Numb State Studios DCSP

Visual Journal

Brief

To develop a full fledged game as a group in the span of 48 hours. This is part of the Game Jam competition. The topic was given on 20/12/16 at 5 PM. The things to be presented are as following:

Build file of game project.

Game Design Document

Screenshots

Gameplay video

Group RVJ

The software for developing the game is Unity 5 Engine. For the art assets and background, we used Adobe Photoshop. For coding, there is an in-built software in Unity called MonoDevelop.

What is a Game Jam?

Game Jam, an event usually taking place from 24 to 72 hours or more, but limited time (48 hours in current Game Jam). People from different fields team up together to develop a full game. Game designers, artists, programmers, writers, animators, everything related to the game development field.

It is a great way for people from various fields to collaborate and work as a team.

How does it work?

Location: There are different types. Few of them are local events, being held in a University or a stadium of sorts (our college classrooms for us). Some of them are made up of teams from their own locality, usually from their homes and submitted online.

Time Limit: Game Jams always have a restricted time limit, usually from 24 hours to several days depending on the event (48 hours for us). Time limits are set to create pressure and making the teams productive.

Theme: The theme of the game is usually announced shortly before the competition begins. This centralises on ideation and trying on different themes and also restricts the developers bringing pre made assets or ideas into the game.

Technology: The technology the player uses like Adobe Photoshop and Unity is up to the developer's' choice, unless the competition states otherwise. Usually there are no restrictions of the sort.

Team: It can be done individually or in a group. Usually, the basic necessity in a team is a programmer and an artist. This can be expanded with the number of



A Game Jam convention being held in Birmingham City University.

The Team

The team was set by random and assigned particular posts to share the work amongst us. The team is as follows:

Sushan Sudev (Project Manager)

Vishal (Level Designer)

Shabbir (Programmer)

Fazzi (UI Designer)

Mohit (2D Artist)

The Topic

Before Game Jam began, there were 4 topics given to us from which we would get one topic at random. The four topics are:

Gandhi's Game – A game that must have zero violence.

Comic book games – Games that uses only 4 colours with emphasis on contrast.

Life is black & white.

Little world – Game with ant-like perspective.

Before we got our topics, we worked on each of the given concepts.

Ideation

Since we got the list of topics for the competition, few concept designs were made and discussed. Here are a few of them:

Black& White (Simple gave concepts) Sidescrolling shooter. > 8-bit Black Intert Wipring cuil out interest \ white Is 2-0 site surdlar (like Vector) Endless numer After player croker > Different mine while different envonment. atflorent characters

Frennes on platform Visuals: Tapon every to shoot Charge costine adleti of character' Breakable by collection (optional) files (01-3 Score Syltem? Scone Distance Distance Y Mys. no-of evenies killed Obstactes + no-of coins, collected (optimal) Conore mores Powerups diagonally Latoral side scroker of Force push nond Level progression or Urmm though Infinite Rumor or nowber of platfors Both (shield bubble) ConceptStory: Old school romantic Art Style: jumps up the Stairway to Hearon 2 or 2.5D simple looking for her loved ones embrace open county see by and ait through all the obstacles. hanges as you progress of.

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Black & White

The topic we got was the theme "life is black and white". The first thing we did was a group discussion. The kind of game we were going to make. The list was:

2D

Overhead

Side Scrolling

Isometric Overhead

We wanted to develop a 3D infused in orthographic view but we were not that experienced with 3D animation and programming which was a huge disadvantage. On the other hand 2D animation wasn't an issue so we decided to Next was to decide what genre of game it was going to be. The choices had to be made with the experience we had and the time limit. The topics we could choose from were:

Infinite runner

Puzzle platformer

Story based platformer

Level based platformer

The name of the game is 'Ascending'. The idea of this is from the game level and how it moves upwards.

From discussions and concept designing, we came up with a 2D side scroller level based game. The idea and core behind this game is to make it very tough for the player, but give a possibility to proceed so it gives replayability.

The concept story we came up with was a simple one, a spirit escaping from the depths of hell to get back to Earth where he can haunt people in peace.

Why a Spirit?

Sprite animations are way simpler to make compared to human-like sprite movements.

Since our topic is black and white, and a spirit or ghost is usually white. It would be a suitable sprite.

We wanted a negative protagonist doing something he wouldn't do. A spirit usually is stuck in Hell and him trying to escape is something new.

Easier to use particle systems on the character.

Game Concept References

The main references for the game concept came from Youtubers. People like Pewdiepie and Markiplier play rage games like The Unfair Platformer, Cat Mario and many others. People like rage platformers because it gives them the urge to go on and complete it.



