

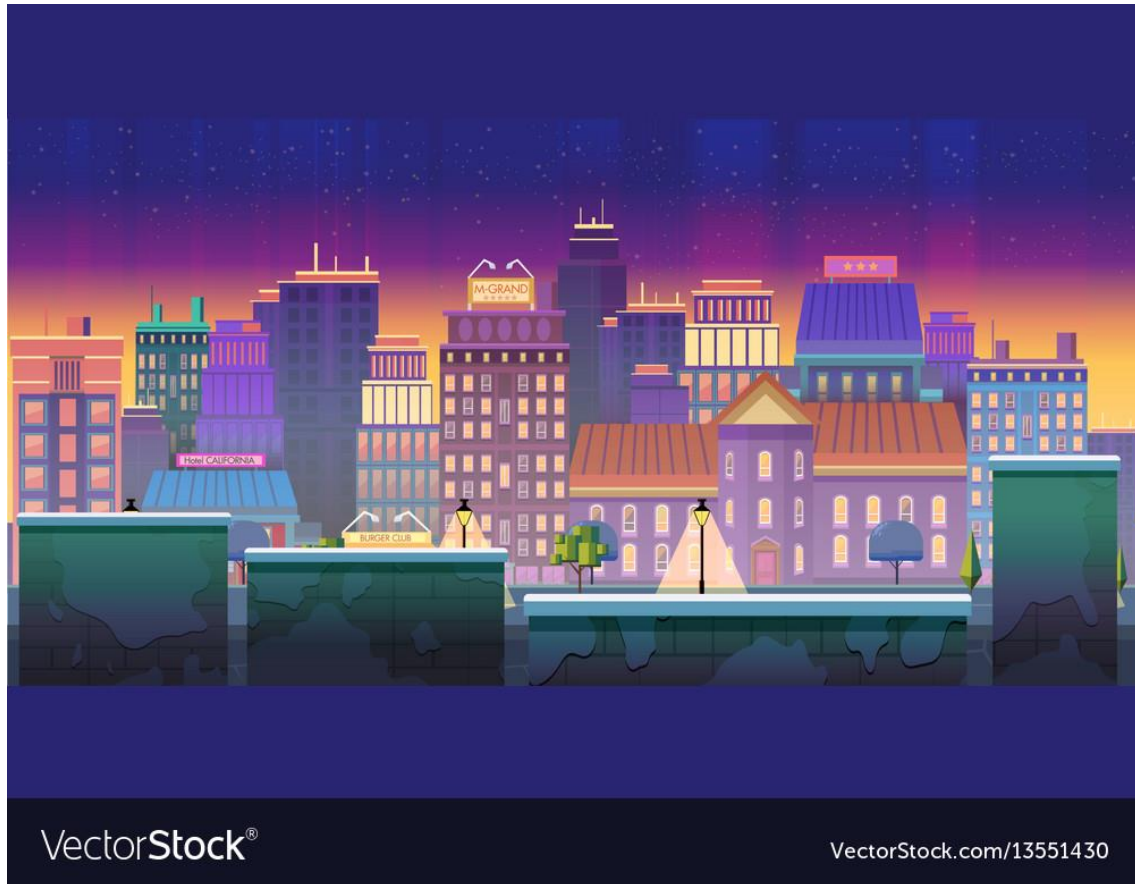
# Assignment 1

Enoch Elijah Fredric John Rozario

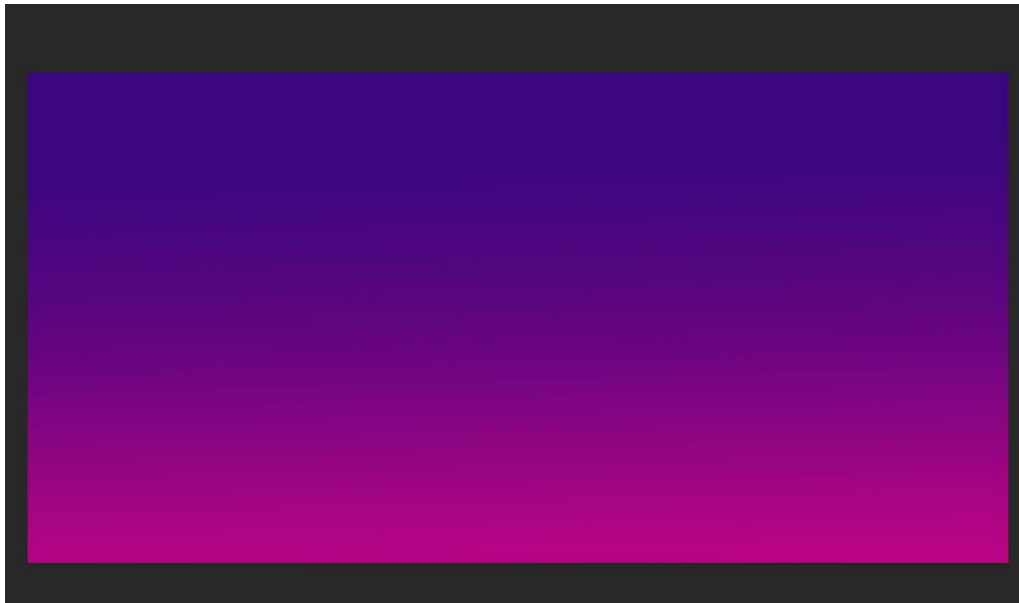
