Level 1 Game Development Log

Final Product : https://gamerguru212.itch.io/contrast

Relevant Implications

Watch <u>this Video</u> to help explain how to write about each one once you understand them. In your own words, describe at least 3 relevant implications that are important for game designers to consider before development.

Relevant Implication	What is it and why is it important to consider when making games? State, Explain, eXample, whY
Aesthetics	S - My game will be a pixel art game with small non pixel aspects eg. Rocks E - I will create all the game elements in gimp and use my own art pallet making it very unique. This type of game has been made before but it is not pixel art. X - My game will be similar to the colour change game "Hue". This is also a colour change platformer puzzle game. Y - I decided to make the game this way because it is unique and plays to my strengths.
Functionality	S - The game will be partially realistic physics and colour change. E - The controls will be WASD for movement and jump with the mouse used to switch colours and grab objects. X - The game Hue has a similar movement system and has very positive reviews and is one of the best colour platformers on steam. Functionality is how this game works/functions. This game will function as a 2D platformer with a colour change feature. Y - I decided to use this movement system because it is widely used and the mouse is easy to use to switch colours.
Usability	S - The UI will include very easy to read text and simple buttons to access the game. This is important because without clear buttons players might be confused and not be able to play the game. E - The buttons will be square with white on black text of the button functions eg. start game, settings, graphics and sound. X - It will be similar to the UI in Hue; simple, clean and easy to read. This game is a good example of a good UI because it is easy to understand and play with.

	Y - I decided to make it like this because the simpler it is the more people that are likely to play and not quit when seeing the start.
Relevant Implication	What is it and why is it important to consider when making games? State, Explain, eXample, whY

Overall Project Planning

Link to your Trello Plan (make sure it is public):

 $\underline{\text{https://trello.com/invite/b/mfNZh3v6/46100544aa7aae72cac575800e77fbe3/contrast-game-de} \underline{v}$

Sprint #1 Planning

What are your priorities and goals for this development cycle?

I need to write movement code
I need to write colour change code

Plan and finalise assets

Plan at least 2 levels

Get rigidbody movement.

Scene change code.

MVP platform code

Sprint#1 Feedback

You need to gather some feedback from your end users or other relevant individuals. This is best done with a google form, spreadsheet or document. Make one in your Google Drive and paste the shortcut into the build folder of your project.- Example <u>HERE</u>

Link to Feedback Responses. (remember to share the results NOT the form)

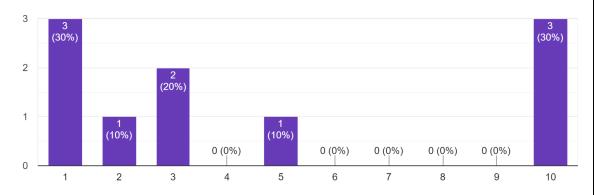
Feedback

Summary of Feedback

The results of the feedback can be summed up to: Make it a Game.

This is because all I posted was a movement overview and not the actual game. Most people thought that the minimum viable product was not fun and not a game. For the next sprint I need to put together all the projects I made and then combine them to a playable game that I will then publish as a new update.



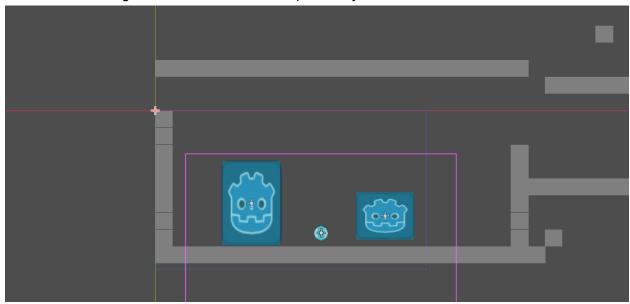


Sprint #1 Project Reflection:

Things to consider when answering

- Time restraints
- Resources
- New knowledge
- Unforeseen problems
- Testing

Screenshot of the game at end of this Development Cycle



What went well and why?

The research and concept test for the game went well and I have a good Idea of how to make the game. I have also made multiple little games with different aspects of my final game in them. Now what I am doing is putting together a final game with all the researched aspects and features. With the time that I had been provided for this sprint I think I did a decent amount of work. I'm not proud of my game yet but it's getting there.

What didn't go well and why?

What didn't go well was the asset selection and colour change feature, I was hoping to have both of these finalised by this time but I was not able to do this. The colour change feature is a lot harder to implement than I thought and I was not able to code it properly.

What have you learned?

I have learnt how to change the colour of the sprite and how to change how other blocks affect each other through code.

