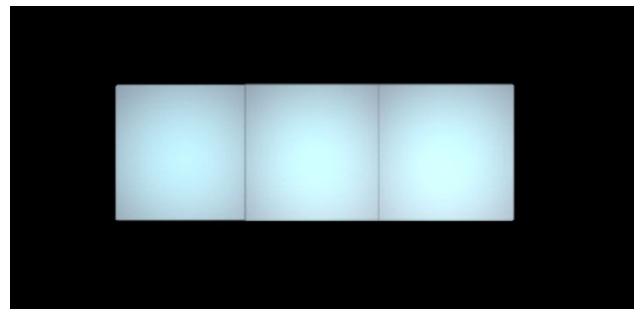
I wanted to show the individual tiles without show broad lines . As the game is based on print and color the lines will break the feel of the game .

For this i decided to use a halo in the cube textures itself which allowed player to differentiate between the tiles without noticing it much.

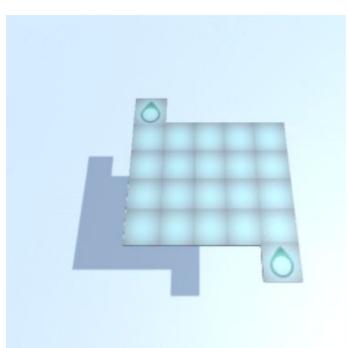


Before Halo Texture

After Halo Texture

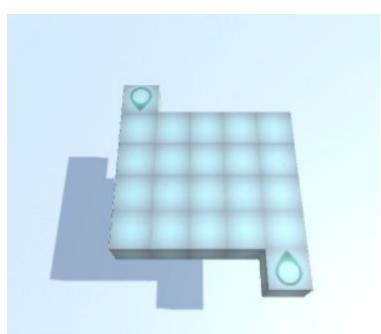


At the start the tiles thin but my peers felt the something was off and felt a floating feel in the game so i increased the thickness of the tiles to give a more grounded feel .

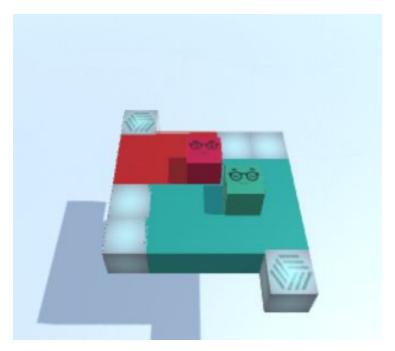


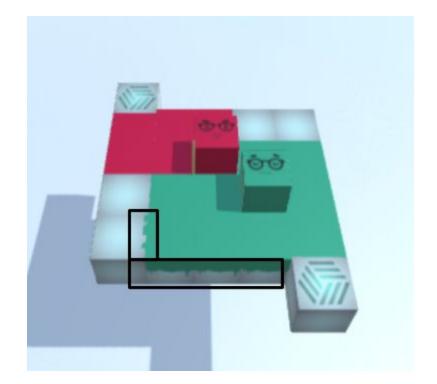
Before

After



For the painted tile i first just had them change colour , but it didn't actually give the feel that the tiles was painted , Especially for the ones in the edges and corners.





I added a splash type of effect to the painted floor tiles to the paint splash feeling to it

Character

I wanted the character to be simple and havre reason to its form and not just some random character that looks good .

While doing case study for my dissertation i realised that animation can completely make or break a game.

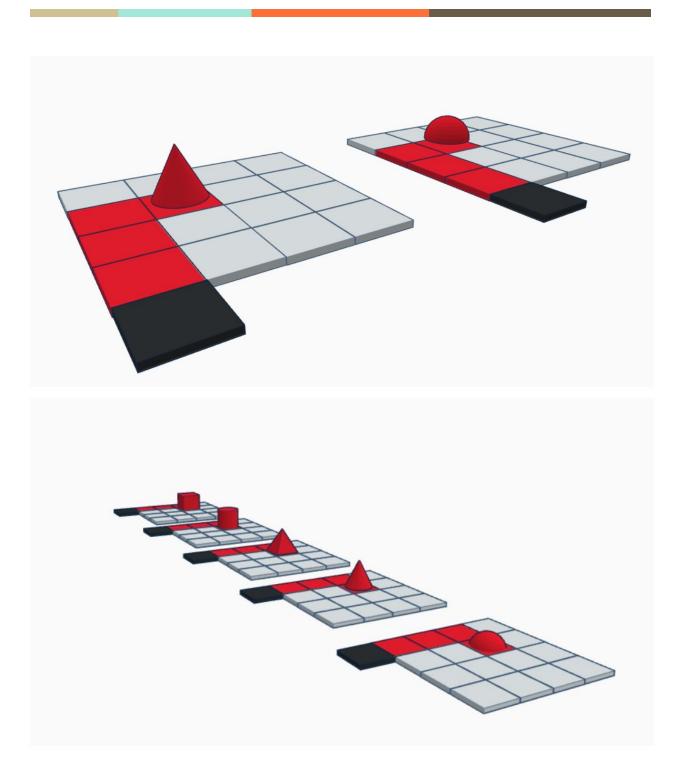
As i am not an animator i wanted to find a character that can give the same feel of a well made character with minimal animation .