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Documentation

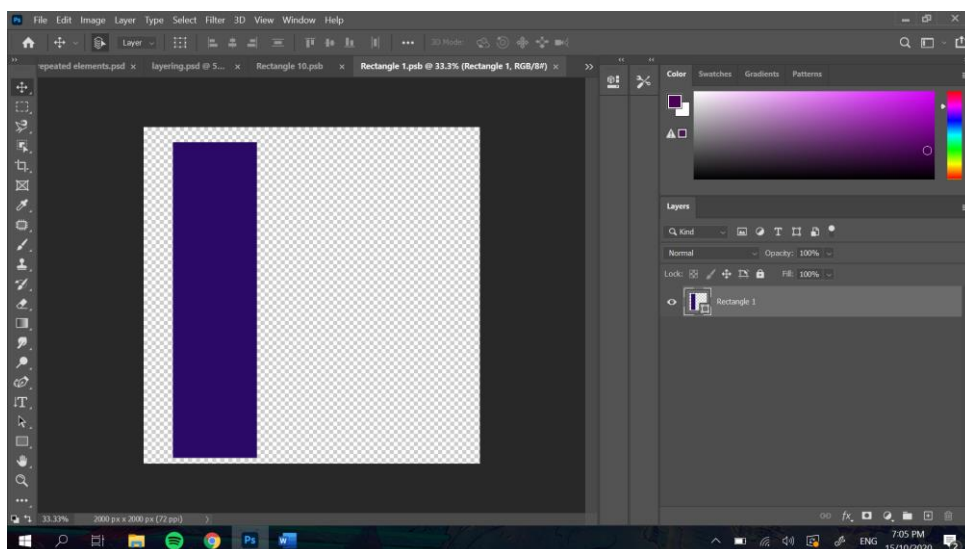
## Scene Composition 1 – Repeated Elements