What are you most proud of this sprint? Add a screenshot. What is it? How did you make it? Why are you proud of this the most?

I'm most proud of my movement code, I will most likely keep this code until the game is finished. Other than that there is nothing much that I'm proud of.

```
extends RigidBody2D
   3 export var speed = 400
   4 export var jump_force = 150
   7 var touch_ground = true
   9 v func _physics_process(delta):
   10 > | move()
   11
  12 \rightarrow func move():
   13 > var my_vert_vel = get_linear_velocity().y
   14 ∨ > if Input.is_key_pressed(KEY_R):
   15 > get_tree().reload_current_scene()
  16 ∨ > if Input.is_key_pressed(KEY_D):
   17 > set_linear_velocity(Vector2(1 * speed, my_vert_vel))
   18 ∨ >  elif Input.is_key_pressed(KEY_A):
   19 > set_linear_velocity(Vector2(-1 * speed, my_vert_vel))
  20 ∨ > l else:
  21 > set_linear_velocity(Vector2(0, my_vert_vel))
  23 ∨ > if Input.is_key_pressed(KEY_W):
  24 v > if touch_ground == true:
  25 > apply_impulse(Vector2(), Vector2(0, -1 * jump_force))
→3 27 v func _on_Area2D_body_entered(touched):
 28 >> if touched.get_name() == "TileMap" or touched.get_name() == "Box" or touched.get_name() == "Box2":
 29 > touch_ground = true
-1 32 ∨ func _on_Area2D_body_exited(touched):
 33 v > if touched.get_name() == "TileMap" or touched.get_name() == "Box2":
 34 \rightarrow 1 \rightarrow 1 touch_ground = false
→1 39 ∨ func _on_Area2D_area_entered(area):
```

Sprint #2 Planning

What are your priorities and goals for this development cycle?

To add the final assets

Finish programming

Finish cutscene

Add some basic Music

Design and build 2 - 4 levels

Change kinematic body for rigidbody movement because it works better with box physics

Sprint#2 Feedback

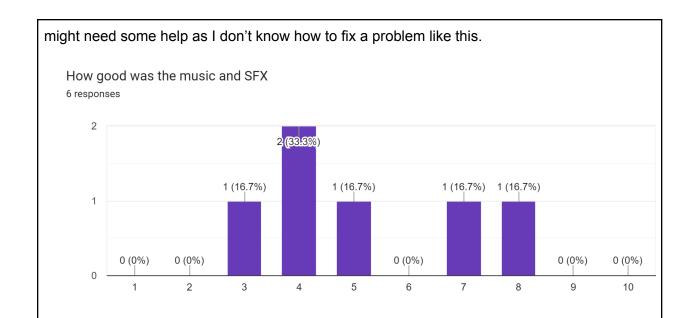
You need to gather some feedback from your end users or other relevant individuals. This is best done with a google form, spreadsheet or document. Make one in your Google Drive and paste the shortcut into the build folder of your project.- Example HERE

Link to Feedback Responses. (remember to share the document)

Feedback

Summary of Feedback

Most feedback responses mentioned the jump glitch. This is the one glitch in the game where if you change colour when you are inside the blocks, you get pushed into the ground and you can no longer jump. I still have not figured out how to make the colour switch work with multiple blocks how I want it. I will try to fix the jump glitch throughout the other sprints but I



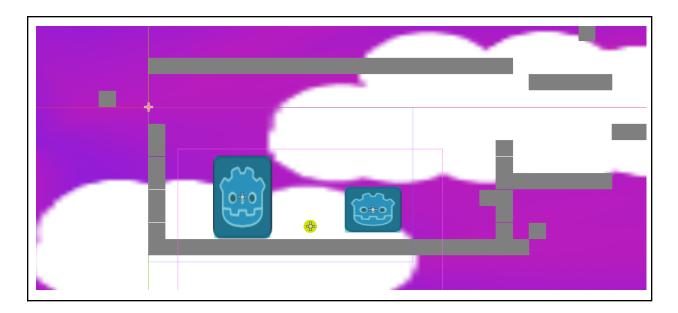
I also added some basic piano background music and jump effect sounds into the game just to see how it would sound. Most people answered an average of 5 out of 10 meaning the music was good but it was not the best. I'm guessing it is the Jump sound effect that is not good because it was the last thing I added and when I was adding it I was wondering if it would fit with the theme of the game. Next sprint I will most likely remove the sound effect and see.