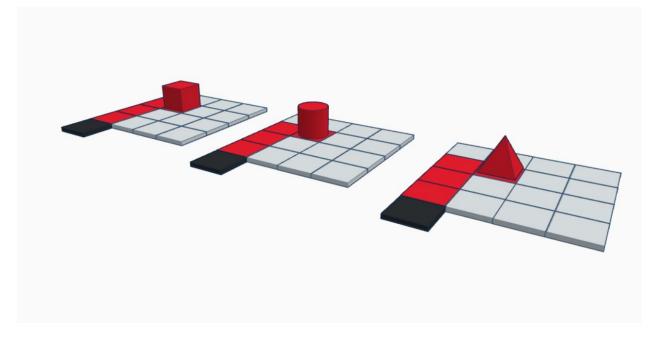
As the game is fasted paced long animations can be use as this will hinder the pacing of the game or make it feel completely off.

The game is tile based to there is no to have characters that are humanoid in shape .

My game is tile based game and the movement will be in fixed steps and the time between steps will be very less. Unlike a game of digital chess where there is time between the movements to completely play out a smooth movement animation for the above reason i did not consider a characters like vehicles, sphere, or any other moving objects as there will not be enough time to play out the animation .

As the tile are in the shape of a cube i started experimenting with characters which are simple Shapes as it also fits the minimalistic art of the game.



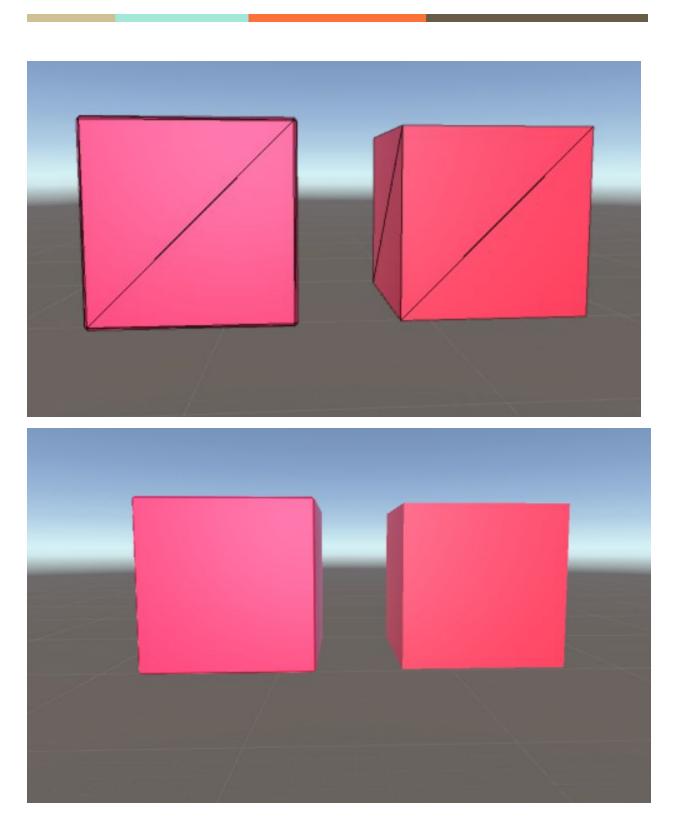


Out of all the shapes i tried, i went back to the cube (in prototype) seemed to fit best.

- It need very little animation if any
- The tiles being a cube in shape the character fit perfectly .
- The movement fit perfectly to a cube as the character moves on a square grid .

The size of the character needed to be a little smaller than the tile can be seen when the player is standing .

I also rounded the edges of the of the cube to give a soft feel that fits better with the fun party feel of the game.This is a small change but makes the feel better , even if the player does not recognise it .



After choosing the shape i wanted to add character to the shapes , to do that i decided to **add faces** to the cubes.

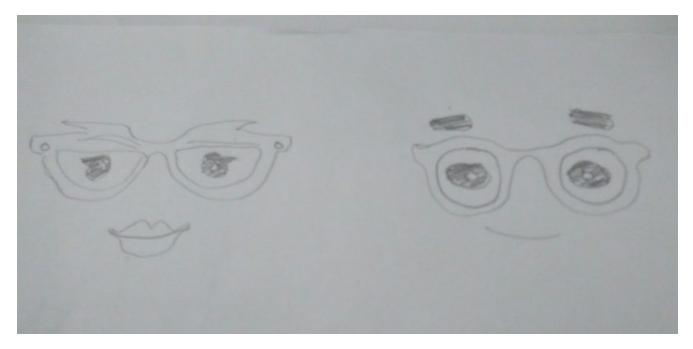
I drew **inspiration** from **UNBOX** the game and drew some Faces for cubes.







Rough Sketches



I Choose to keep the glass design as it add more depth to the character as rest of the character was just lines.

I tried new eyes but the eyes looking in a specific direction makes the character in the game would look odd.

0 0

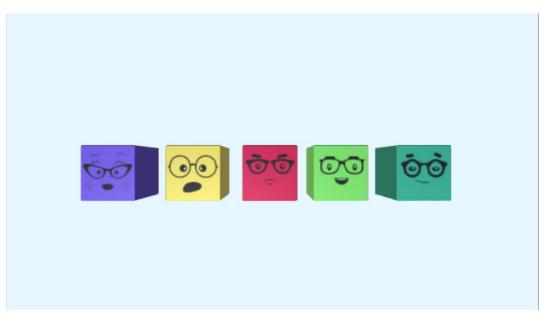
I tried different emotions in the character faces and choose the funniest of ones for the character (All char in Art Bible)

I choose these characters following the colour scheme that i had decided *(Explained Below)*.