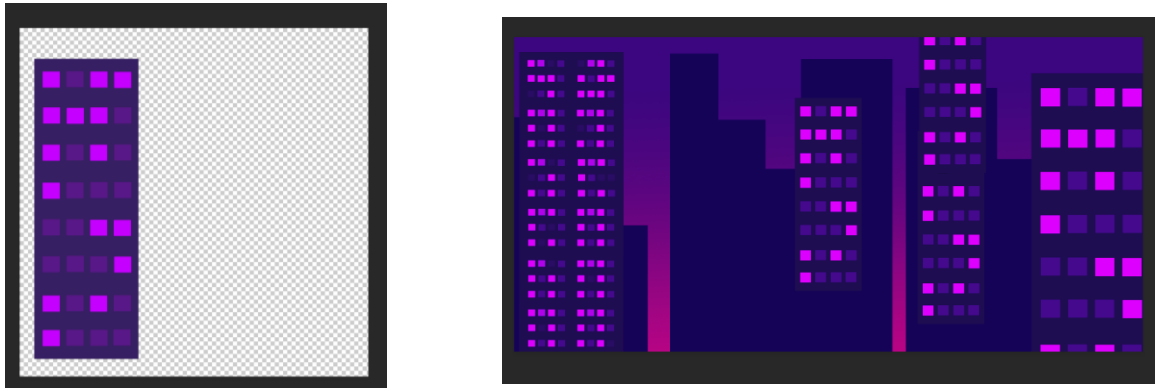
I took inspiration from this picture I found after googling “purple city 2d”. Before researching, I had an idea of having a purple themed city for my assignment since I have been obsessed with the Cyberpunk genre for games which follows a similar theme. Since most cyberpunk games have a neon purple and pink setting, I followed the same colour scheme and made a background using the gradient tool.



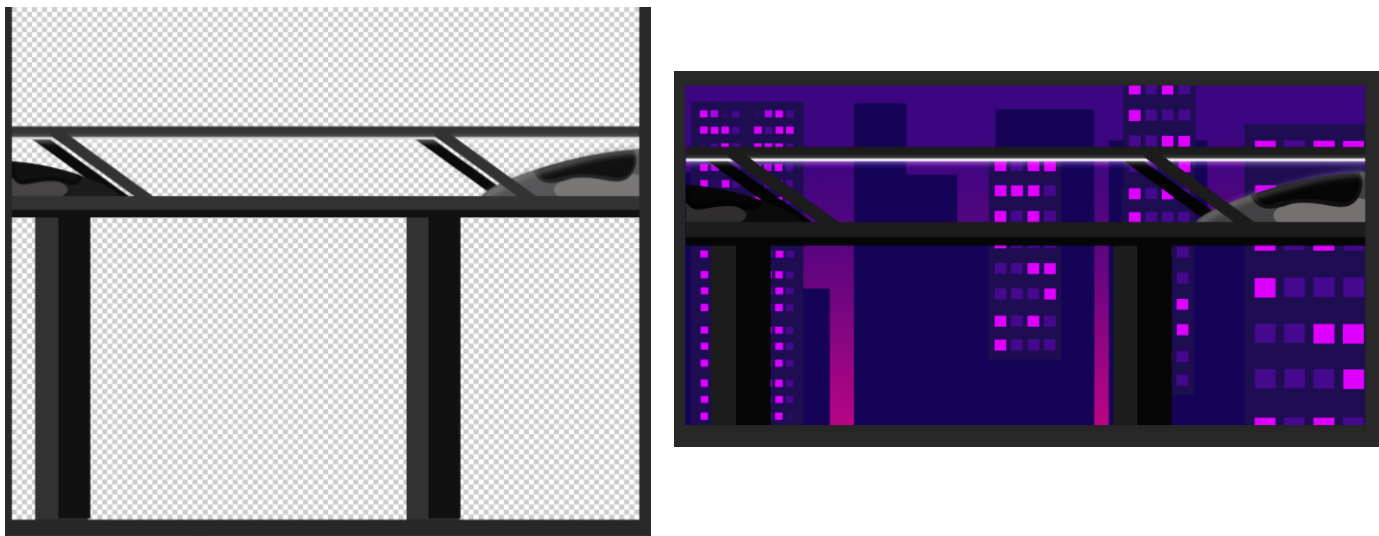
For the next layer I made a purple rectangle as a smart object and then copy-pasted them multiple times with different dimensions to create a background silhouette of a city.



