

# **Prospector Jasper**

By: Amanda Coler and Jason Skillman

### Table of Contents

Game Description	5
High Concept Statement	5
Genre	5
Target Audience	5
Target Platform	5
Development Platform	5
Target Rating	5
Length of Play	5
Game Mechanics	6
1. Digging:	6
a. Player will dig tunnels underground to get to where they need to reach enemies. As player digs blocks, the blocks will disappear, leaving a tunnel behind. Players will also be able to mine rocks and receive ore and power ups from rocks.	ł
2. Boomerang:	6
a. When player attacks, the pickaxe will do a boomerang affect. The boomerang will be thrown to the enemy then bounce back to the player. The Boomerang can also bounce off a wall and come ba to the player	ck
User Experience + User Interface Problems	6
Technical Limitations	7
Player Types	7
(How different player types can affect the gameplay)	7
The Achiever: (They wish to receive all the achievements in the game, gain rewards, increase sco	
The Explorer: (They wish to explore the whole game)	7
The Socializer: (Players who wish to socialized with other players)	7
The Killer: (Players who enjoy killing things)	8
Basic Controls	8
The controls for the game:	8
Flow Chart	9
Concepts	.10
Story-boards and Concepts:	.10
EARTHQUAKE	.16

Tone Mood Boards/Explanation	20
Reasons for the Colors:	20
In Game Screen-Shots	21
Non-Prototypes:	26
How the Game Screens Work:	31
(MAIN MENU)	31
(HIGHSCORES)	32
Dimensions	36
Font	45
Character(s)	46
Character Dimensions	46
Jasper	47
Walking Sprite Sheet	47
Idle Sprite Sheet	48
Mining Sprite Sheet	48
Fighting Sprite Sheet	48
Death Sprite Sheet	48
Enemies	48
Quartz Enemy	48
Walking Animation	48
Attack Animation	49
Death Animation	50
"Fun-Guy" Enemy	50
Walking Animation	50
Death Animation	50
Angry Rock Enemy	51
Walking Animation	51
Death Animation	51
Power-Ups	51
Speed Up	51
Health Up	51
Attack Up	52
Booby Traps	52

Dynamite	52
Earth Quakes	52
Ores and Gems	52
Different Colored Gems:	52
Different Kinds of Ores:	52
Dirt Tiles	53
Top Dirt:	53
Bottom Rocks:	53
The HUD	53
(Health HUD (OLD))	53
(Health HUD (PRESENT))	54
(Power-Up HUD)	55
(Score HUD)	56
Player Feedback	56
Where to View Prospector Jasper	58
Itch.io	58
YouTube	60
Credits:	60

### **Game Description**

#### High Concept Statement

Prospector Jasper is a Pixel Arcade Maze game that has the user playing as a character named Jasper. The game takes place in the ground, digging through the soil to collect resources, power ups and fight monsters to increase your points to get to the number one score on the leaderboards. (Goal)

Genre Pixel Arcade Maze Game

Target Audience Ages eight and older, all genders

# Target Platform PC

Development Platform Unity

### Target Rating

E for Everyone

#### Length of Play

Generated Infinite Levels

## **Game Mechanics**

- 1. Digging:
  - a. Player will dig tunnels underground to get to where they need to reach enemies. As player digs blocks, the blocks will disappear, leaving a tunnel behind. Players will also be able to mine rocks and receive ore and power ups from rocks.
- 2. Boomerang:
  - a. When player attacks, the pickaxe will do a boomerang affect. The boomerang will be thrown to the enemy then bounce back to the player. The Boomerang can also bounce off a wall and come back to the player.

## User Experience + User Interface Problems



-Console Gamer -Used to Controller -Bigger Screen Might have a harder time with PC Controls



-Color blind - Deaf May not be able to see certain colors



- Epileptic

Earthquakes in game may not be suitable for John

## **Technical Limitations**

- Have to use the mouse to press the buttons since the main menu is the tutorial screen, which you would use the arrow keys to move the player
- Using a computer for an arcade game doesn't give it the same feel as if using an arcade machine
- The only computer the game can be played on is a windows computer. The file does not work on Mac and Linux, so it is then not available to all players.
- The game can only be played in the resolution of 1920 x 1080 because we did not program the game to minimize due to the choice of canvas size for the game.
- The vanity screen that unity provides for the game can interrupt the fast game play we wish to provide for the game.

## **Player Types**

#### (How different player types can affect the gameplay)

# **The Achiever:** (They wish to receive all the achievements in the game, gain rewards, increase score)

Achievers who play Prospector Jasper would feel relieved that there is a leader board in the game. The achiever would feel happy with every point gathered (from gems, ores and monsters). I feel the only thing the achievers would have a hard time with is the fact that there are no real... in game achievements that let the player feel like they have completed the game because there are no quests, just infinite levels. I feel the only thing they really have to look forward to is gathering power-ups and getting a high score to make it to that number one on the leaderboards.

#### The Explorer: (They wish to explore the whole game)

Explorers who play Prospector Jasper probably would have a great time playing the game. Since the game is a maze arcade game (similar to Dig Dug) the area will be fun to explore and as you proceed further into the ground, the light fades and you only have the light from your mining helmet. This drives the player (in this case, an explorer) to explore all parts of the game through the darkness.

#### The Socializer: (Players who wish to socialized with other players)

Socializers who play Prospector Jasper may not find the game appealing, because it is not a MMO. It's an arcade game. I could see how the leaderboards could start conversations but nothing really in the game drives the player to be social through an online interface.

#### The Killer: (Players who enjoy killing things)

Killers who play Prospector Jasper would probably like the fact that you can kill multiple monsters and they do make sounds and it makes it feel complete when the monsters are killed because you can only proceed to the next level if all the monsters are killed. I feel it could also get boring because there are only three monsters in our game.