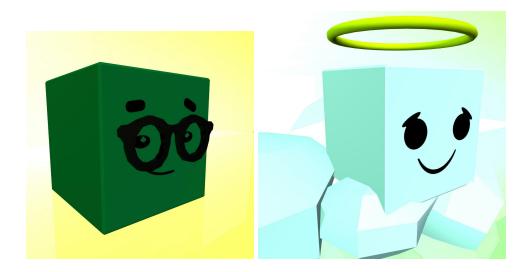
They will Be further developed but i wanted to continue build the game and its feel before i come back and experiment developing the textures on the character

This character design would appeal to a the target audience (Explained below).

Also the Funny charter and there colours gives a fun party feel to the game



I have also been experimenting with 3 Objects that over lay on the Cube character other than just 2D textures .depending on how play-Testers react i will continue with this .



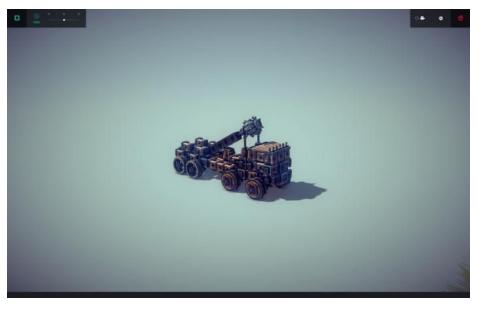
Background

I needed a background that complimented my games look and feel.

I needed a background had to be something that did not grab attention away from the tiles and the player.

Having a plane background is the best way to do it as elements in the background do not grab the attention of the player .

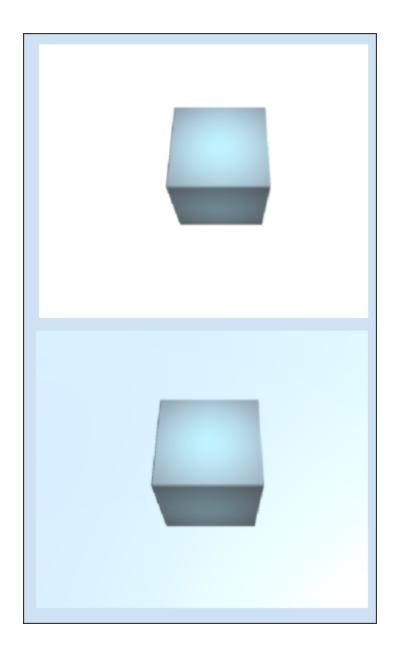
One of the best games that illustrate this is Besiege in which everything except the main character and environment elements that the it has to interact with everything else is in a blueish grey gradient .





The Main reason for the gradient being there other than plain flat colour being that it helps our eyes and brain feel a sense of 3D space .





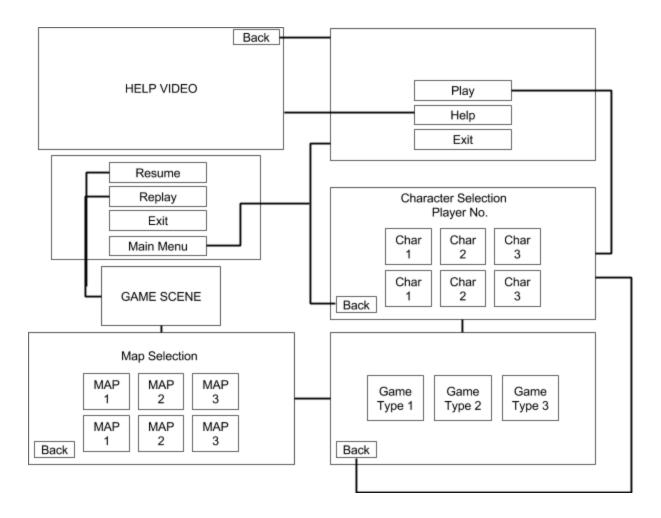
The Main reason for the gradient being there other than plain flat colour being that it helps our eyes and brain feel a sense of 3D space .

So i wanted to use this gradient to make the tiles visible without it standing out too much

UI/UX

I wanted to do a simplistic UI that matched the game's Minimalistic Art Style.

I Firsted Decided the UI/Menu Flow and later Went on to design the Actual UI Style .



I later tried a few UI Art Design

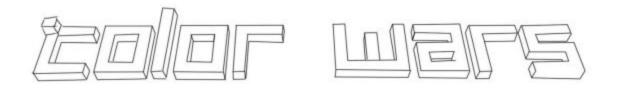
I Then Choose one from the above designs and developed it more as this design is the one that most people liked the most and Fit the game's Theme the best .





These are the few of the initial rough Sketches i did for the UI before Choosing One the final one

Final UI Outlines



select map

help

ANA

Character And Map Selection Screen Inspired By Mekoroma's Map Selection Screen























bech

Pause Menu

ScoreD

ScoresD

resume replay select map exit



Time Left :54

UI Buttons

reaume reaume select map select map exit exit back back

Based on the blocky minimalistic art style of the game i chose this style for the UI elements.

All Buttons Change colour when the cursor hovers over it and the colour of the button was decided depending on it function . Exit--->red ,Resume -->Blue, and so on.