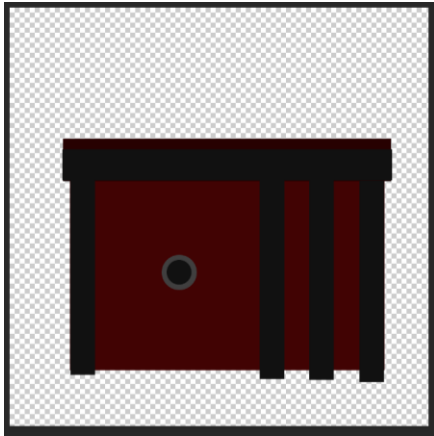
Then made another layer of buildings with more detail which would show lit and not lit up windows. I produced the windows by changing opacity of random windows to a lower setting. Again repeated this smart object multiple times by copy-pasting and transforming. Also used a lighter shade of purple than the background building silhouette.



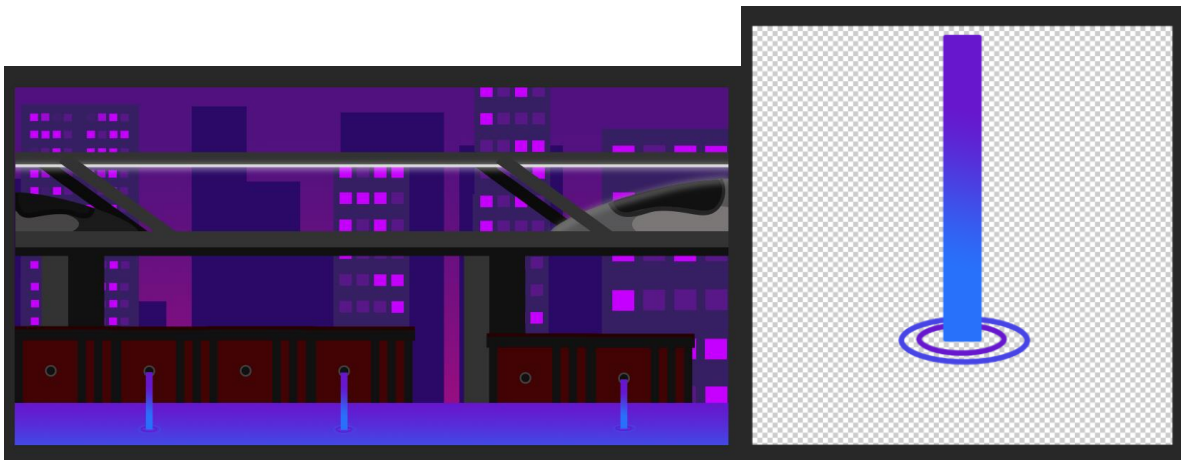
I thought of implementing a train going between the buildings with pillars supporting it. Which I created using shapes and the pen tool. The train on the right is lighter as its closer to us than the train on the left which is on the further track. Also added a bar of light on top and included a gaussian blur to it to give that glowing effect. I Did the same on the train on the right, where the curved edge near the light has a grey line with gaussian blur applied to it, hence giving it a shade interacting with the light bar on top of the track.



The next layer includes the pavement for the player to walk on. This was made using the rectangle tool and the ellipse tool. I wanted the player to be able to distinguish between the walkable platform and the background, hence made it a different colour from the purple-pink theme. I repeated the same step I did with the other layers where I copy-paste the smart object and connect them. The space and difference in height between the 2 pavement is meant for the player to jump across.



Inspired from the research stated at the start, I decided to add a river in front of the pavement with water gushing out of the pipes under the pavement. I made this by adding gradient to a rectangle. The water flowing out of the pipes are repeated elements and the ripples created were not visible when reduced in size. I thought of removing it, but also figured that if it was an actual game, it would be visible since it would be moving as an animation and not still.