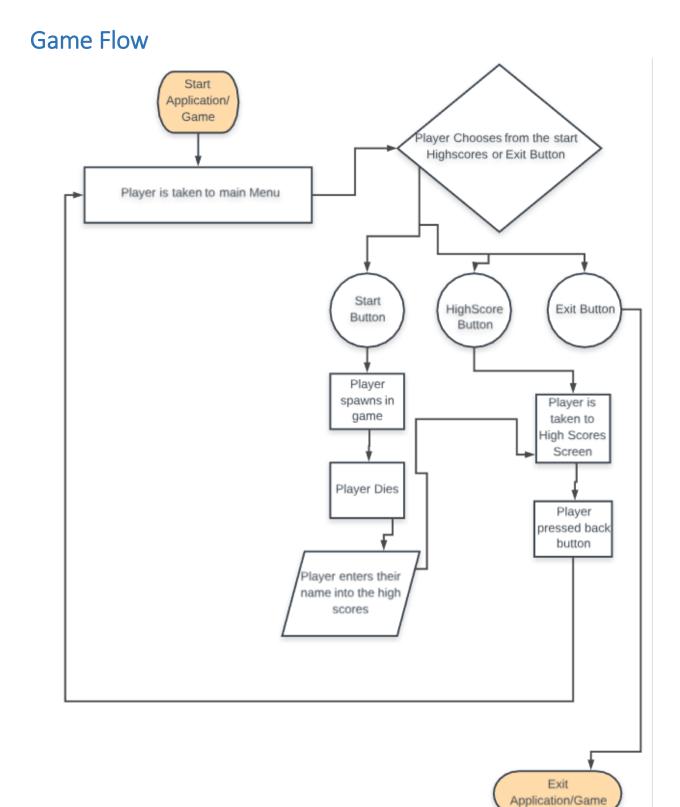
### **Basic Controls**

The controls for the game:



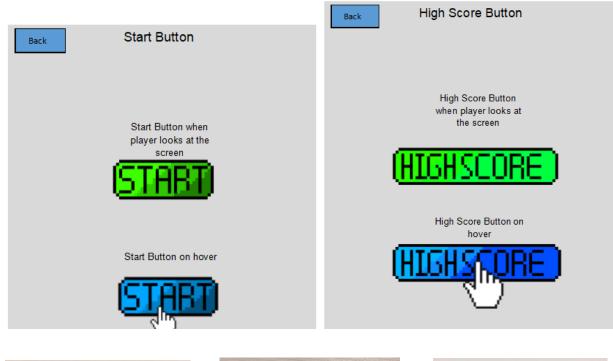


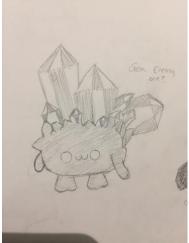
**Move Character** 



## Concepts

### Story-boards and Concepts:







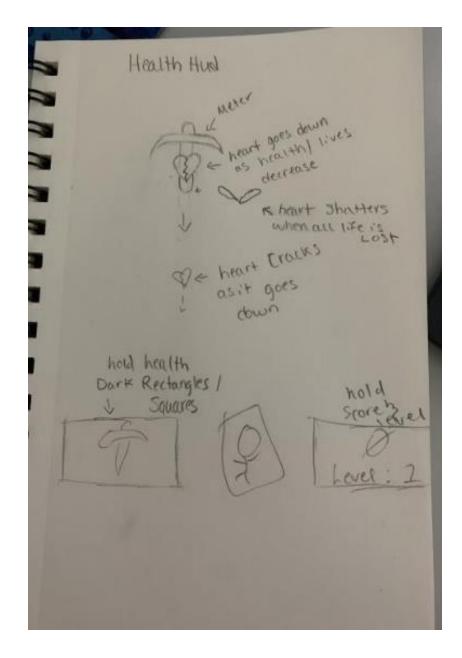












# **Prospector Jasper: Mechanics**

Inspired by Dig Dug

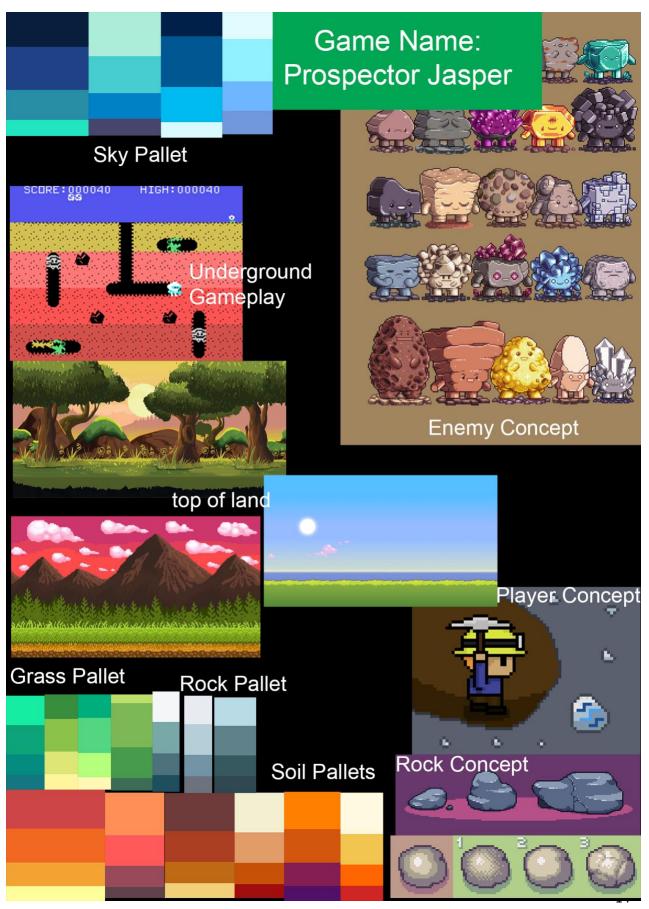
Character can move up down left and right.