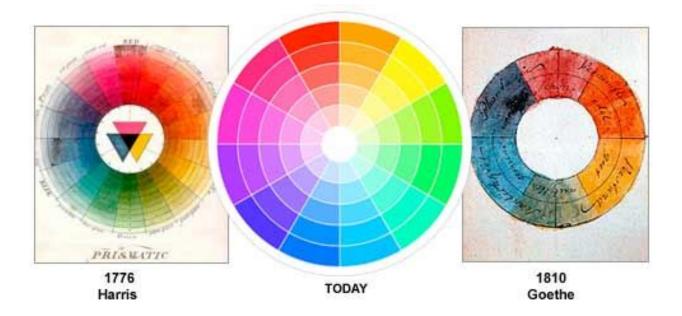
Color scheme

Basic Color Theory

Color theory encompasses a multitude of definitions, concepts and design applications enough to fill several encyclopedias. However, there are three basic categories of color theory that are logical and useful : The color wheel, color harmony, and the context of how colors are used.

The Color Wheel

A color circle, based on red, yellow and blue, is traditional in the field of art. Sir Isaac Newton developed the first circular diagram of colors in 1666. Since then, scientists and artists have studied and designed numerous variations of this concept. Differences of opinion about the validity of one format over another continue to provoke debate. In reality, any color circle or color wheel which presents a logically arranged sequence of pure hues has merit.



There are also definitions (or categories) of colors based on the color wheel. We begin with a 3-part color wheel.



Primary Colors: Red, yellow and blue

In traditional color theory (used in paint and pigments), primary colors are the 3 pigment colors that can not be mixed or formed by any combination of other colors. All other colors are derived from these 3 hues.

Secondary Colors: Green, orange and purple

These are the colors formed by mixing the primary colors.

Tertiary Colors: Yellow-orange, red-orange, red-purple, blue-purple, blue-green & yellow-green

These are the colors formed by mixing a primary and a secondary color. That's why the hue is a two word name, such as blue-green, red-violet, and yellow-orange.

Color Harmony

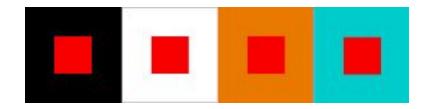
Harmony can be defined as a pleasing arrangement of parts, whether it be music, poetry, color, or even an ice cream sundae.

In visual experiences, harmony is something that is pleasing to the eye. It engages the viewer and it creates an inner sense of order, a balance in the visual experience. When something is not harmonious, it's either boring or chaotic. At one extreme is a visual experience that is so bland that the viewer is not engaged. The human brain will reject under-stimulating information. At the other extreme is a visual experience that is so overdone, so chaotic that the viewer can't stand to look at it. The human brain rejects what it can not organize, what it can not understand. The visual task requires that we present a logical structure. Color harmony delivers visual interest and a sense of order.

In summary, extreme unity leads to under-stimulation, extreme complexity leads to over-stimulation. Harmony is a dynamic equilibrium.

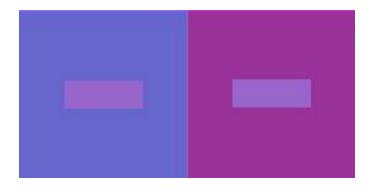
Color Context

How color behaves in relation to other colors and shapes is a complex area of color theory. Compare the contrast effects of different color backgrounds for the same red square.



Red appears more brilliant against a black background and somewhat duller against the white background. In contrast with orange, the red appears lifeless; in contrast with blue-green, it exhibits brilliance. Notice that the red square appears larger on black than on other background colors.

Different readings of the same color



If your computer has sufficient color stability and gamma correction you will see that the small purple rectangle on the left appears to have a red-purple tinge when compared to the small purple rectangle on the right. They are both the same color as seen in the illustration below. This demonstrates how three colors can be perceived as four colors.



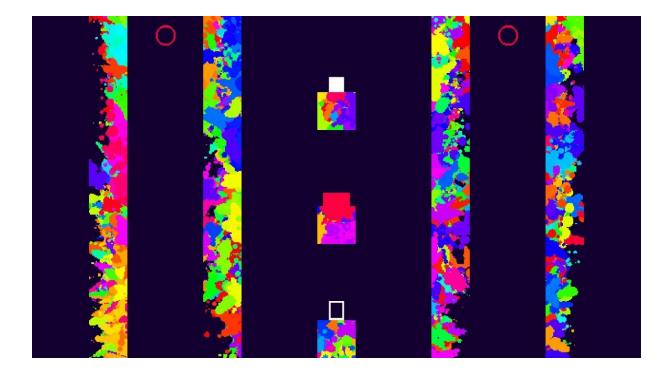
Observing the effects colors have on each other is the starting point for understanding the relativity of color. The relationship of values, saturations and the warmth or coolness of respective hues can cause noticeable differences in our perception of color.

Color Scheme for Color Wars

Before i Started to Select the color scheme for my game i wanted to research about what colours are used in games based of colours.

Ink





User reviews: RECENT: Mostly Positive (11 reviews) OVERALL: Very Positive (559 reviews)
Release Date: 5 Aug, 2015

INK is a fast-paced platformer about using colorful paint to uncover your surroundings. Defeat all enemies in the room and reach the goal! However, the terrain is invisible, so you need to discover the terrain by physically bumping into it, by performing a double jump or dying.

My Thoughts : I tried the game and What i realised is the game always use vibrant colours and on a dark blueish colour.

As the game is based on not being able to see the world without interacting with it the dark blue Background fits very well.

Colour Scheme in the game:

- Bright Vibrant Colours
- Dark Bluish Background

Splatoon







Splatoon is a third-person shooter video game developed and published by Nintendo for the Wii U, which released worldwide in May 2015. The game centers around characters known as Inklings—beings that can transform between humanoid and squid forms, and hide or swim through colored ink sprayed on surfaces using gun or brush-based weaponry.

My Thoughts : UnLike INK Splatoon Uses White-ish Backgrounds(Buildings), one of the reasons this works is that the game is in 3D Gradients can help in defining the 3d objects.

Just Like INK, Splatoon uses Bright and vibrant colours. When the ink/paint feeling like a thick liquid than the thin light feel in INK

Colour Scheme in the game:

- Bright Vibrant Colours
- Whitish objects.

Hue

Hue is a vibrant, award-winning puzzle-adventure, where you alter the world by changing its background colour.You need to use this Machanic to slove the puzzles .





User reviews: RECENT: Mostly Positive (13 reviews) OVERALL: Very Positive (56 reviews) Release Date: 30 Aug, 2016

My Thoughts :The game uses color in a very different way compared to other games , Other u being able to paint items you switch the secondary colour of the world (the primary being black)

Colour Scheme in the game:

- Bright Vibrant secondary Colours that are used to define the objects in the world .
- Black (primary colour) Background .

Colours and how they make you feel

I want the games colour scheme to invoke the the Fun-Party like feel.

It's obvious that not all color schemes are going to look visually appealing with every single game's theme. A color scheme should be used to strengthen the mood you are trying to convey.

Picture a horror movie: the scariest scenes all take place in a dark environment or at night. That's because dark colors convey a feeling of unease. So if you were to make a horror game, you probably wouldn't pick hot pink as the dominant color of your game; you would most likely choose a monochromatic or custom

color palette consisting of dark colors.

(https://gamedevelopment.tutsplus.com/articles/picking-a-color-pa lette-for-your-games-artwork--gamedev-1174)

My Thoughts : Dark Colours Seem to convey a unease feel so i have to avoid using dark colours .

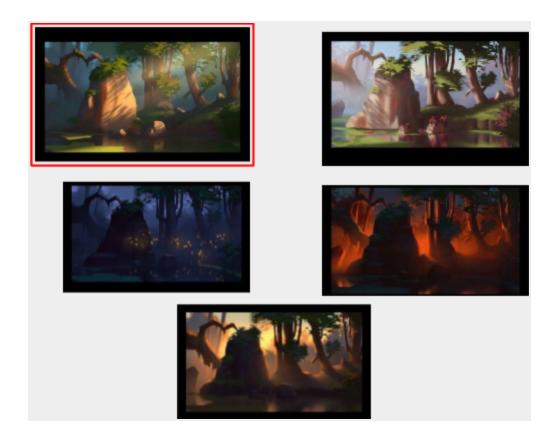
The Function of Color in Games

The primary function of color vision is to make it easier to identify objects, and indeed, the use of color in games reflect this. We make apples red in games because they are also red in the real world, and so we can recognize them easier in the game. But color has many other functions in games, as it does in art, design, and film. This section describe some of those.

Emotion

Color is a powerful way to evoke emotion.

The following is an example of essentially the same scene, with different colors. Each has a distinct mood..."



My Thoughts :The Highlighted ones give a feel of happy and Excitement (Decided from asking my peers) .

In addition to making games recognizable, <mark>color can also help convey its intended audience: for example, brighter colors are used more in casual games,</mark> while more nuanced colors are used in core games.



My Thoughts :As my game is for the casual gamers it is better to use Brighter colours .

Signifiers and Identifiers

Colors in games are used to identify different elements and alert the player to properties of elements.

Identifiers

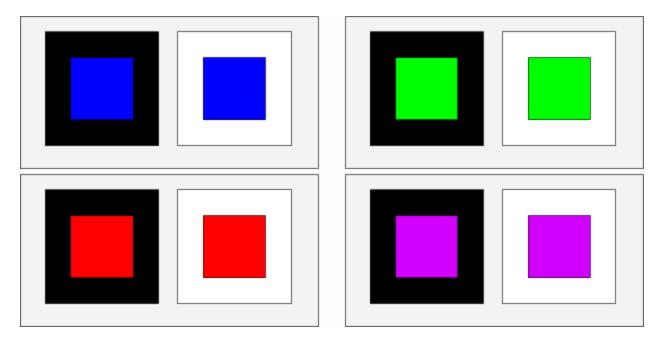
Color identifiers (also known as glyphs) are used to group and separate game elements, such as differentiating players, in game characters and in game areas.



My Thoughts :My game being a multiplayer game, have each character in a different colour will help a lot in differentiating the the two character , especially when both characters have the same general shape.

As my game is based on painting colours it is very important to pick the right color scheme.

I decided to use a white background as vibrant colours would look better on a white background than a dark one .



Plus it is easy for imagene fresh paint on a white wall/floor than on a dark wall.Problem being that if i use a white for the background and floor the player might not be able to differentiate between them. I use a gredition in the background and floor to solve this problem like the BG in "Mekorama"



Mekorama also is a good example in for bright - vibrant - rich colours .

Conclusion : So i decide to use a blueish- white greadriation for the background and floor and bright - vibrant - rich colors for the character and the tiles hey paint

Mechanic

I wanted to create a unique simple and fun mechanic.

For the tiles, I first locked at different shapes of tiles used in games.

1.Hexagon

This is the most common type of tiles used in tile based game mostly used in games like strategy games , turn based etc ast hexon gives more control over direction.



2. Square

This is the second most common type of tile based game and is mostly used in puzzle games .Even though the it constraints direction it is a simple and easy understand .

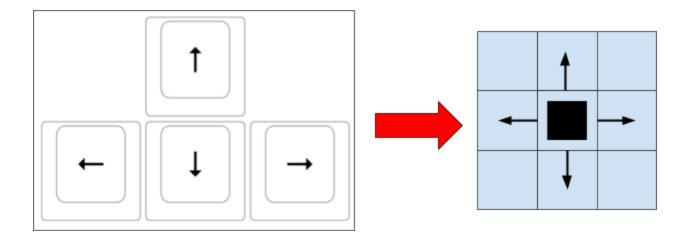


3.Triangle

This is very rare as the the grid is very constrains in terms of direction and a very few puzzle games use it



After some experimenting i chose to use the square tiles as the keys? controls alove for easy 4 directional movement. The Hexagonal tiles is ideal for point and click mechanics but it is difficult to get this movement through key board and point and click is slower.



I developed the game Future and after a reviews from peers ,teacher and industrial professional i refined the game mechanics and rules to what it is now .

I wanted the game to be Fun for the players to play.

Games with Similar Mechanics



Splatoon is primarily a team-based third-person shooter which is playable by up to eight players in online four-versus-four matches, although the game also features local one-versus-one multiplayer matches and a single player campaign. Players control characters called Inklings, who have the ability to shapeshift between human and squid forms. In humanoid form, Inklings can shoot ink in their team's color, which can be used to cover the environment or "splat" opposing players or enemies. Transforming into a squid allows players to swim through ink of their own color, even up walls and through grates, hiding from the enemy and replenishing their ink supply in the process. Conversely, enemy ink is much slower to move across in humanoid form, cannot be swum through in squid form, and can gradually deal damage. Players can use their ink to try and "splat" their opponents, which will send them back to their team's respawn point whilst also providing a large splat of ink. In all modes, except for the two-player mode, players can use the Wii U GamePad to view a map of the surroundings and instantly launch towards the location of another teammate, as well as use optional gyroscopic controls to assist with aiming.

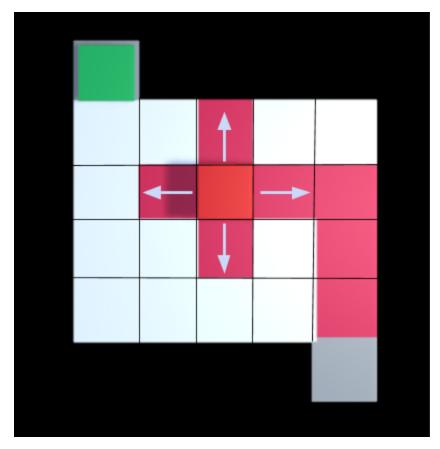


My Thoughts :Even though this game has a completely different core Mechanic than mine the idea of using paint /ink is similar to my game.

There is also a penalty to moving on the opponent's colour which is similar to my game .

The art style is minimalist and cartoony to give a better feel of the fun party type idea of the game .

- The game is tile based and the character in the game sits on top of a floor made of individual tile.
- The player can move in only 4 directions front , back left and right



- The player can't stop moving ,if he/she dode he is losses the game immediately.
- The player has a limited amount of pint and each time the player paints a floor tile the player loses some amount of paint .

My Thoughts : at first i thought that that the button clicking might get irritating so i tried a version of the game where the player could hold a direction button other than tapping it but it turned out that people actually like the rapid tapping so i changed it back

Re-paint mechanics

If there is a tile in the enemies colour and the player tries to paint it in his colour the tile will first change to neutral colour , the player must then repaint the tile to paint it in his colour.

In doing so the player loses **twice the amount** of paint than normal and will spend **twice the amount of time.**

My Thoughts : The repaint mechanic was created as a balancing mechanics so no player can't just go around repainting the opponents floor without any consequences.

Paint Collection

To re-fill paint the player must go to special floor tile called "Paint Buckets".

Paint Buckets are common to all and don't have a specify colour

Once on the paint bucket the player's paint level moves up and down and the player must hit a certain button to select the level of paint, this is simulate to the power bar in a lot of games. (Mostly games like golf, cricket etc where the player must select the power in which the ball must be hit).

The player **can't move** until he **selects the amount** of paint he needs .

My Thoughts : one other thing i changed is other than the player pressing a certain button, the level of paint is decided on when the player leaves the Paint Bucket the reason for this being that the button pressing was breaking the flow of the game and the many players just wanted to pass through the bucket and not stop there .

Game Type 1 – Classic

In this game mode the player try to paint as much of the floor they can in a limited amount of time.

Paint buckets are spread out through the map and players must keep and conquer (Paint) new floors .

The player can paint floor or stop the opponent from moving by blocking their path

As the game is multiplayer the difficulty is subjective.

One way to improve game is to add blockers/Pillars in the map design

Game End Conditions :

If **any player stops** the player is out of the game .If it is a 2 person game the other player wins no matter the amount of paint the player has .

When the **timer** gets over the player with the **most tiles** in his colour **wins**.

My Thoughts :

During the game testing i realized that the game gets boring during mid-game , People complained about the game sections being too long .

Previously the timer was decided depending on the no of tiles in the Map

Eg: if there are 40 tiles in the maps

Timer = 40 X 2sec(time for each tile)

80sec

But i turned out that, While this worked for smaller maps the play time for the bigger maps starter to get too long therefore i decide to have a max time limit - around 30-40 sec ,requires testing.

Also players like the maps with more Pillars (Blocker) than the plain one even though i thought large open maps might be preferred by the players

Some of the others ideas to get over this is :

Powers that spawn and on collection give special power ups .

- Paint 4 tiles at once
- Can paint over opponents tile directly

Dynamically change the map (Pillars that move you and down)

Game Type 2 – Race

In this game mode the map is a linear race track.