I made a barrier on top of the pavement using the curvature pen tool. Then made red chains to connect them

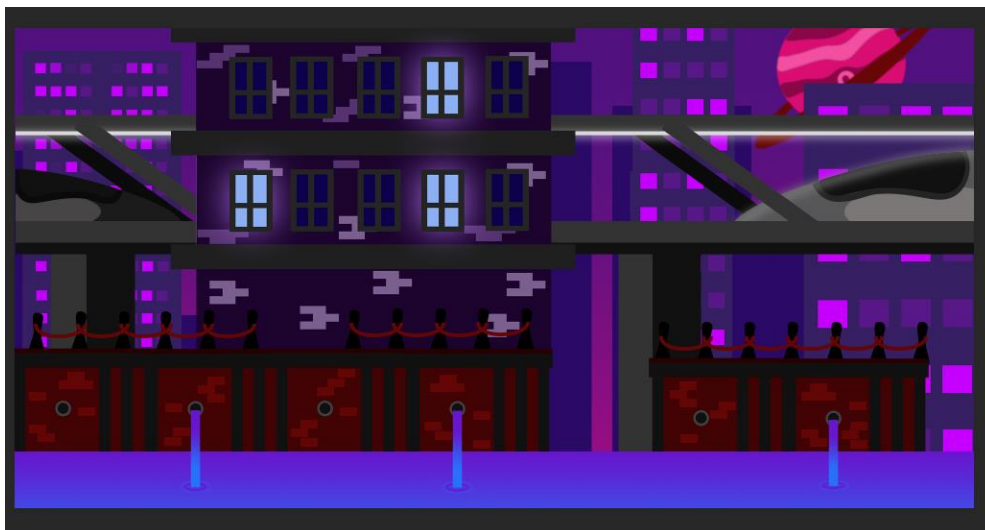
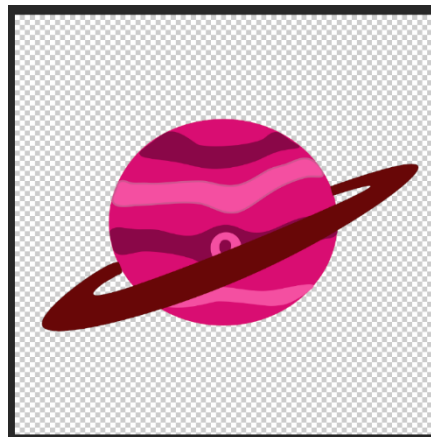


To make the purple building below, I used the rectangle tool and repeated the windows, floor separators and bricks. The windows which are lit up have a streak of blue paint behind it with gaussian blur applied on it. This gives a glow around the lit up windows. The idea of using random patterns of bricks to add detail to buildings was taken from the game "Night in the woods".



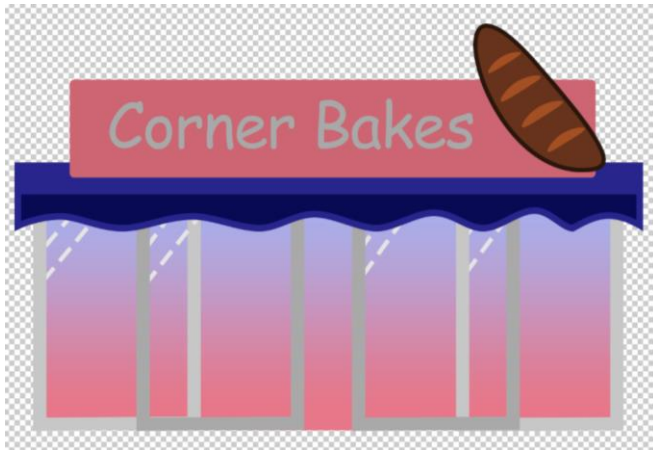


The game I made a layered scene is on a moon orbiting a ringed pink planet which has a similar design as the planet Jupiter. I used the ellipse tool for the planet shape and pen tool for the patterns and the ring.



The ground floor of the main building was empty and I wanted to add more light and different colours to the canvas. Hence I made a neighbourhood bakery using the pen tool and shapes tool. Also added a glow effect using the brush tool with the repetitive colour with gaussian blur applied.