You must kill all of the enemies in the level before you can move on. Enemies will walk side to side.

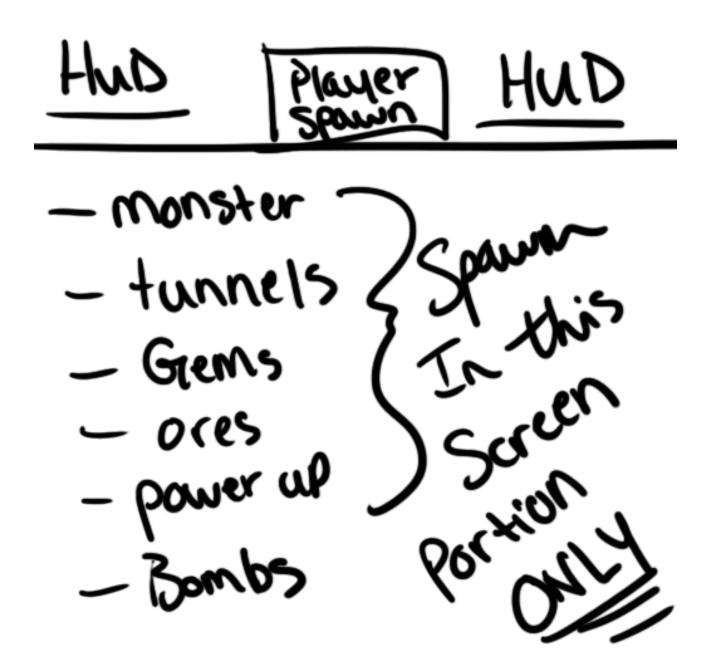


You can attack with Spacebar. You will throw a pickaxe 2 blocks away and it will come back to you like a bomerang.

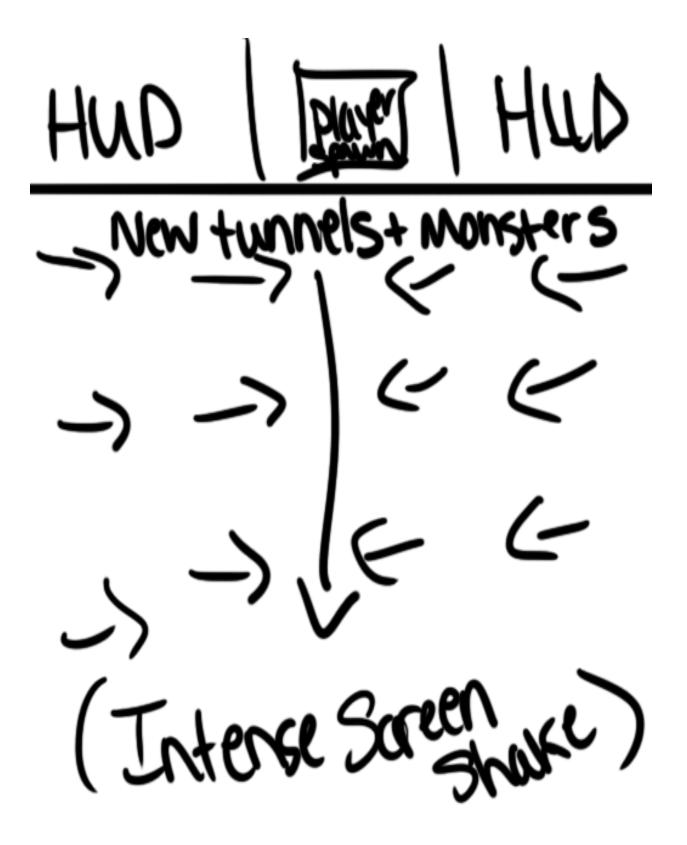
over the map and will fall on the player if under it.

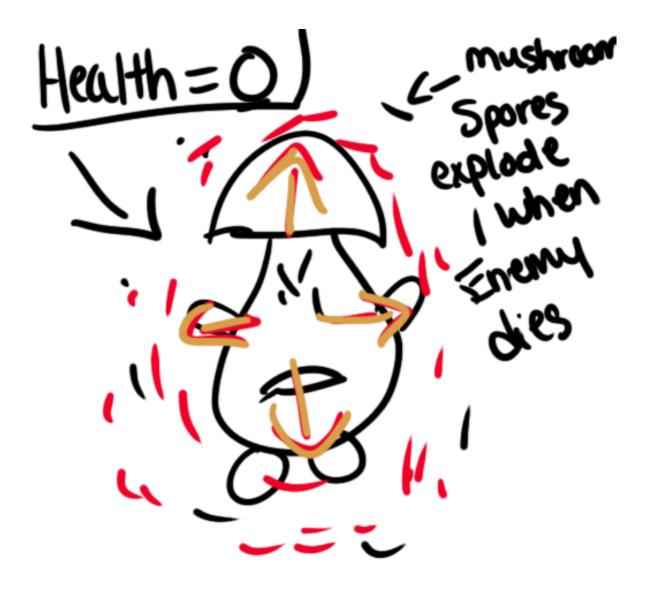


©2019 Amanda Coler













### **Tone Mood Boards/Explanation**

## Tone - Prospector Jasper (Color Selections)



The colors for the ground: Brown, Orange and black The colors for the Background: Brown and Black The colors for the lights: Orange and Yellow The colors for the Gems: Red, Orange, Yellow, Green, Blue, Purple The colors for the dynamite: Red, orange and yellow The colors for the Monsters: Grey, Red, and black