The Unfair Platformer



Concept Rough Ideation

if(m Rew Pokemon Skyle over onewheard 200 L> Ghort based 5 2. · Kardom spanning Time system 1 hit hill Level Side Bared Black Shek Agne 20 smarchal y white light Tap to Fly Two way & morewell Scrothing Platforme - Spitzes, tire, limited the platformy, Down to top Fragile platforms, fake platforms.

· Caneva follous player · 20-sec. 10 sec. or dead (Optional) · Clothing and syle (gondor) Pophiand rache white aklest is white

2D Character Concept

A hovering spirit is what we decided on. There are a lot of references to choose from. We started off with something simple like Casper The Friendly Ghost and the logo of Snapchat app.





Casper The Friendly Ghost

The Snapchat Ghost

2D Character Reference









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The final character was done by Mohit. After this he moved on to the animation of the sprites.

Character Sprite Animations

The animation sprites we need for the player are:

Idle

Left and right movement

Death

Explosion

Left and Right movement Animation

The sprites shown is facing left. This is inverted and made for the right side movement. Both sides were made to lean a bit so it shows like the sprite is moving forward.

Death Animation

Explosion Animation

Player Mechanics

We decided to have simple controls for the playable character to make the coding easier and the mechanics simpler. There's only three movements for the player:

Left right movement

Jump movement

The jump we decided to make differently. Instead of single or double jump, we set the limit to five jumps. The map is designed accordingly and this makes it more challenging for the player to progress. The jump tap is inspired by Running Fred.

In this game, there is a flying feature where you can flap the wings for a limited time to stay afloat, which can be increased by buying upgrades. This is what I wanted to do with the jump mechanics in our game.

Level Design

At first, we decided to have the game movement diagonal, upward to the right. Then decided to stick to upward movement because it also goes along nicely with the player mechanics.

The level design should have only one way to progress and should be challenging for the player. Super Meat Boy is a good example for this type of level system.
Level Design References



Top: Prince of Persia 2D Top right: The Impossible Game Bottom right: Dangerous Dave









Top left: Inside Top right: Limbo Bottom: Super Meat Boy



Level Design Rough Layout

This is the initial map layout we did. A vertically upward map.







Level Design Final Layout





Level Mechanics

Our game is all about making it tough for the player, so it has been filled with booby traps. These are the traps we planned and decided. Few of them made it to the game, few of them didn't.

Spikes

Flames

Fragile platforms (breaks after a few seconds)

Fake platforms (not in final)

Button placed traps (not in final)

Fake gem traps

Portal door

Portal ceiling (not in final)

The ones which did not end up in the final game because of coding difficulties and time shortage.

Assets

We had made simple tilesets for the game, and the flames were done in particle system in Unity. These are the created assets.



Spikes

Platform 1



Platform 2



Platform 3





Swiveling Axe

Portal Door

Game Background

The game background is supposed to be located in hell. So the concept is that it's supposed to be dark, in a cave type. The primary idea was to make a parallax background to give the background depth and detail. But in the end, we stuck to a simple background image.

Background References







This was the first background attempt based on the reference images above. It's supposed to be a parallax background but the level layout and this did not match as well.



This is the final background is this, the stone background is an asset from photobucket.com and the fog screen was made to give a dark and gloomy effect.

User Interface

The user interface was designed to be very simple and to the point. Nothing flashy or anything, very simple buttons with added glow to the button. This is the basic UI splash screen:







Main Menu Screen





ON	OFF
PAC	
BAL	:R

Options Screen







Pause Menu Screen



I can' go on, I'm a noob. Bring it On! Nothing can stop me.

Exit Screen

You steller WOOD JOB. WELL PLAYED. (6) 1) YOU CAN'T BEAT THIS DUDE? REALLY? DAMN YOURE LAD () HAHAHAMTHOUAT SO ... YOU AREN'T DESTENED FOR GREATNESS 3 I'VE SEEN COWS PLAY BETTER THAN YOU MARAAY!

RETRY7

NO

This is the writings for the death screen when the player dies. I used these lines to irritate and make the player play again.

The exit screen for the game is inspired from Max Payne games' exit screen.

yes

ALL I HAD LEFT WAS EMPTINESS, AND THAT HAD RARELY SERVED ME WELL.

Better to live a lie than face the truth.

But I couldn't give up now.

Max Payne has different types of exit screen dialogues like this. They used this instead of yes and no, which is a great UI style.

QUIT 🚚

Sounds

Sound assets were taken from the free license website opengameart.org. Main menu and in-game music was added. The music is a creepy horror type theme.

Sound liet BG - Game Sound / Honer left right (wild sound) Jump up sound Fine collinion Spike collinon +Landing sound (After jumping) Icon pickup sound (trop) Level completion sound _____ 5 (an also be same Yout died sound sound Final gave completion soud] Explorion sound Main Mene BG Button sound

Behind the Scenes











Final Game