Without gaussian blur



With gaussian blur

Since hot dog stands are on the verge of dying off because of the lockdown, I made one to pay respect for its existence and the times it has saved me energy and time from not walking too far to find food downtown.







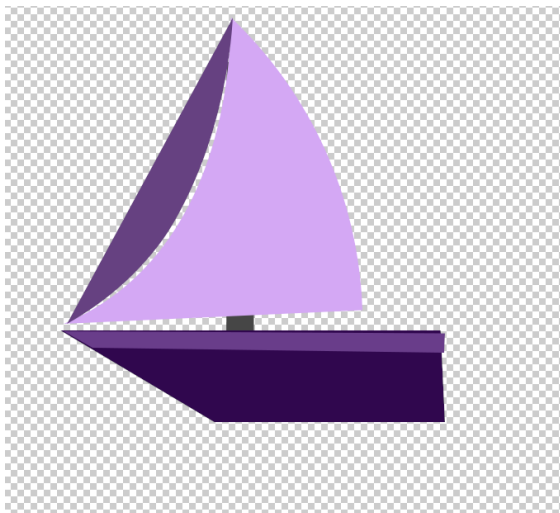
To enhance the depth of the scene, I added purple-pink mist behind the background buildings and in front of the planet.



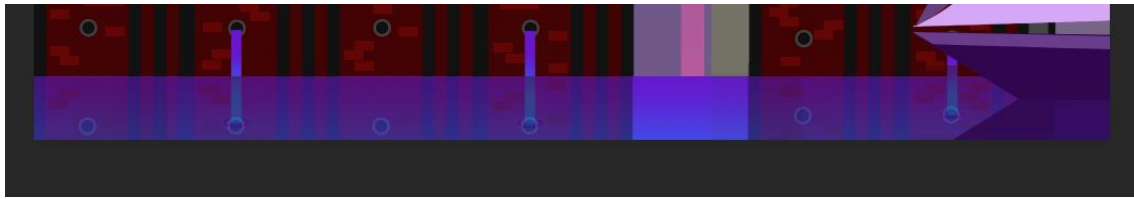
I moved on to add lamps made using the pen tool and the light rays with lowered opacity. The glow around the lamps were made using gaussian blur.



I added a boat on the river made using the pen tool.



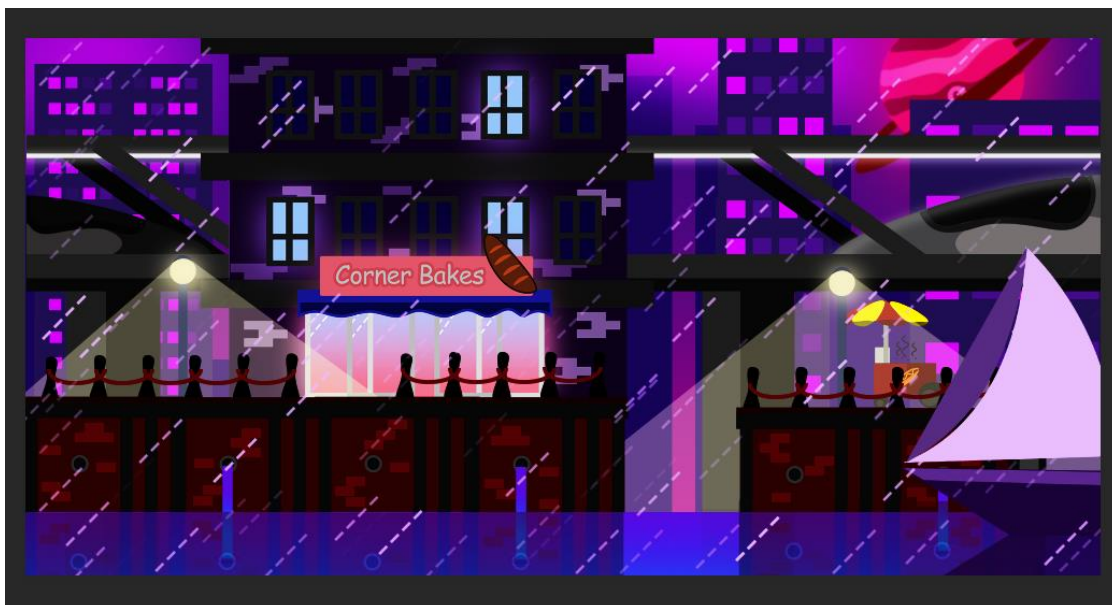
I went on to add reflections on the water interacting with the objects on it by copying, flipping it vertically and then reducing its opacity.



I wanted to make it look like it was raining, so I made a smart object of a dotted line produced using a pen tool, which I then made into a brush by defining brush pattern preset under the edit tab. I modified the brush to have 100% size jitter, 100% minimum diameter, 1000% scatter, 10 count, 100% opacity jitter and 100% flow jitter. Finally, painted the custom brush on a new layer at random locations to create the rain.



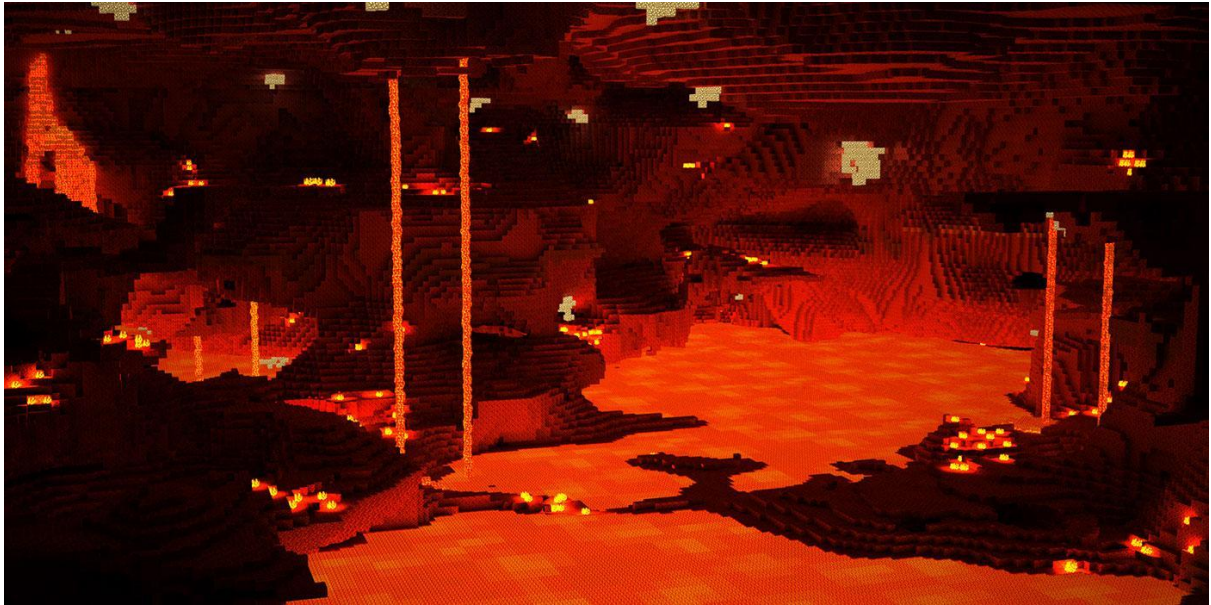
As the last layer, I increased the contrast to 100% to give it a darker look to the overall scene and also because I wanted the colours to look richer than before.