Sprint #2 Project Reflection:

Things to consider when answering

- Time restraints
- Resources
- New knowledge
- Unforeseen problems
- Testing

Screenshot of the game at end of this Development Cycle



What went well and why?

I figured out how to make the colour change code work. It still does not work how I want it to but it is enough for now. Right now the blocks can change colour one by one but if the player stands on them the block falls through the ground and the block disappears.

What didn't go well and why?

What didn't go well was the Asset picking and cut scene animating. I decided to scrap the cut scene part of the game and proceed without it. Making a cutscene is a lot harder than I expected and I don't have the knowledge to do it. I finalised the asset for the player. I made a simple white circle as the player, this allows the player to be easily visible and not look different in colour environments.

What have you learned?

I learnt how to make the boxes and environments change colours. With this knowledge I was able to make the game more playable because now the user can see what colour they are in and what they have changed. They can also see what boxes are no longer jumpable

What are you most proud of this sprint? Add a screenshot. What is it? How did you make it? Why are you proud of this the most?

I'm most proud of the colour change aspect of the game now partially working. I didn't think I would be able to get it to work but it works. It still does not work with different colours but the blocks disappear and appear in the same place on command which is great for now.

Sprint #3 Planning

What are your priorities and goals for this development cycle?

Finish the whole game.

Add Juice

Add music

Add glow effect

Make levels

Sprint#3 Feedback

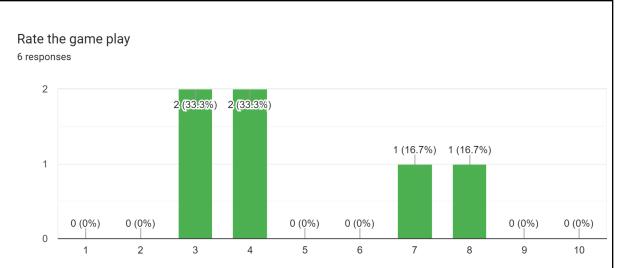
You need to gather some feedback from your end users or other relevant individuals. This is best done with a google form, spreadsheet or document. Make one in your Google Drive and paste the shortcut into the build folder of your project.- Example HERE

Link to Feedback Responses. (remember to share the document)

Feedback

Summary of Feedback

What did the feedback say in general?



Overall the responses said that the game is good but there needs to be bug fixes and more levels. This chart shows the results to be 3,3,4,4,7,8 this gives the game an average score of about 6 this is not bad.

The game bugs out very easily when I switch colours and it normally renders me unable to jump. :(I couldn't really play, please add a restart button so I can reload your jump script.

fix the jumping bug where the jump doesnt work

fix the bug where you get stuck in the ground, make better assets, jumping is not fluid, the different colour boxes should be a bit visible when - 20378

If you try and change the colour while you're at the position where a block will be, you will get stuck in the ground. Other than that, there's not much else. It's a really cool and unique idea!

wth is the jump?

The game is immensely buggy because I felt like every other time I hit a button it would break my jumping You can also click on multiple colours at the same time

Every response mentioned the Jump glitch and one response told me to make the assets better, make the jumping more fluid and different colour boxes should be a bit more visible. I was not able to fix the Jump glitch because I got sidetracked with making art assets and level designing. When I'm thinking about it now I have an idea on how to fix the glitch but I'm not sure if it would actually work.



Final Reflection:

Screenshot of the game at end of this project



Final Reflection

What went well/poorly? If you had more time what might you do? What would you do differently if you could start again?

The final game looks very polished and clean. I'm actually very happy with how it came out but It needs some fixes. The game needs more levels and bug fixes. It lacks the polished feel of a good game, the game looks polished and the art assets are good but the gameplay feels that of a scratch game. If I was to redo the game, I would spend less time on coding new features and making art and instead making the features that are there amazing and polishing

the game and fixing bugs so that even if the game is basic, the gameplay is unmatched by other games in this category.

Relevant Implications

How have you addressed the relevant implications that you identified at the beginning of the project?