Here there are checkpoints that the player must pass through to gain paint.

Unlike the Paint Buckets the player can't stop on the checkpoints

The player **can't move** on a **neutral or opponent's tile** if he/she runs **out of pain.**

when the player has no paint he/she can **move only in their colour** .

If the player runs out in the middle the player must go back and get more paint.

This add slove the problems of all players have the same movement speed

Player can cut off opponents access to paint by braking the players link to the previous checkpoint but in the player must leave his track and spend more paint which puts him/her in the danger of running out of paint.

Game End Conditions :

If any player stops the player is out of the game .If it is a 2 person game the other player wins no matter the amount of paint the player has .

Whichever player reaches the end first wins.

My Thoughts :

The reasons behind the checkpoint machanic be in that the movement mechanic of this game type being that the players have the same movement speed. This creates a prob with race type as it depends on one player being faster than the other.

Player having to go back to get paint adds difference in the speed as players should decide if they want to go empty the paint reserves and then fill or keep toppling their pain level up. And the counter for this again adds a new style

Other things that can solve the problem being

Powers that spawn and on collection give special power ups .

- Paint the complete row in his/her colour which will break the opponent's link to the checkpoint.
- Can paint over opponents tile directly
- randomise the other players colours (only if more than 2 players are playing)

Maps that force the players to fight for the path (all paths blocked except one)

Game Type 3 – Have a link

It is a version of the classic but with the "**can't move** on a **neutral or opponent's tile** if he/she runs **out of pain** and can **move only in their colour .**

My Thoughts :

I felt can't move on a neutral or opponent's tile if he/she runs out of pain and can move only in their colour mechanic was a real good one would completely change the way the game is played where the classic type of the game was all about brute force this game type for ces the player to think and play and encourages defencive play

Other

Close games (in party game types) are also more fun than a huge leads so the game is built around trying to get this feel .

So i am trying to balance the paint leaves and no of tiles , no of pillars , timer to get the perfect feel

Feel of the game

The game feel that i wanted the players to feel was a Happy -Fun - Comdy .

Something like Mario Cart.

Being a party type game it is all about fun multiplayer games.

To get these feelings :

- I kept the game fast paced so that the players kept moving and there is no make mistakes that make for some fun in game events .
- I am designing the character in to be funny cartoon character faces on the top of the cube .
- The Theme of the game being bright and filled with vibrant colors further helps convey the fun feel of the game

Fun happy feel How get by fun by keeping game close wins Funny characters Sound

Level Design

Each level in the current build of the game is leads different play type from fast paced button mashing to strategy to a fight over movement space.

This is so that i can evaluate Which playtype?maptype is more fun and why so that the final Levels can be more fun .

For the level design i used the custom tool to create level on paper and convert them into digital forum .

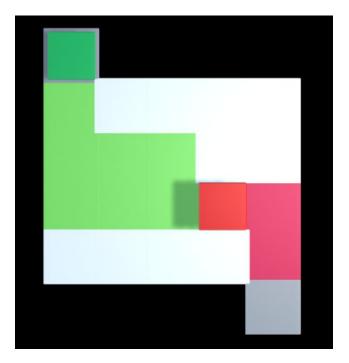
Overlay the designed map on a 10X10 Grid and number the tiles according to the key below .

Туре	ID Number
Empty	0
Normal tile	1
Paint Bucket	2
Piller	3

Then note down the numbers starting from the top left

Enter this code into the tool

Eg:

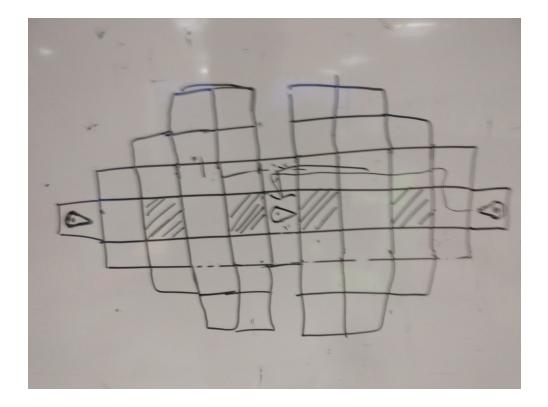


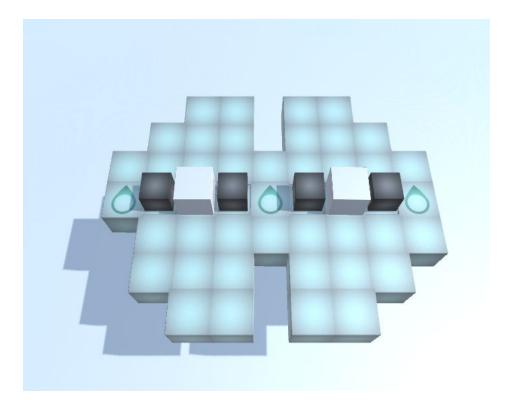
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0
0	0	0	1	1	1	1	1	0	0
0	0	0	1	1	1	1	1	0	0
0	0	0	1	1	1	1	1	0	0
0	0	0	1	1	1	1	1	0	0
0	0	0	0	0	0	0	2	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

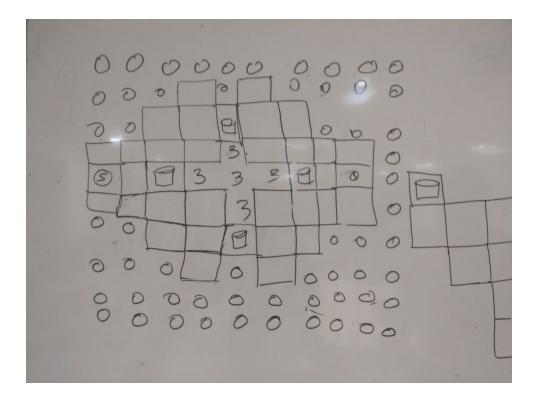
So the code for this level would be :

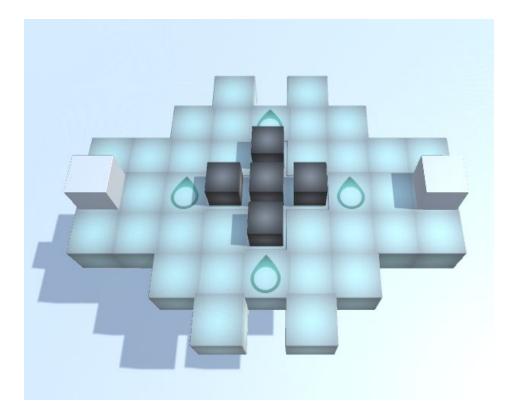
Using this method I created levels of different sizes and no of blockers so that i can play test it and experiment with different level configurations .

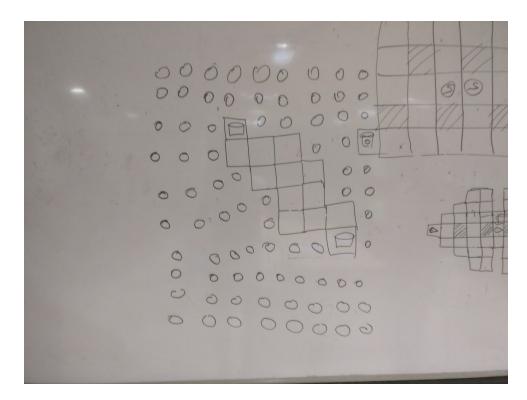
I am still in the process of play testing and deciding what variation of the elements make for a fun gameplay.

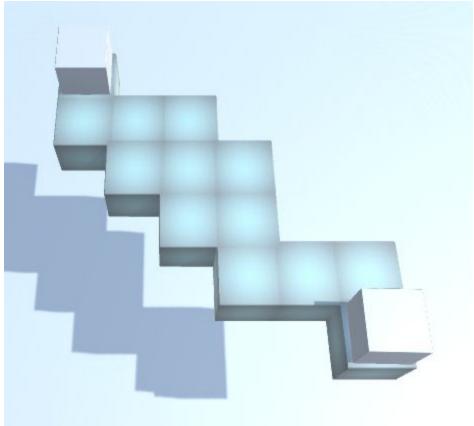












PlayTesting & Game play Changes

• There were 2 Major game rule changes that was done during the productions .I decided to make these changes after i showcased the a build of the game in a Game Designer Meetup (Recorded on the video). I had also had my peers play my game and observed their behaviour.







- The Issues were :
 - The players would get forget to hit "CTRL" when they were on a paint bucket and try to move. The fact that the Character suddenly stopped was breaking the flow and frustrating the player.

THe idea give the player behind the mechanic was to give the player some time to select his paint and give another button that the player must remember to hit. But During PlayTesting It was observed that player really don't like this rule and was spoiling their fun .

So i change the rule to as soon as the player leaves the paint bucket the paint level gets selected .

And other Issues was with the amount of time a match lasts
The time a match was previously decided depending on the no of tiles on the map as to give enough time to play through the whole map.

```
50 Tiles ---> 50X2s(Amount of time for each tile)--->100sec match
```

The start of the game should be a race to fill as many blocks as you can, the mid game would be a battle to hold those tiles and if possible get more and the end would be trying to keep the no. of blocks more than your opponent.

But it turned out that players enjoyed short session lasting anywhere from 30-45 sec .Players started getting bored in the mid game of some of the larger maps .

I am currently in the process of testing the optimal match time for each map and adjusting the formula that calculates the match time

• One of the other trend that i noticed was that the players liked the maps with blockers than the ones without them. Players seem to have more fun in maps haat create mazes like paths using blockers .This is something that i need to keep in mind while designing maps in the future

Target audience

I have designed the game to appeal to large and wide range of players . As a party game the target audience for my game is players of all age. My game's Target audience is similar to Mario Kart games .



PEGI 3

The content of games given this rating is considered suitable for all age groups. Some violence in a comical context (typically Bugs Bunny or Tom & Jerry cartoon-like forms of violence) is acceptable. The child should not be able to associate the character on the screen with real life characters, they should be totally fantasy. The game should not contain any sounds or pictures that are likely to scare or frighten young children. No bad language should be heard.

Publishing and Marketing

I plan to submit my game for Steam GreenLight and ID@Xbox .





What is Steam Greenlight?

Steam Greenlight is a system that enlists the community's help in picking some of the new games to be released on Steam. Developers post information, screenshots, and video for their game and seek a critical mass of community support in order to get selected for distribution. Steam Greenlight also helps developers get feedback from potential customers and start creating an active community around their game during the development process.

Both Are for indie developers Platforms that allows Developers to showcase their games and get funding to further develop their game.

Both also Act a Marketing platforms in 2 of the biggest gaming community and platform, they have the ability to reach a lot of gamers and get a lot of exporecture for your games.

I also plan to pitch the concept in Conference like NGDC(Nasscom Game developers conference) to get in touch with potential investors and make the game know in the gaming community.