Landscape:	Lights:	Lights: Gems/Ores: Monster Colo	

#### Reasons for the Colors:

The reason I chose the color pallet that I have in our game is the fact that we are under the ground. You are in a cave, where there will be gems and ores to obtain. These colors should be more bright and vibrant to the player, so it feels like a reward and is noticeable. The lights are a brighter red, orange and yellow color to produce a light opacity to it. This resembles a light in a better way. The landscape will be brown and black because we are focusing on underground cave aesthetic where there are rocks and

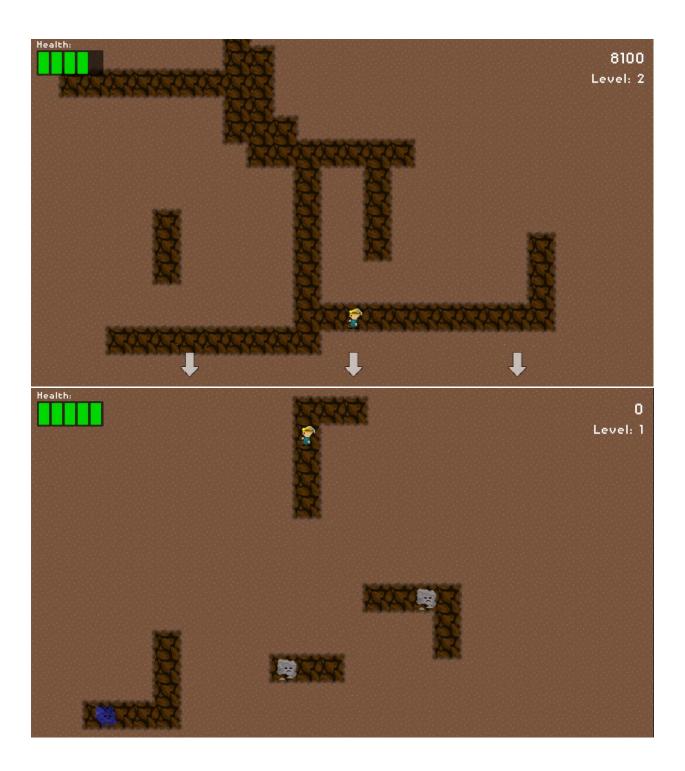
dirt. Monsters are the colors they are so that players can do and find them and attack them. The crystals on the quartz monsters are all different so there seems to be variety to the game.

## In Game Screen-Shots

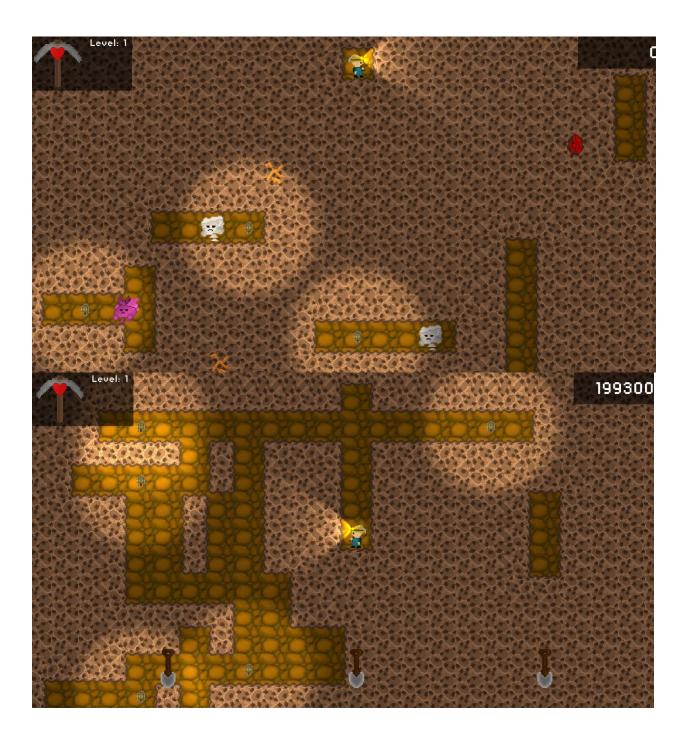
Prototypes:







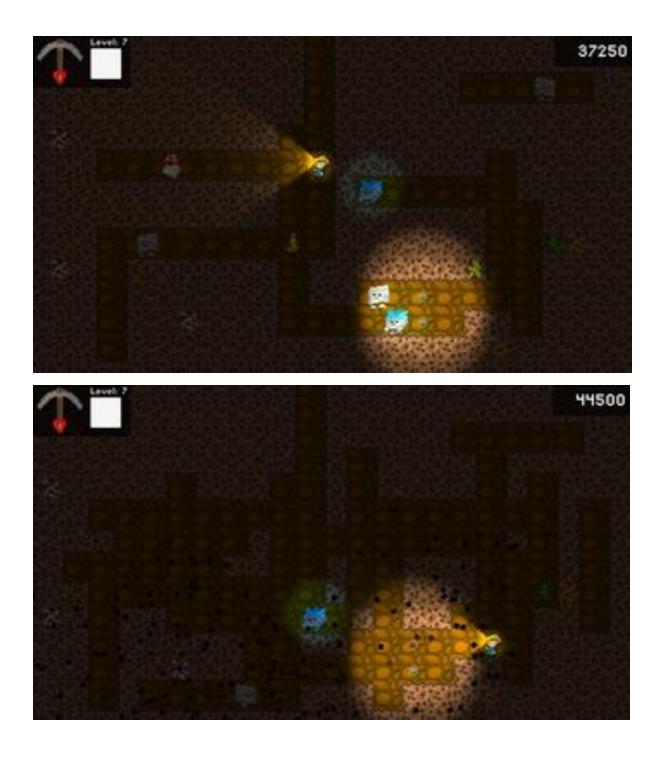


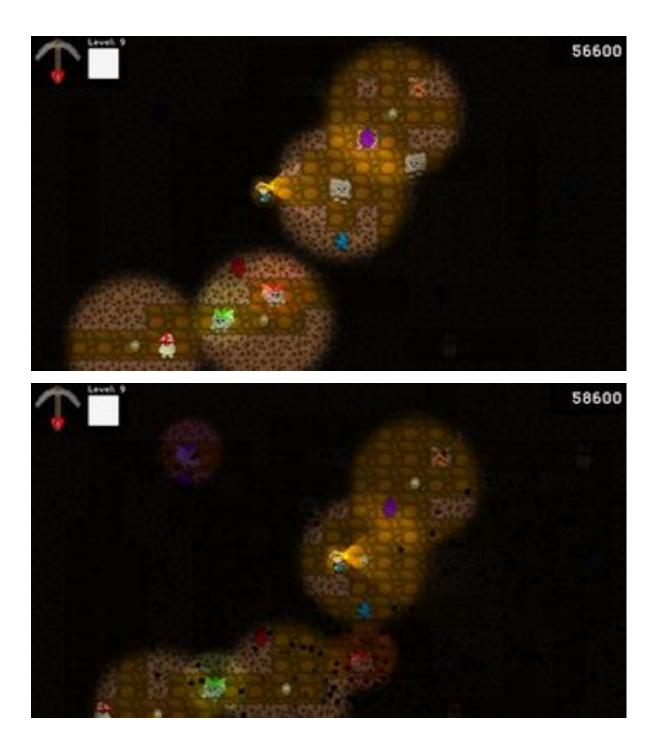


#### Non-Prototypes:











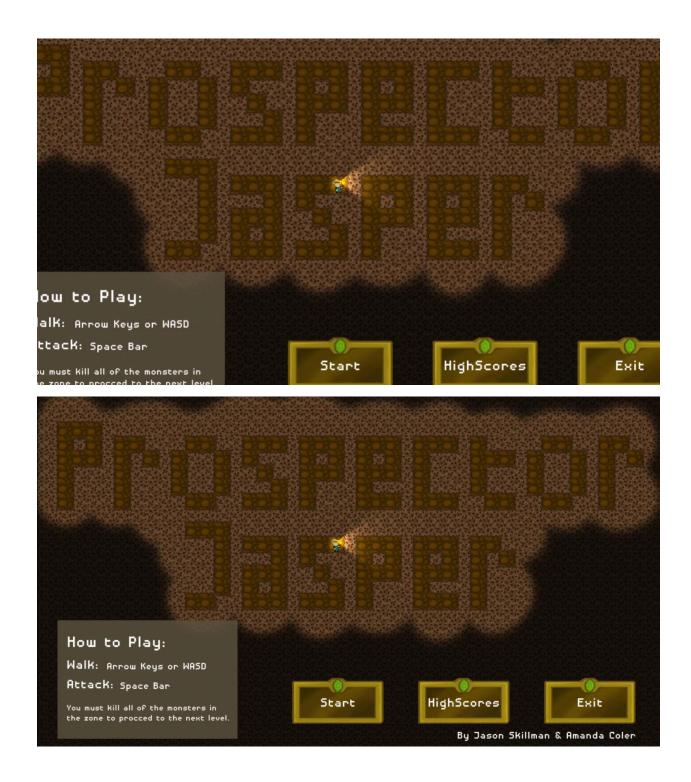
	HIGHS	ORES	RES	
	Jason Level: 19	269450		
*	Spencer Level: 11	122900		
	Tyler P Level: 10	110850		
	Jason v2 Level: 10	97250		
	Spencer Level: 9	88600		
Back	Jason	82750		

### How the Game Screens Work:

#### (MAIN MENU)

The main menu starts off with the camera focused in on Jasper (Player). The camera slowly zooms out and you realize that Jasper was mining out the title of the game. (Pictures shown below of transition)



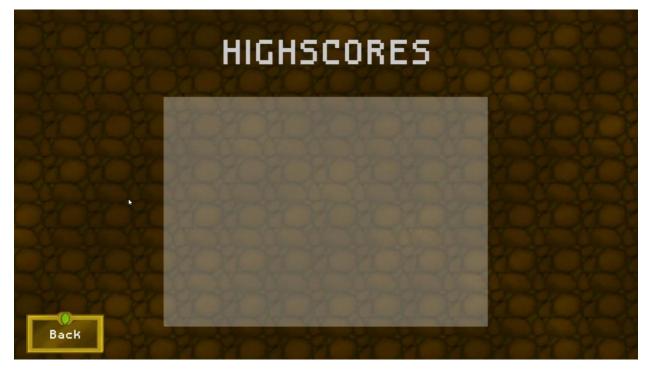


#### (HIGHSCORES)

When the player has gone through four lives, the high scores screen will immediately open. The User can type in their name. The high scores will list the player name, the level they died on and the total score. (Pictures of the high score screen below)

(OLD)

	HIGHSCORES	
DOR	Amanda Level: 9	92000
RORDE	Jananananaa Level: 12	73450
a ta ta	Manderz Level: 6	32000
RAR	Please kill me Level: 4	24800
ROROR	AManda Level: 3	8700
Back	mar and marked	And ma



HIGHSCORES	
Enter your Name:   Ecre: 60750   Manda Submit	

(In Game Currently)

How to Play: Walk: Arrow Keys or WASD Attack: Space Bar Pause: P Start HighScores Exit You must kill all of the monsters in the zone to procced to the next level. Ru Jacob Skillman & Omanda Colon & A B & # + B U H 🗔 🌖 🏦 🗖 🗃 垦 . 0



	HIGHSCORES		
	booboo Level: 2	200700	*
Strander -	Manderz Level: 11	118350	Store Star
North Star	Amanda Level: 9	92000	A Start
A Brand	C Money Level: 8	75350	W Stra
A BAR	Jananananaa Level: 12	73450	A Start
Back	Amandayo	51850	운 ^ 己 @ 44 여 <sup>( 837AM</sup> 喝)

# Dimensions

UI

All assets are 32x32 pixel

#### Main Menu:

How to play



Pos X	Pos Y	F
30	29	
Width	Height	
570	385	

#### Text

How to Play:	
Character	
Font	▶ DisposableDroidBB
Font Style	Normal
Font Size	62
Line Spacing	1
Rich Text	

# Text (Script)

	•				
V	V	а	lŀ	:	

#### Character

cital acces	
Font	▶ DisposableDroidBB
Font Style	Normal
Font Size	50
Line Spacing	1
Rich Text	

#### 🔻 🚺 🗹 Text (Script)

Text	
Arrow Keys or WAS	D
Character	
Font	▲ DisposableDroidBB
Font Style	Normal
Font Size	38
Line Spacing	1
Rich Text	

#### Start button



🔻 T 🗹 Text (Script)	)
Text	
Start	
Character	
Font	DisposableDroidBB
Font Style	Normal
Font Size	50
Line Spacing	1
Rich Text	

#### Credits

By Jason Skillm	an & Amanda Coler
Text	
By Jason Skillman 8	& Amanda Coler
Character	
Font	▲ DisposableDroidBB
Font Style	Normal
Font Size	40
Line Spacing	1
Rich Text	

#### High Scores:

#### Input popup



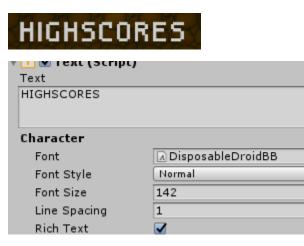
🔻 T 🗹 Text (Script)	
Text	
Enter your Name:	
Character	
Font	☑ DisposableDroidBB
Font Style	Normal
Font Size	64
Line Spacing	1
Rich Text	
🔻 T 🗹 Техt (Script)	
Text	
Score:	
Character	
Character Font	☑ DisposableDroidBB
	DisposableDroidBB Normal
Font	
Font Font Style	Normal

🔻 🔟 🗹 Input Field (S	(cript)	💽 🖬
Interactable		
Transition	Color Tint	
Target Graphic	NputField (Image)	
Normal Color		
Highlighted Color		
Pressed Color		
Disabled Color		
Color Multiplier	0	- 1
Fade Duration	0.1	
Navigation	Automatic	
	Visualize	
Text Component	Text (Text)	
Text		
Character Limit	15	
Content Type	Standard	
Line Type	Single Line	
Placeholder	TPlaceholder (Text)	
Caret Blink Rate		0.85
Caret Width	0	- 1
Custom Caret Color		
Selection Color		
Hide Mobile Input		
Read Only		

🔻 🚺 🗹 Text (Script)	)
Text	
Submit	
Character	
Font	▲ DisposableDroidBB
Font Style	Normal
Font Size	36
Line Spacing	1
Rich Text	

▼ <b>T ✓ Text (Script</b> Text	)
X	
Character	
Font	Arial
Font Style	Normal
Font Size	28
Line Spacing	1
Rich Text	

#### **High Scores title**



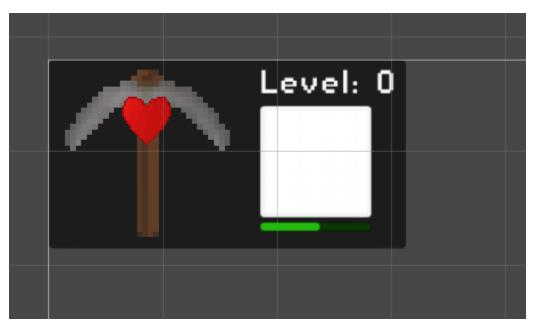
#### **Every Score profile**

Pos Y	Po
-68	0
Height	
770	
	-68 Height

#### **Back Button**

▼ <b>Text (Script)</b> Text	
Back	
Character	
Font	DisposableDroidBB
Font Style	Normal
Font Size	50
Line Spacing	1
Rich Text	

#### HUD



#### Pickaxe

Pos X	Pos Y	Po
10	-5	0
Width	Height	
155	151	

#### Level

Pos X	Pos Y
185	-1
Width	Height
250	42.03

▼ Text (Script) Text	
Level: 0	
Character	
Font	☑ DisposableDroidBB
Font Style	Normal
Font Size	38
Line Spacing	1
Rich Text	

#### Power-Up

Pos X	Pos Y	Р
185	-40	C
Width	Height	
100	100	

▼ Text (Script Text	)
Powerup	
Character	
Font	DisposableDroidBB
Font Style	Normal
Font Size	75
Line Spacing	1
Rich Text	

🔻 🖸 🗹 Slider (Script)	🛐 =
Interactable	
Transition	Color Tint
Target Graphic	🚰 Handle (Image)
Normal Color	
Highlighted Color	
Pressed Color	
Disabled Color	
Color Multiplier	0
Fade Duration	0.1
Navigation	Automatic
	Visualize
Fill Rect	SeFill (Rect Transform)
Handle Rect	Handle (Rect Transform)
Direction	Left To Right
Min Value	0
Max Value	1
Whole Numbers	
Value	0.5

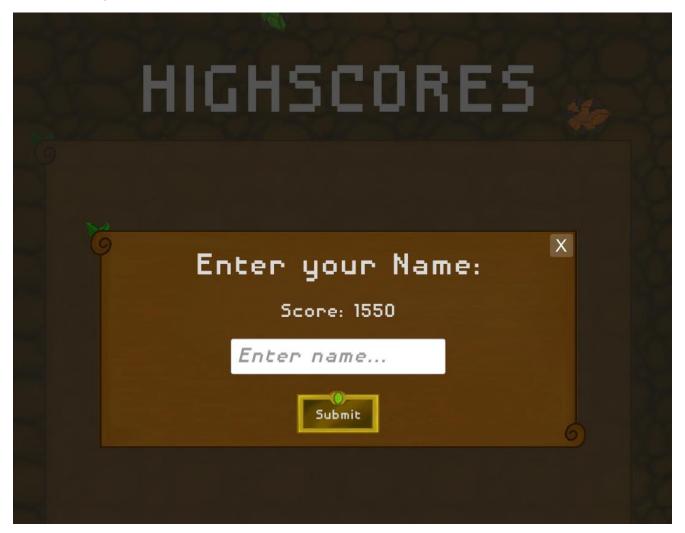
Score Bar

Rect Transform	n		
stretch	Left	Pos Y	Pos Z
<b>•</b>	0	0	0
2	Right	Height	
	15	100	] [
Anchors			
Pivot	X 0.5	Y 1	]
Rotation	X 0	Y 0	Z 0
Scale	X 1	) Y 1	Z 1
🔊 💿 🛛 Canvas Rende	rer		
Cull Transparent Mesh			
🖊 🔽 🗹 Text (Script)			
Text			
0			
Character			
Font	Disposable	eDroidBB	
Font Style	Normal		
Font Size	68		
Line Spacing	1		
Rich Text			
Paragraph			
Alignment			
Alian Ru. Casmature			

# Font

Font used was

Pixel Font – DisposableDroidBB



# Character(s)

### **Character Dimensions**

V	1	Transforn	ı						0	댞	٥
	Posit	ion		-0.5					0		
	Rota	tion		0			0	Z	0		
	Scale							Z			
		Sprite Rer	nde	erer					1	킕	\$
	Sprit				Fur	١g	uy_Wall	kin	g_(	0	
	Color										1
	Flip										
	Mate	rial		٥s	prit	tes	sDiffuse	(L	.igh	itir	
	Draw	Mode									
	Sorti	ng Layer		Defa	ault						
	Orde	r in Layer		10							
	Mask	Interaction									
	Sprit	e Sort Point		Cen	ter						
	4	Rigidbody	2	<b>)</b>						칶	٥
		Box Collid	ler	2D						칶	٥
				ሌ		Ed	lit Collid				
	Mate	rial		Non		Ph	ysics M	ate	eria		
	Is Tri	igger									
	Used	By Effector									
	Used	By Compos	site								
	Auto	Tiling									
	Offse	t									
		0				0					
	Size										
		0.9				0	.75				
		Radius		0							
	Info										
		Animator							2	큐	٥

🔻 🗟 📝 Funguy (Scrip	ot) 🔝 🗐	¢,
	🖻 Funguy	0
Health		
Damage Dealt		
Speed Min	0.03	
Speed Max	0.045	
Score	1250	
▼ Audio Growl Clips		
Size		
Element 0	💝 growl 1	0
Element 1	😓 growl2	0
Element 2	😓 growl3	0
Audio Growl	Audio Growl (Audio S	0
Audio Hit	🗖 Audio Hit (Audio Sour	0
Audio Death	🛋 Audio Death (Audio S	0
Prefab Score Popup	🔍 Canvas - ScorePopup	0
Prefab Hit	💙 Hit	0
Direction	Right	ŧ.
Can Move	✓	
Time Elapsed	0	
Duration	0	
Spore	🔍 Spore	0
Detect Area Right	DetectRight (Box Coll	Θ
Detect Area Left	DetectLeft (Box Collic	0
Spawn Quartz Right	SpawnRight	Θ
Spawn Quartz Left	© SpawnLeft	0
SpritesDiffuse Shader Sprite		<b>*</b> ,

## Jasper

### Walking Sprite Sheet



#### Idle Sprite Sheet



#### Mining Sprite Sheet



#### Fighting Sprite Sheet



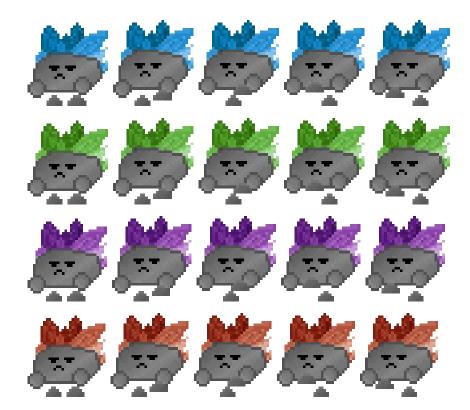
#### Death Sprite Sheet



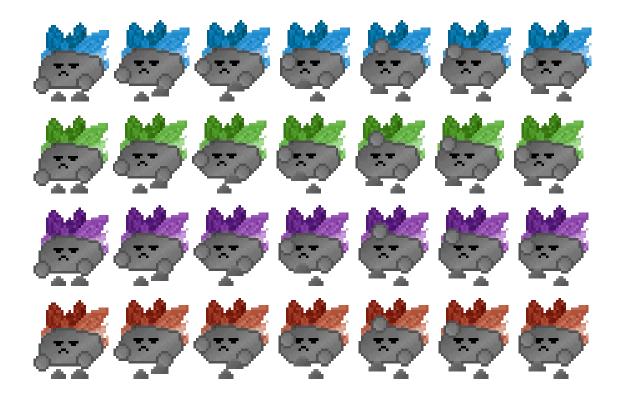
# Enemies

#### Quartz Enemy

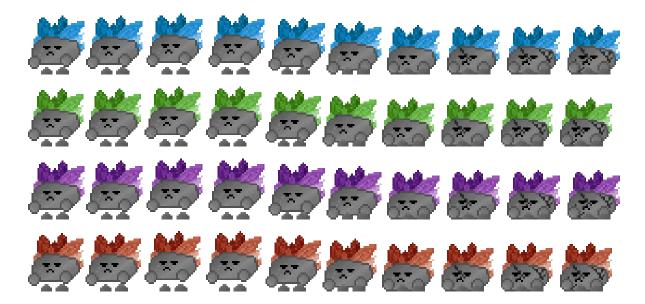
Walking Animation



#### Attack Animation



#### **Death Animation**



"Fun-Guy" Enemy

Walking Animation



#### Death Animation



## Angry Rock Enemy

Walking Animation



#### Death Animation



Power-Ups Speed Up



Increases the players speed

Health Up



Gives +1 Lives

#### Attack Up



Grants the player with faster attack speed

# **Booby Traps**

Dynamite



Bombs are randomly spawned in each level and explode when the fuse is lit.

#### Earth Quakes

Earth Quakes can happen during any part of the game, but start happening more frequently when you start proceeding down in the level.

## **Ores and Gems**

Different Colored Gems:



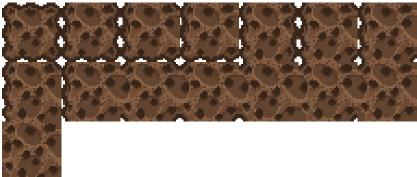
#### Different Kinds of Ores:



The ores and the gems go on top of the "Top Dirt" tiles. When the player mines the tiles with ore or gems, the score increases depending on which gem/ore you mined.

## **Dirt Tiles**

#### Top Dirt:



#### Bottom Rocks:



## The HUD

#### (Health HUD (OLD))

The health HUD is a pickaxe with a heart in the middle of it. As the player loses a life, the heart falls to the bottom of the pickaxe with a cracking animation to follow along with it. When the heart reaches the bottom of the pickaxe, the player has one more chance to live, but then will die if the player gets hit by a monster. Here is what the Health HUD looks like. This HUD is on the top left hand side of the game.









### (Health HUD (PRESENT))





#### (Power-Up HUD)

Right below the level, will be a power – up HUD. The power – up only shows up on the HUD when you receive one. The HUD will show the power- up that you have received, and the duration of time left till it runs out. When the power – up disappears, the power up is no longer in use and has run out of time.



### (Score HUD)

The score shows up on the top right-hand side of the screen. It starts at zero. As the player mines ores, gems and kills monsters, the score will increase.



# **Player Feedback**

## Tyler (19 years old)

**Liked:** He liked the boomerang effect. The darkness of the levels scary. He also thought the game was addicting and very satisfying to play.

Disliked: Cannot attack down. He wanted more power-ups (specifically the health up)

## Justice (19 years old)

Liked: Mining is so rewarding and the sounds are reassuring.

## Brittney (20 years old)

**Liked:** The growl sounds make the game come to life. The assets are pleasing to the eye and the lanterns really add ascetic to the game.

Disliked: The player sometimes moves too slowly.

## Spencer (20 years old)

**Liked:** The amount of lives seems very reasonable. There are enough amount of lamps and the lamps give the darkness this real feeling. The theme of the characters is appealing, I love the underground cave and theme.

Disliked: The player sometimes moves too slowly.

## Jason (19 years old)

Liked: It is an interesting concept of a game.

**Disliked:** It is laggy between blocks, the spore hit box is way too big so it makes fighting the spores impossible.

## Jessica (10 years old)

**Liked:** I liked the gems. They are so colorful and pretty and the sound that happens when you collect them makes me feel like I won the game. I like that it is scary. It makes me feel awesome when I have completed a level.

Disliked: The enemies are scary and growl a lot.

## Alexandra (7 years old)

Liked: It can be really hard to play but the gems make it worth it.

**Disliked:** It's so hard to play. I don't know if I could ever be as good as everyone else on the leaderboard.

## Where to View Prospector Jasper

#### Itch.io

#### https://jasonskillman.itch.io/prospector-jasper

* P	Prospeci Jaspei		e e 1
			4
4 F	Prospector Jasper is a game with a Dig Dug feel to it. The game takes place underground, mining your way through each level fighting monsters and collecting gems and ores. Beware for booby traps and the darkness! High Concept Statement:	Prospector Jasper	e e F
	Prospector Jasper is a Pixel Arcade Maze game that has the user playing as a character named Jasper. The game takes place in the ground, digging through the soil to collect resources, power ups and fight monsters to increase your points to get to the number one score on the leader boards.	The first product of the second secon	-
* P	Genre: Pixel Arcade Maze Game		e e 1
	Target Audience and Rating:		
	Ages 8+ All Genders		
	E for Everyone		

## Target Platform: 27650 Creek 6 **Development Platform:** Unity The sector Length of Play: 5 - 10min Generated infinite levels Programmer: Jason Skillman The set 44500 Designer: Amanda Coler Install instructions 1. Download 2. Unzip 3. Play Recommended to play in 1920x 1080 58600 T Level C Download

Install instructions 1. Download 2. Unzip 3. Play Recommended to play in 1920x 1080	
Download 23 MB	
Leave a comment	
$\begin{array}{c} \P  B  I  S  \equiv  \blacksquare  c \Rightarrow  \blacksquare  \blacksquare \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	HIGHSCORES
Post comment	
	HIGHSCORES
🖀 itchia • Viewall by Jacon Skillman • Recort • Embed • Updated 3 days ago	Games + Action + Free

# Credits:

Programmer: https://jasonskillman.itch.io/

Designer: https://colergames.itch.io/