Relevant Implication	I addressed this by Give specific examples
Aesthetics	I addressed this relevant implication by making all the assets myself in gimp. I also made my own colour pallet for this game just like I said in the start. I was not able to make all of the assets out of pixel art but all of the background pieces are. Therefore I addressed this relevant implication.
Functionality	I addressed this implication by making the controls all WASD as standard in all games on PC and by making this game have similar movement and gravity to HUE. I mentioned how the game HUE has lots of good reviews on steam and adapting my game to have the same movement will allow me to also get good reviews. Therefore I addressed this relevant implication
Usability	I addressed this implication by making all the text readable and usable for all users. I mentioned at the start that my game must have text that is easy to read and understand so that all age groups and experience levels can have a similar experience. I achieved this by doing just what I said I would, I made all the start buttons and menu buttons easy to read and simple font so that all people can read it and understand it. The setting menu also uses simple text on a plain background so that it is easy to read and understand

Name:

Grade:

Use basic iterative processes to plan and develop a digital outcome

Domain: Digital Technology 1.9

Credits: 6 (Internal)

Link: https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2018/as91884.pdf

Achieved Use basic iterative processes to plan and develop an outcome	Example Evidence	
Planned a digital outcome to address a problem, need, opportunity or interest	Used planning tools (Trello Freedcamp etc) to create an overall plan of what your game needs to be considered a success. This is related to your proposal or the given brief for the game.	1
Decomposed the outcome into smaller components	Break the whole project down into sprints of a few weeks each. Each sprint will develop your game further. Tasks in each sprint should be small and specific not just (make an enemy)	1
Planning and trialling components in an iterative manner	Sprints contain a series of small tasks that are developed, tested and evaluated then feedback from the planning and tialling helps to inform the planning for the next sprint.	1
Tested the outcome to ensure it functions as intended	Final evaluation of the outcome relates to the brief/proposal and attempts are made to ensure the game works and is relatively bug free.	√
Described the social implications and end-user considerations that are relevant to the outcome	Shown an understanding of the relevant implications as they relate to game development and completed the relevant implications section for 3 chosen implications. Explanation here	✓
Merit Use iterative processes to plan and develop an informed outcome		

Used information from testing and trialling to improve the outcome	Really good sprint evaluations leading to informed and detailed improvements that create a high quality outcome.	√
Trialled multiple components and/or techniques and selected those which improved the quality of the outcome	You should have evidence of revisiting a task because it was found (from feedback or reflection) to be in need of improvement. Eg. you may have done a main character then completely redone it because feedback or reflections showed it was a bit rubbish and could make a big difference to the overall quality of your game. You could so the same with code, levels, particle systems, menus, etc.	1
Addressed relevant social implications and end user considerations in the development of the outcome	Not only did you consider a few "implications" from above, you dealt with them. Eg. Aesthetics- you re-do a level and add several new models in sprint 2 because after testing, the user thought it looked a bit disjointed (your had a bunch of textured objects but the main map was flat color- so you made the main map textured and added concrete blocks, brick walls and roads)	✓
Excellence Use iterative processes to plan and develop a refined outcome		
Applied information from planning, testing and trialling of components to develop a high quality outcome	As above, the process was followed through in detail- your development log is highly detailed and comprehensive (lots of writing about lots of tasks) and your outcome as a result of the process is really impressive.	

Comments:

Develop a digital media outcome

Domain: Digital Technology 1.4

Credits: 4 (Internal)

Link: https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2018/as91880.pdf

Achieved Develop a digital media outcome	Evidence	
Used appropriate tools, techniques and design elements for the purpose and the end users	Your development log has evidence that you can use at least two of the following pieces of software with some	✓

	T	
	skill- Godot, Inkscape, Gimp, Pixelart/Piskell, Goxel, Blender	
Applied appropriate data integrity and testing procedures	The art/code/level is tested or evaluated- this appears in your development log as a reflection or the results of testing. Eg. You have a screenshot of the model in game and you reflect on it in your development log-does it fit the art style? Is it efficiently made? Is it functional	<
Described the social and end-user considerations that are relevant to the outcome	Same as the "Iterative design" standard- You do NOT have to do this twice! Ensure that you have answered this- explanation here	1
Merit Develop an informed digital media outcome		
Used information from testing procedures to improve the quality of the outcome	You manage to make a better than average outcome because your contribution is refined by feedback and reflection. You should show that you are quite skillful in your chosen area (code/level design/modelling)	✓
Addressed relevant social implications and end-user considerations	As above- only this time you have to not only show you understand some of the "implications" but you have ensured you have dealt with them.	1
Excellence Develop a refined digital media outcome		
Showed iterative improvements throughout the design, development and testing process	Your development log shows that you have put a lot of work into developing the part of the game that you were responsible for. Eg. you have made several versions of the main character- each one slightly better than the other to end up with an awesome main character. This has been recorded in depth in your development log and there is evidence of reflection, feedback from others and consideration of other "implications" (mentioned above) that have guided your improvements.	y
Applied design elements effectively	You have shown a high level of skill in your area on top of making an awesome outcome. Eg. You are a blender guru!	

Comments: