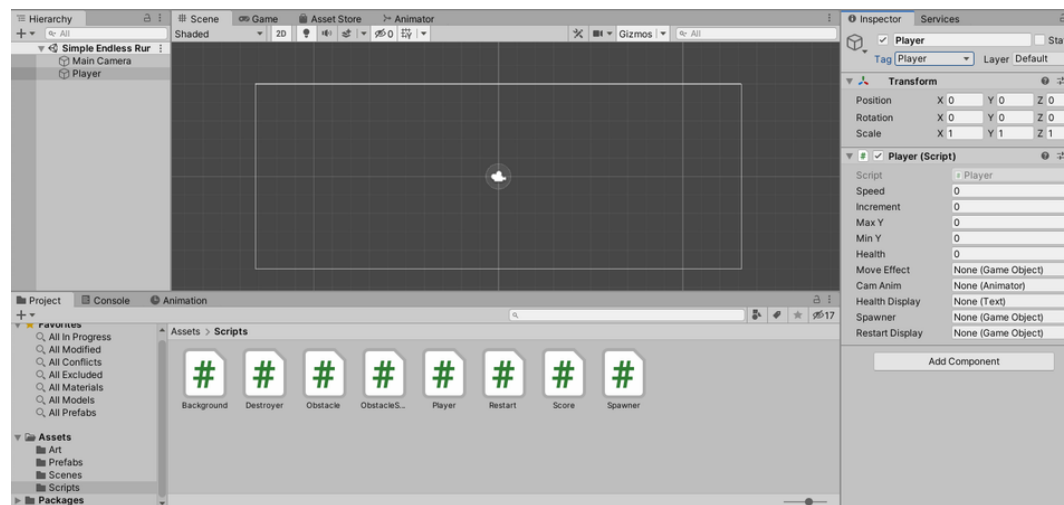
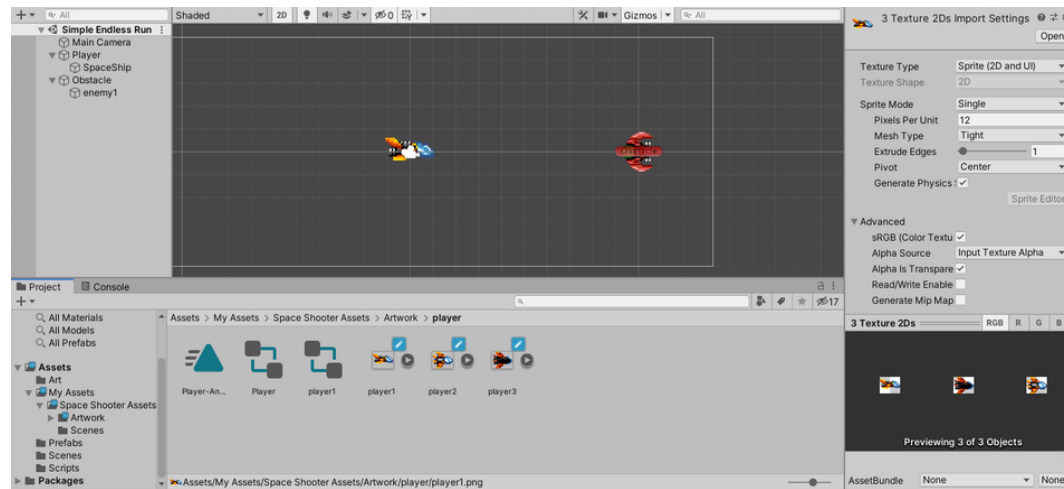


# Production Journal

 Diogo Constantino



Here are the scripts i added to my game with the code i copied from GitHub from the tutorials i was following.

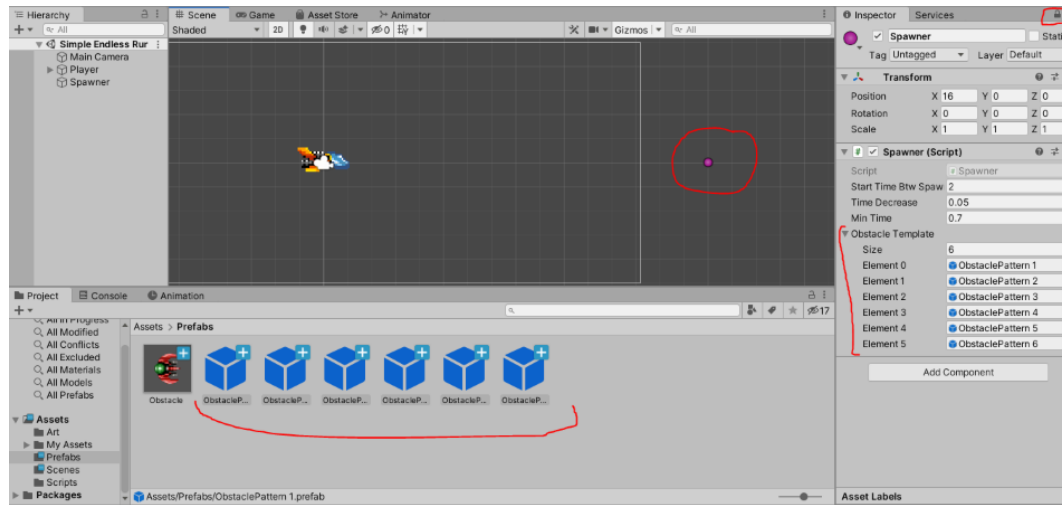


Here is the new asset i downloaded from the asset store with sprites, sound, music and more for my game.

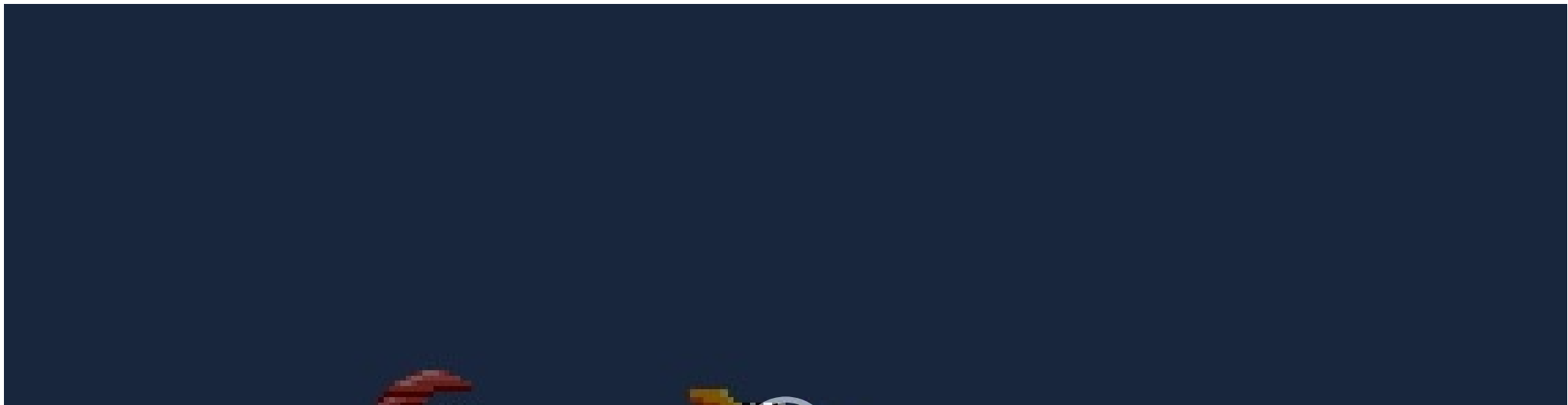
04/03/2021 was when i added multiple scripts from the GitHub site (<https://github.com/BlackthornProd/EndlessRunnerSeries>) from the tutorial i was following and finally downloaded a asset from unity's asset store that involves, pixel art, background, enemy and player sprites, looping music and sound effects, which all are very helpful to me and saves me a lot of time.

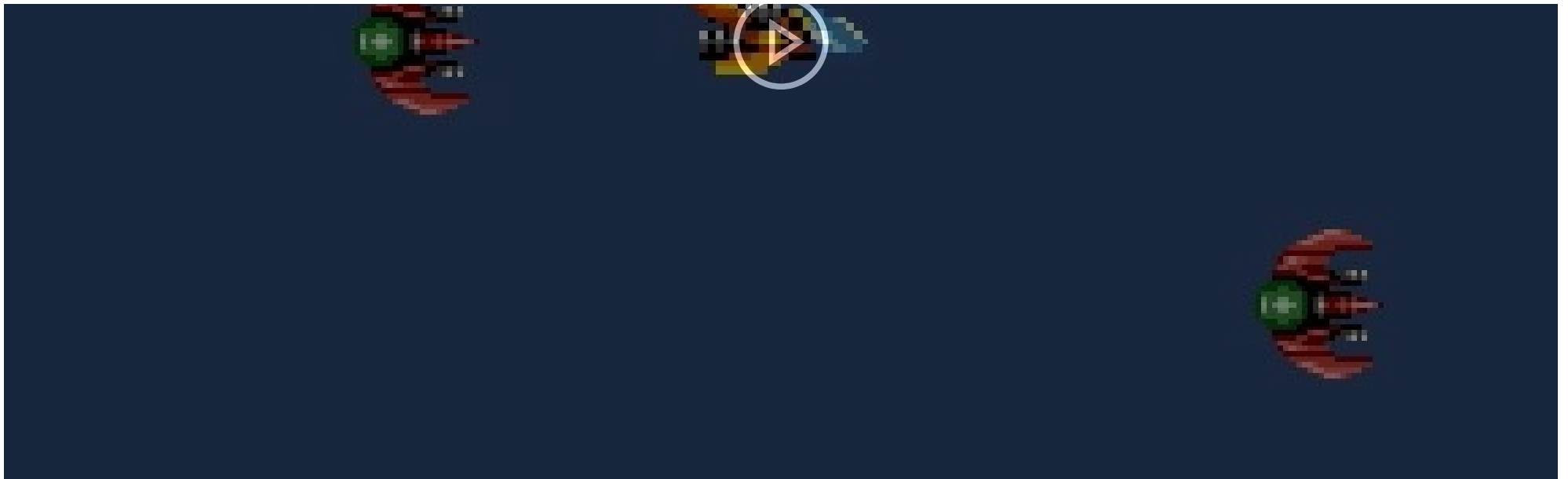
What i did first was make a bunch of C# scripts with the same names as the scripts in the GitHub of the video i was following. Then i simply copied and pasted the right code, from GitHub into my Unity scripts saving me a ton of time, instead of manually writing the code. I'll probably have more scripts like the ones for menus and such but these scripts i have now are a good baseline to have now.

Then after that, i went to the asset store to look for a art asset to add to my game and i found it. I later installed it into my Unity project, saw what they were, the music and sound effects were good, the pixel sprites were also of good quality. It even had animations done already so i didn't need to connect the sprites together to make a animation. When i dragged my sprites to my scene, my sprites were too small for some reason so i looked at my sprites inspector and saw that the Pixels per unity was set to 100. So i changed that to 18 and now my pixel art looks like the right size for my game. Except for the fact that my enemy sprite looks a bit too big compared to the Player, so i decided to adjust the pixels per unity for the Player to be 12. This may make the pixels of the Player a bit bigger then everything else but the size will be perfect in my opinion. Another thing i noticed is that the pixel background doesn't quite fit well into the camera, i'll either have to make the background bigger and try to make it fit the screen perfectly or i'll have to make the camera smaller, i'll probably make the camera smaller as not to make the background look weird.



Here are the SpawnPoint i created and the 6 Spawner point prefabs i created.





Here is the test i did to see if the Spawner worked.

The new particle effect i created for the enemy when they touch the Player.

The new particle effect i created for the Player every time the Player moves.

At 07/03/2021 i finished the first and second tutorial i was watching, and i am now in the middle of the third tutorial. Next time i update the production journal hopefully i have completed the third and final tutorial and fixed a problem i'm having involving collision and the Player not moving.

The first thing i did was make a Spawner, where the enemies will spawn, which will be outside of the camera, and i added a Spawner script to it. Later i made the three ObstaclePattern, that the tutorial also made. but i made some adjustments determining the position of the enemies that they will spawn. I added an additional three ObstaclePatterns that will represent the position of just one enemy that will spawn instead of two, so that it isn't always two enemies spawning at a time, sometimes it will be just one, i believe that will make my game not so repetitive for the Player and a little bit easier to play.

Later i tested this out in play mode, and while the spawning of the enemies work and the different position as well, there are a few problems i encountered. For example, for what ever reason i cannot move my Player, also when the enemies touch the Player they don't get destroyed and i don't know why. Well at least the Player loses health when it touches an enemy and when that happens three times, making it's health of 3 down to 0 the spawning of the enemies stop which is great as you don't want to have enemies spawning when the game is over.

I decided to ignore the issue with collision and the Player not moving for now as i wanted everything to work and be right before solving this problem as the main part of the game is almost complete. I later created a particle effect that would serve as a explosion effect for when the enemies died by touching my Player. I followed the video i was watching and followed the instructions but i did make some personal changes to better fit my game. Such as the colour, sprite shape, size, speed and more. In the end i believe i did a good job and it looks good, not too distracting and it adds a nice flare to my game.

After that i made another particle effect for the Player, this one is slightly different then the Obstacle one, the colour, shape, speed and more are different. Then i went to my Player and Obstacle inspector and dragged their respective particle effect to their designated slot in their component script.

After all that i went to test all of this and for one reason or another the particle effects aren't appearing. It doesn't matter if the Obstacle touched the Player or if i press the up and down arrow keys on the Player, the particle effects aren't appearing. There is something definitely wrong with the collision and the arrow keys not working or the Player not realizing that i'm pressing buttons or something like that, i'll have to look more into it after i have everything done in my game, the background, screen shake and such. I want everything in order before i try to research, analyze and solve the problem i have having involving the Player and Obstacles.

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The multiple backgrounds i added to my game along with the BackGround script to it.

The particle effects i made into a prefab and how i made them destroy themselves after the effect is over.

The Score Manager i created with it's Script, collider 2D and RigidBody 2D.

The Health Display UI i created, with it's components.







The small change i made to the Obstacle script so sound could be played when the Obstacle touches the Player.

The change i made to my Player script, a explosion sound will play when the Player reaches zero health.

I made my Explosion Sound empty game objects of the Player and obstacle into a prefab so i could drag them into their designated slot in the inspector window.

On 13/03/2021 90% of the main mechanic of my game is almost complete, i also almost finished the tutorials i am following in order to make a endless runner. What i did first was add the background i have install from the asset store to my scene, placed them into position and added all of them to the BackGround script, each with it's own speed, so that a parallax effect can be achieved. I also made multiples of the main background and Stars sprites, so that they can be looped right to left with no problems. I didn't like how wide the background looked when playing the game so i made the screen on unity's game scene 1920x1080, it looked good in my opinion, not too wide not too thin.

Later i made the particle effects into a prefab as i forgot to do that, then i made them be able to be destroyed after the particle effect animation was done, so that they won't stay in the game and fill the memory of the game, slowing the game and making the players

experience bad.

Later, what i did next was add a empty gameobject called "Score Manager" which is where all the score mechanics will be placed. I added a box collider 2D and made it a trigger, then a rigidbody 2D and after that i added the "Score" C# script to it so that the Score UI will be created and can be updated.

After that i created a UI text called "Health Display" that will show you the number of health points you have. I made some adjustments to it so it looks good in game. I added a shadow component to it so it's easier to see, i also placed it to the upper left side of the screen, basically all of the small things in order to make it look nice and readable.

I then made more UI text, i added a Score Display that will display the number of points the Player has. But i have also created an empty text that will be next to the health and score display numbers, so that Players can know what each number is and not have just the numbers, it's a nice quality of life thing that makes my game just a little bit better. I changed how the health and score display look so it's easier for me to know what text GameObject changes to a number when i play the game, i made it into a "#" so i know which is which. I added the Score Display to the Score Manager, and now when enemies hit the Score Manager box collider 2D, the Player will gain 1 point for each enemy.

At one point i wanted to Collab after all the work i did, but there was a problem that occurred. When i clicked on the Collab button in Unity, it said "Localhost Unavailable" and to visit a very specific website. I went to the web site and what i found was something to do with some forums about people having the same problem and other site explaining what it is. I decided to ignore this problem, maybe it will fix on it's own or the problem will go away when i restart or close my laptop, if the problem persists, i'll have to do more research and understand what truly is the issue here.

As i was testing my game i noticed a minor issue with the Text UI involving the Health Display. When the Player has 1 hp left, then a enemy touches the Player, the Player will die but the health display will not update to be zero, instead it just stays at 1 which looks weird in my opinion. I looked at my Player script to figure out a solution to my problem. I looked at the code and realized what the problem was, the Health Display code was only updating after the Player's health reaches zero, meaning when the Player's health is 0 everything is destroyed and deactivated, making it impossible to update the health display. To solve this minor problem, you simple have to move the health display line of code on top of the if statement, involving the "health <= 0".

After that, i tested my game and now the health UI updates properly. Then i continued with my tutorial and i went ahead and added a Panel UI that will be my Restart Display. I added the grayed out Game Over panel, the Game Over text and everything it needs, i also gave the Restart Display the "Restart" C# script so the Player can actually restart the game. Then i disabled it because i don't want it activated when a player first starts the game, it should be only activated when you die in game.

Then, i added a empty game object called "Obstacle Explosion Sound" that will contain, a audio source component with a audio clip that will be a explosion sound that will appear when an enemy is destroyed, by touching the Player.

I made some additions to my Obstacle script that will make it possible for me to drag it's designated explosion sound effect and have it activate when the Obstacle/enemy touches the Player.



I did the same thing with the Player script, just with different names so i know what sound effects goes to what.

I then made a second empty game object that will contain a Explosion Sound but for the Player called "Player Explosion Sound". I then made them into prefabs so i can drag and drop them into their designated component scripts so that everything works.

After all that, i went to play my game to see how everything works, fortunately the UI works completely fine, but everything else doesn't. I still can't make the Player move, the particle and sound effect don't play when the game objects collide with each other and the Obstacles don't disappearing when they touch the Player.

I believe these problems stems from the collision not working, i don't know why, it may be because the collision is not being detected, the Rigidbody 2D being kinematic, something with the code or something else. I don't know why but i will find out so that my audience can have a pleasant experience and give me useful feedback in order for me to improve.



You can see the problem i was having with trying to make a camera animation that went up and down...  
the background was too small.

I made my Backgrounds bigger so that all of the Camera animations fit in the screen, i adjusted my backgrounds position accordingly.

Here is were i added the additional along with it's new parameter that i added to their conditions.





The new Animator i created in the Player game object so that the explosion animation would happen.



The new Player Moves Sound prefab i created and the changes i made to my previous sound effect prefabs.

The Changes i made to my Player script so that a sound effect would play whenever the Player would move up or down.

19/03/2021 was the date i finally completed the tutorials i was watching, in order to make a simple endless runner, i also completed the main mechanics of the game. I have every feature in my game for people to play it and give me feedback on what needs to be fixed and how i can improve it.

I had almost everything done in my game, i just needed to add a camera shake into my game and then fix the problem of my Player not moving, along with other small things that needed to be added and fixed. I wanted to finally add the camera shake to my game as one of the slots in the Player's script in the inspector needed it. I started watching a YouTube video called "SCREEN SHAKE WITH NO CODE - EASY UNITY TUTORIAL" that was suggested by the tutorial i was watching originally. I followed the shake tutorial and started making a animation by making the camera move left to right, in a very fast and subtle way as to not make the Player feel noxious.

After i made the animations i needed, i went to the Animator and made transitions so that the camera shake would happen whenever the shake parameter was activated, I already had the code done from the GitHub to make this possible, i copied and pasted it into my Player script. This Animator also belongs to the Main Camera Game Object as that is the object that is being animated.

After i did that i did a test on my game, it didn't work for some reason and i may need to make some adjustments to make it work properly. But one thing that did surprise me was that the Player was finally moving, the enemies died when the Player touched them, and the particle effects appeared whenever the Obstacles touched the Player and when the Player moved. I'm really glad that this happened, as i just had to add a Camera animation for everything to work properly. The problem is i don't know why my player wasn't moving before what was the reason, to figure this out i went to my Player C# script and looked at it. That was when i realized that the reason nothing was working before, the code to make the camera shake was on top of everything else and since i didn't have the animation yet, nothing was working. I either had to make the shake code below the rest of the code so it's the last to activated or have the animation work first before adding more mechanic or comment out or delete that shake code before re-adding it.

I looked more closely to my Animator to see what the problem was for my camera not shaking, i found out that i didn't set up the transition properly. After making some small changes i tested my game again and now the camera shakes when the Player moves and touches obstacles.

I wanted to make more shake animations, not just the one i made that makes the camera go left to right very fast, i want it from all directions, at least up & down, top left & bottom right and bottom left & top right. The main 8 directions, so that the shake feels more random and looks better. I made the animations but there was a problem with the vertical animations, the camera would go up and beyond the background, so you would see behind the background as you can see from this image to the left. I could ether make the movement of

the camera shake much shorter or make the background slightly bigger, i choose the bigger approach as i believe this is the best option to make the in order to make the game look and feel better.

After i made the background bigger in all aspects, the stars, moons and everything in it, i did that to all of the duplicates, i readjusted their positions and size, i made sure that their transition from left to right was smooth.

This is what my Animator looks like after i created the animations of the camera shaking in all 8 directions. You can see the new parameters i created, going for each different shake animation. When the camera idle is going to any animation it won't have a Exit time but when a animation is going back to Camera idle it will have an exit time of 1 second so that the camera shakes can be played out before going into a idle animation which is a still camera.

These are the modifications i made to my Player C# script so that whenever the RandomShake function is called, which is when the Player moves up or down. One of the four Camera Shake animations i created will be called at random.

I also made some changes to the Obstacle C# script so that the RandomShake function is called when an Obstacle game object touches the Player, in order to do this i would need to get the function from the Player script since the Obstacle doesn't have the RandomShake() function.

Before i wrote the code you see underlined in red, i deleted the previous code and tried to just write "RandomShake()" think that would be enough to get the code from the Player script. I tried to change the void RandomShake() to public void RandomShake() thinking that would solve the problem i was having. It wasn't and i didn't know why so i did some research and turns out, to get code from one script into another script you have to specifically get the C# script component and then get the specific class, function or method you want. I didn't know about this but now i do, this will certainly help me become a better programmer.

I wanted to collab my work after doing quite a bit of work but for some reason it's not letting me do it and i don't know why. The only way this can be solved is if i close my Unity project and re-open it again. I tried to do some research as to why this happens but i didn't get any good conclusions or solutions to my problem. This problem usually happens when i close my laptop and reopen it to continue working on

my game, which is weird because previously this didn't happen. I tried making a new link and refreshing access from the services tab as you can see in the left, but none of those things work and i don't know why. I guess i just have to close my project and reopen it so i can collab it, luckily i can re-collab after i re-open my project so there's that.

Later i wanted to have my player to get a explosion animation sprite whenever the player loses all of their health, as i already have an animation like that from the Warped Space Shooter Unity asset. I created a public Animator called "playerDeath" for the game object that would contain the animation. I also added the code that would activate the explosion animation when the health of the Player reaches zero. I wanted to do this because, for me it looks weird for the Player to suddenly disappear when they die.

After some testing and experimentations i decided to add my animation in the Player game object and consequently it's Animator, because it's the Player that's going to have the animation happen to them. You can see in the image to the left that i added a simple "player death" parameter and made a transition connection between the Player Idle and Player Explosion, so that when the "Player death" is activated a explosion will happen just before the Player disappears. I also dragged the Player game object into it's slot in the inspector of the Player

Death. Previously the animation didn't work and i didn't know why but i looked more closely to the Animation tab and found out that it had to do with the sprites of the explosion not being in the Animation, i thought maybe that i could drag and drop the sprites and as it turns out it worked. The animation happened after doing that, i can now see the animation. I tested this out in game and ,Unfortunately, it wasn't working, when the player's health reaches zero the animation doesn't appear, i tried many things to fix this problem, i placed the animation into the Main Camera instead of the Player game object, i created the Explosion animation again, instead of using the one already made, with the same pixel sprites, but nothing worked. In the end i thought that fixing this problem wasn't worth the effort and decided to delete the explosion animation and the code i made for it. I decided to move on onto the sound of sound my game.

I added sound effects to my game before but for some reason it wasn't working, to figure out the problem i rewatched the last tutorial talking about adding sound to your endless runner game, turns out that i needed to have the Play On Awake box ticked ON not off. So i made so i made those changes to my sound effect Prefabs, i tested my game and now sound effect work as intended. But i didn't like the type of sounds i have currently, so i decided to download a asset of retro explosive sounds, so i can add to my Obstacles and Player. I also wanted a simple very short sound to play whenever the Player moved up or down.

I created a new empty game object called "Player Move Sound" that would contain a Audio Source component that would have the sound i want and make it Play On Awake.

In order to make the new sound possible whenever the Player moved, i added additional code to my Player script. What i did was add a new public GameObject variable called "movePlayerSound" that i would then drag and drop the new empty game object i created, and then have it so the sound would play when ever the up or down keys are pressed as you can see in the image to the left.

After all the assets i installed, all the features, all the issues i fixed, the adjustments i made and everything else, it was time to make the final adjustments and play test my game one final time before i build and add it to multiple websites for me to share my game to multiple people from the internet, for feedback. I played my game and it looks and feels pretty good to play, but that's just my opinion other people might have a different view that can open a new perspective i didn't consider. First i'm going to ask my peers and tutors to play my game and document their feedback and experience on SharePoint, as that will show my tutors i can analyse and understand criticism and improve my work accordingly. The game doesn't have everything i want in it, i want to add a menu, maybe more feature and effects but this version of my endless runner game is enough for people to play and test out the game on the platforms i want. I'm quite curious to what people have to say about my game, what they will like and dislike, i can know exactly what my audience wants. After i receive the criticism and feedback i wanted i will make modifications accordingly along with additional thing i wanted to add to my game, like a menu, maybe random looping music, more effects and stuff of the likes, all of this will hopefully make the 2D Simple Endless Runner game i'm making more enjoyable and better.

Overall it was quite enjoyable and a bit challenging to do, i am quite excited to show everyone my game as it's quite important since every game developer needs to know how to sell their game in their chosen platform. I did encounter a few issues here and there but i overcame them thanks to my skill, research and rational thinking as i understood, analyse and solved the problems.

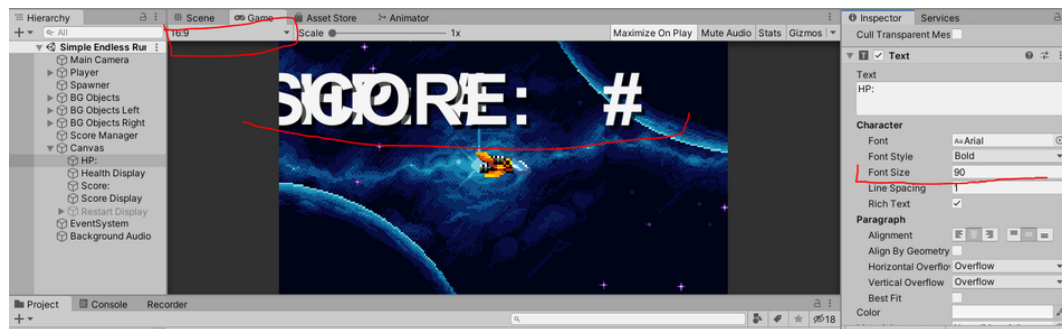


The WebGL Support Setup i had to download in order to be able to build my game for WebGL.

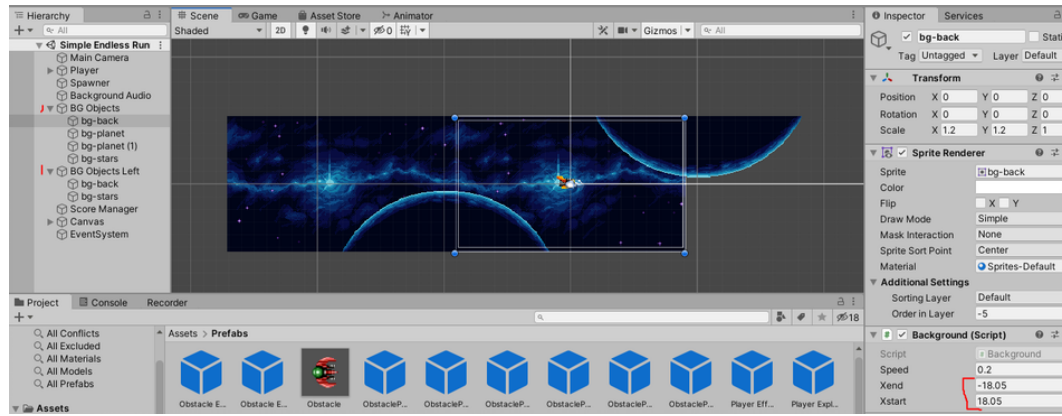
This is the top part of edit i made, It has the tittle, what kind of project it is and even a image i created and added to it.

Here you can see that i made it so my game is free and you can't donate or buy anything. It's a prototype and not a full complete game and i then uploaded the game i made to it.





The problem with my UI and what to change in order to fix everything.



The changes i made to my background so that the parallax and scrolling movement works properly.

### Viewport dimensions












Width  px × Height  px

### Frame options

- Mobile friendly – Your project can run on mobile phones (smaller resolution and touch support)
- Automatically start on page load – Not recommended for Unity games, since they can lag the browser when loading
- Fullscreen button – Add a button to the bottom right corner of your embed to make it fullscreen
- Enable scrollbars – Enable scrollbars in the iframe that contains your project

### Details

**Description** – This will make up the content of your game page.

          
<p>This is a very simple 2D endless runner that i created for a project i needed to make, with the help of tutorials i watched and assets i used. Please tell me what you liked and didn't like, any problems that appeared, how to improve the game and such. I am new to making games and using Itch.io so any feedback would be greatly appreciated.</p>

The changes i made to the edit page of my game in Itch.io so that description is better and that the view of the game on the page is better, with the right viewport dimension.

26/03/2021, As i have finished the main part of my Simple 2D Endless Runner game, i started building my game for WebGL, which is for websites like Itch.io, Newgrounds and other sites. But for some reason my Unity didn't have the WebGL module installed for some reason, must be because it's my own pc, maybe because it's the new version of unity or something else. It does make sense in a way, because i'm not going to use all of the modules, like Xbox one, PS4 so might as well save some memory space and not have them automatically downloaded. Still it is a bit annoying that i have to download a separate thing so i can have my game posted in websites, but it'll have to do and it wasn't so hard install.

After i have installed all of the things i need, i created a new folder to contain the build of my game, then i will send that into a ZIP file so i can upload it to Itch.io.

I went to my Itch.io account and made a new project, i named it, chose what classification it is, i made it a HTML project so i can upload my ZIP file to it and i even added a simple screenshot so people can see it and know it's my game. I only added just one image because i thought that would be enough and my game is fairly small and i don't think more images would help my marketing that much, for now.

This is just the top part of the edit page, i did more stuff and changes below.

Here is what type of status my game is, a prototype since my game isn't fully complete and i'm just testing things out, i think this is a good way for people to know what they are looking at and what they are playing.

I also made it so you can't buy or donate anything since i don't expect anybody to spend money on something that's just a simple prototype game.

I then i uploaded the build of my game that was inside of a ZIP file and made so that the file (the game) will be played in the browser.

This was the final change i made to the edit page, after that i would save and go to the page of my game and test it out. What i did here was i added a description of what my game was and that i could use some feedback to improve my game. I wrote what were the controls of



my game were and what assets i used and who they were from.

I chose the Other genre for my game because there weren't any runner or endless runner genre to choose from. But i did choose it for my tags along with other ones i believed fitted my game well. I believe that these tags will help me to gather players to play my game as some people are looking for a specific thing, the tags will definitely help me with that.

After all that i saved my edits and went to my game page and immediately i found some problems, the UI for some reason was way too bit and the overall screen of my game was also too big, it even had scroll bar for vertical and horizontal. This is pretty bad and it won't look nice to play my game like this, i'll need to go back to my unity project and make some changes so that my game will look find in Itch.io.

But before i did that i wanted some quick feedback on how my game feels by letting one of my siblings play my game. So i asked her and she played it for a few minutes and while she was playing, surviving as long as possible and getting a score of over 100 points. I noticed some things, one is that my sister really liked the music it was one of things she liked the most about my game, but there was another thing

i noticed that wasn't so good. At one point after surviving for some time in the game, there will be a part where the background will be sort of disconnected, like there was a gap between the left background and the one next after it moved position, i'll have to look into this.

I looked again at my 2D endless runner to see what the problem was involving the UI, and i found out that it was because i made the aspect ratio into 1920×1080 when it should be 16:9, but when i do make the change to 16:9 the text becomes way too big. This may be because the font size is too high, instead of 90 it should be something like 28, so that's what i did and now that text looks good.

After that i began trying to fix the problem i was having involving the background. I did some adjustments and tests and i found out that it had to do with the Xend and Xstart value of the Background script and having three backgrounds when i should only need two. What i did to fix these issues was i made sure that the numbers were lower on the Xend and Xstart to like 18 and i tested this with the middle background and it seems to work fine. But then i realize that having three backgrounds was unnecessary because just one background image could fit the entire camera screen i just needed two, one to stay on the scene and the other to move the the right and replace the main background while moving.

Later, after i made the changes to my game and building it again. I went to my Itch.io edit page of my simple endless runner game and updated the description to be better and to better explain myself to my audience. I then changed the Viewport dimension after doing some research on game resolution, these sites especially helped me: (<http://gamedevlopertips.com/how-to-handle-different-aspect-ratios-in-unity-a-complete-guide/>) and (<http://www.firenibbler.com/2016/05/26/what-are-the-best-resolutions-for-your-html5-game/>). With all of that i went to the game page and tested everything out to see how everything looks and feels.

After testing my game out, seeing if the link i added works, if the game feels and looks good and everything else. I have concluded that everything works fine, and that my game plays well. It may get a bit too hard after a while but i think people will enjoy my game even if it doesn't have a lot of content.

Now after i have done this i intend to, after the Easter break is over, ask my peers and tutors to play test my game and give me feedback on everything. While in Easter break i will add my games to my other websites and platforms i intended to post on, like Newgrounds and Game Jolt, and document my experience and how i felt about the whole thing.

Here is the game i added (in a ZIP file) to Newgrounds, with a tile and short description.

Here is the image that will be basically the thumb nail of my game, i choose a appropriate genre and rating, in my opinion.

This is where i added a description, multiple tags, made it so it can't receive awards and it can be embedded.







This is the bottom part of my game page, with my game, this is how it looks.



I found out that i could have a sort of Portfolio in Game Jolt among other things that could be beneficial to me as a game developer.

I made a survey that i would sent to Teams for my peers to play test my game and give me feedback.

At 12/04/2021 i have added my game, the Simple Endless Runner, to Newgrounds and Game Jolt, also making a survey for my peers to give feedback to me.

What i basically did was make a simple account in Newgrounds then i would go and try to add my game in Newgrounds with the ZIP file i made.

As you can see in the image to the left i successfully added my Endless Runner to the Submission File, i made a title and short description. I choose it's pixel height and width, but i later changed this after a quick test because the screen was too small. I've notice that actually adding the game to a specific website is quite easy if you have the right type of file. This is where you can play my game:

<https://www.newgrounds.com/portal/view/788607>

Another part of what i did was add the same icon image i used for Itch.io, using the same image/icon in multiple websites is a good way for people to recognize your game in multiple places.

I chose the genre "Skill - Avoid" because there wasn't a sort of sidescroller or endless runner genre to choose from, so i chose this since it best describes my game. Misrepresenting my game with a more popular genre like adventure would give my game more attention but it

wouldn't be viewed to kindly since people don't like to be lied to and that could have severe consequences for me, so misrepresenting your game is not a good thing.

The Rating of my game is E for Everyone, since my game doesn't have anything bad in it. This is good because then my game won't be restricted in viewership, thus i will get more people to play my game. If i had a teen or mature rating less people will see my game, so it's important to consider how violent or explicit your game will be, the more it is the more restricted it will be in terms of viewership, so thinking about rating is important.

I later added a description that will explain what this game is, why i did this, the controls and assets i used. There is a small error in the commentary but i fixed this later. There are some other things i added like the tags, which are helpful for players looking for a specific game with a specific criteria or tag. I also made it so my game could be embedded in other sites, even if i'm not going to do it, i also opted out of my game to get any awards since it's a very simple game that is more for me to test thing out instead of actively marketing my game.

This is what my game page looks like, you can see the game screen on the top but i had to crop it to so i could fit everything in this image. I have here the description, the tags, genre, upload date and a rating system with stars for people to rate my game.

This is where people will comment on my game and give me criticism, feedback and other types of information.

This is where i found a really good source of information, tools, assets, music, art, how to make those things and much more all provided by Newgrounds. The music part is especially well documented and has a lot of sources to help you, all of this is useful if you are new to game development and want to know where you can get free sources, how to make those exact things you want to know and more for a price or free as well.

I find this very helpful because if i want quick music i can just go here and find websites that can give me royalty free music that i can use in my games with no consequences. All of this information has made me more aware of the music i will put in my future works, i need to contribute to the artist for the music i use, if i didn't do this there would be trouble for me this is important stuff to be aware of.

Later i went to Game Jolt to do the same thing i did with Newgrounds, i checked it out then i went to try to add my game to it. I made a title, had to make a URL path and chose the right engine that i'm using. Right off the bat Game Jolt is quite different from Itch.io and Newgrounds even if it offers similar things, but it also offers some unique things as well which makes it different to the others, this is why i think that if you are making a web game, you should post you game onto these three websites for maximum audience attraction.

I then added a simple description to my game page so that people can know what they are going to play, how to play the game and the assets i used. I also added these game tags to better help players find what they are looking for, if they want to play a action game then the #action tag will definitely help them find it, if they want something with pixel then #pixel will help them find my game and thus play my game, if they want a different game with a tag i don't have then they won't find and play my game but that's ok since i can't make a game that appeals to everyone, i have a better chance of success if i go after a specific niche.

I later went to the Maturity section of the OverviewSetup and i checked everything and i believe that my game is suited for all ages, when it comes to age rating. The one thing that may seem like a case of mild violence are the enemy and Player ships exploding when they die, but the effects aren't all that violent or explicit so i don't count that as mild violence, not even cartoon violence. This all ages rating will definitely help me reach out to more people then if i had a different rating, as my game won't be filtered.

Here is where i struggled a bit to understand what the Package was, it took me a bit of time to figure how to add my game and make everything work but eventually i got it to work fine. The Packages offers some nice things like the analytics for you to see who saw, liked and downloaded your game throughout it's time, which is very useful for a game developer this knowledge can really help you improve how you market your game. I also can adjust my game's screen resolution, add the ZIP file of the game, add the icon image to it and more. This "Package" is what will make it possible for me to post my game to Game Jolt.

After i posted my game i went to check it out on the website, which wasn't quite as easy as Newgrounds and Itch.io, but i did see it. This image here is the top part of my game page, here you can see various buttons that you can press to go to the main game page, comments, followers i have, you can even follow the person who made the game you are playing and more. There are two play buttons, top and below the ad, that will move you to another tab window and there you can play the web game, this is different to Newgrounds and Itch.io since

Game Jolt takes you to a different tab just to play your game, shows you that Game Jolt isn't the best if you want to post a web game there. You can even leave a like and possibly download the game if there is a option, below the ad.

This is the bottom part of my game page, where you can see comments that people post, the description of the game, it's publish date and more, and below all of that are the post you can make to inform your audience by posting updates and other stuff below the description, i think this is a great way to inform you players since the information is next to the game your playing, no other game website has this type of feature.

While looking at my profile and Game Jolt features i found some interesting things that game jolt has, for example you can have a sort of portfolio this is very helpful as there can be other ways for people to find my work, my games and other things, not just through me. Not only that but i also found out that you can sort of form partnership with streamers and youtubers, you can offer then 10% of the money you get for every game you sell if they promote and provide a link going to Game jolt for people to buy your game. You have these things and much more in order to greatly help game developers, especially when it comes to revenue, while Newgrounds does offer help with a lot of sources and information but it doesn't offer you a lot of money when you place your game in their site and it's hard to monetize your game there, Game Jolt is the opposite.

I wanted more feedback on my game so i made a survey that i would send to Teams and ask my peers and tutors about my game and their opinion about it. I used Microsoft Office to make this survey and what i added there, was that i wanted feedback on my game, a link to my game so people can play it, and multiple choice question in order for me to better understand my game and know what people want so they can enjoy my game better. The questions i have here are to help me in one way or another, for example, the "How Hard was the game?" is to better help me see what is the right difficulty my game should be, because other people can reliably tell me the truth, while i made my own game so i'm going to be biased and naturally good at it. I would also like to know what people liked and didn't like about the Simple Endless Runner, as with that information i can know what to keep and remove from my game in order to improve it. I also asked if they have any ideas on how to improve my game as they can have ideas i never thought about, different people give different feedback, perspective and ideas all of which can be very helpful to me as a game developer and programmer.

20/04/2021 The UI i imported from the asset store and added to my game so that my game would look better and better fit the rest of the art style. I did all of this because my mentor suggested this to my and i thought it was a good idea because it was a very simple change to make, it can make my game look a bit better and it won't be hard to do, quite easy in fact.

What i did was replace the Font i had, with the new one i imported and then i had to make a few adjustments to size and position so that everything looks good and not weird, i did some test and everything looks great in my opinion.

After i did this UI update i intend to fix the glitch my game has involving the Players movement and position and then go add a simple menu to my game. If i have time, i then want to add a proper highscore system to my game but i'm not sure about that one, i'm afraid to mess that up like i did last project, but i do have resources to help me, i just hope i have enough time to do everything i can to make my game the best it can be.





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This is where i slowed the Player's speed and found the reason of my player's movement problem.

Here is where i made some adjustments to my Player C# script.

Here is where i created a new scene that will be the main menu, it has a background and some buttons.

The additional changes i made to my main menu, i added a controls scene when you press the controls button, this will tell you the controls and objective of the game.

27/04/2021 I have added a main menu and fixed the movement problem involving the Player.

What i first did was try to fixed the problem of the player being able to go beyond the bottom and top lane, effectively skipping the enemies and not getting hit without ever moving. This is bad as it can make the player not ever have a sort of challenge and thus the game won't be fun to play. I went to my Player's script to think of a way to solve this problem and i thought that maybe it has something to do with the void Update, so i changed that to void FixedUpdate, then i tested my game and i just made things worse, the player started moving twice as before and that made it go to the above the top and below the bottom lanes.

I changed the script back to what it was and i tried to look more closely to my game to see what was going on, by having both the game and scene window screen in Unity to see what's happening behind the game. What i found was that the sound effects empty objects that appear when the Player moves, doesn't disappear in fact it just stays there as you can see in the hierarchy and in the scene view. This could be a problem in the future because someone could play my game the longer they play the game will slow down and lag because the sound

effects are slowing down the game. I later even thought that maybe changing the Min and Max Y to -2 and 2 respectively, could somehow fix the problem I was having involving the Player, but alas it didn't work, the problem was still there.

I later thought that maybe the reason for my Player to be able to move beyond its lanes was because in between the movement of going to one lane to another you could press the move button again and that, while the Player was still moving will overlap the movement thus making the Player go over the lanes. To see if my hypothesis was correct I changed the player's speed to around 10 and then move the Player, and while the Player is slowly moving from one lane to another I pressed the move button to see if that did anything. I did that and my hypothesis was correct, the reason for the problem was because you can move in between lanes and that messes up the movement mechanic, and now I just have to figure out how to fix this problem.

After figuring out the reason for the movement problem I decided to figure out how to solve it by going into the Player's script and removing and adding some lines of code. What I decided to do was remove the code that would make the Player move from one lane to another smoothly, and instead I replaced that with a code that would make the Player teleport to its designated lane when you use the arrow keys. I used the tutorials I used to make the Simple Endless Runner as they showed me how to make this mechanic before the smooth one. I tested this and now the player can't leave outside its top and bottom lanes, yes this will make the game slightly easier as you are effectively teleporting to one place from another but I can always adjust the spawning rate to make the game more challenging.

Another thing I added was a line that I hoped would make the sound effects be destroyed after 1 second, I even added the same thing with the obstacle script. The only problem is that it doesn't work after I tested it, the sound empty game object was still in the hierarchy and I don't know if I should continue trying to find a solution or give up and move onto something else. I'm more inclined on moving to something else because I did some research and it seems a bit hard to fix this sound effect problem, so I'll delete that sound destroy code and leave the new movement code.

After I did all that I moved on and started to make a main menu that will contain a different background compared to the main game, buttons to start the game, another to quit it and another that will let you see the controls and objective of the game. I followed a simple tutorial on how to make a simple menu, of course I'll make adjustments to my game that would best fit it. In this image you can see the title and buttons I added and I made it look nice, it could be much better with a simple cool animation, like the tutorial I saw about how to make a menu: (<https://www.youtube.com/watch?v=RsgjYqLID-U>).

On this image you can see what happens when you press the Controls button, i made it so when you press the button, the main menu panel will be disabled and enable this panel containing the information about controls and objective, you can also go back to the main menu with the back button. I also have made a new C# script called "Main Menu" that will contain the code to make the Start and Quit button work properly.

This is the new script C# i created that will make it possible for the Player to go to the main game and be able to quit the game also. It's a very simple script that will make the start button move the Player to the main game by loading the "Simple Endless Runner" which is the name of the game and main scene, i made a custom method for this called "StartGame()". I also have a "QuitGame()" method that makes you quit the game but it doesn't work on unity's editor, but it does work on Itch.io as i have see it work on other projects i have done.

I then did some more adjustments to my main menu and even my main game, so that everything is smooth, so that the Player could go back to the main menu after you die and more, just to make sure everything works and it all looks nice for the final version of my game. As you can see in this final video, i have everything working well, you can go to the controls option and see your controls and what you need to do in this game. I updated the Controls text so now it tells you all of the necessary information while being at a good size to read,

in my opinion. I went back to the main game and updated the Restart panel as i forgot to add the new font to it, i also made it so when you die a text saying you can press R to restart and P to go back to main menu, so people can quit the game. To be able to press P to go back to the main menu scene i added additional lines of code in the Restart C# script, it was quite simple and easy to do, i tested this and it works just fine and i can keep doing it no problem, going to the game to main menu and vice-versa no problem at all. Now the game and the main menu look good and play well, but there a few adjustments i might need to do here and there, but i'll have to post my game to Itch.io to see how the game looks before i can properly adjust my game accordingly. Even though my game looks and plays well, there are a few small issues with the main menu and that is the buttons and it's text, don't scale properly with the screen. In this video to the left it look fine but when i full screen it, it looks a bit weird, i tried fixing this but it didn't quite work right. The buttons look too big while the text in it don't scale up, making it look small, not only that but for some reason the buttons are not being highlighted when the mouse is over them or when you click on them for some reason.

I not quite sure if i should try to figure how to solve this minor inconvenience, since it doesn't impact the gameplay directly or the game itself, it's just annoying to deal with, but fixing it would make my game more polished. I'll do some research on how to solve this and mess around a bit and if i find it too hard to fix, i'll just leave it and post my game to Itch.io and then make it possible to play the updated version on SharePoint.

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