## Scene Composition 2 – Silhouettes and Illusion of Depth

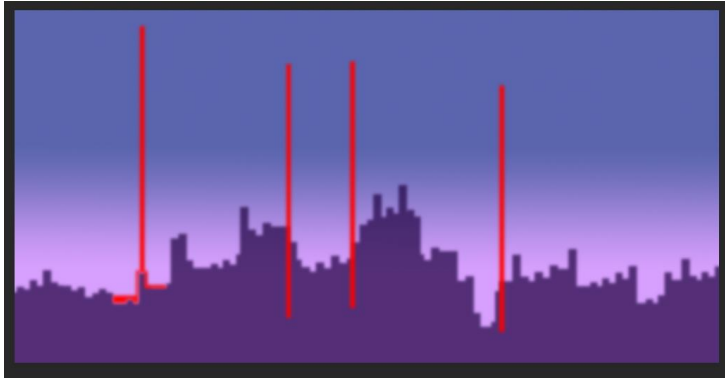
I took inspiration from the nether world in Minecraft which is this hellish underworld with no sky, filled with lava pools and dark caves.



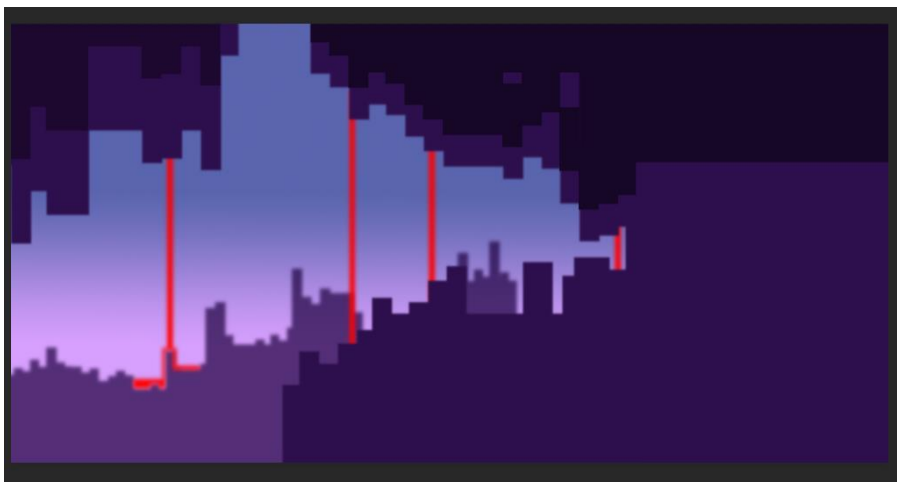
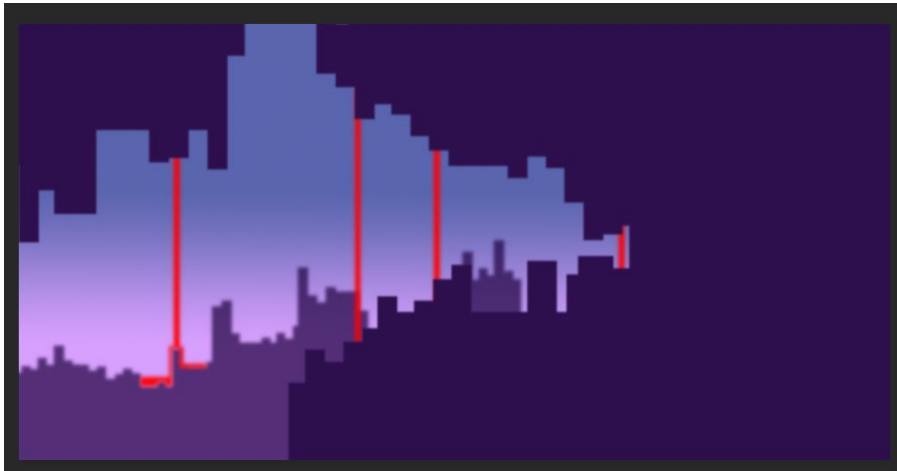
I tried to implement a duotone theme using different shades of purple(surface) and orange (lava). Using the gradient tool, I made a background with the darker shade of purple at the top representing the skyless place, and the lighter shade of purple at the bottom which is caused by the light from the lava reflecting on the purple surface in the distance.



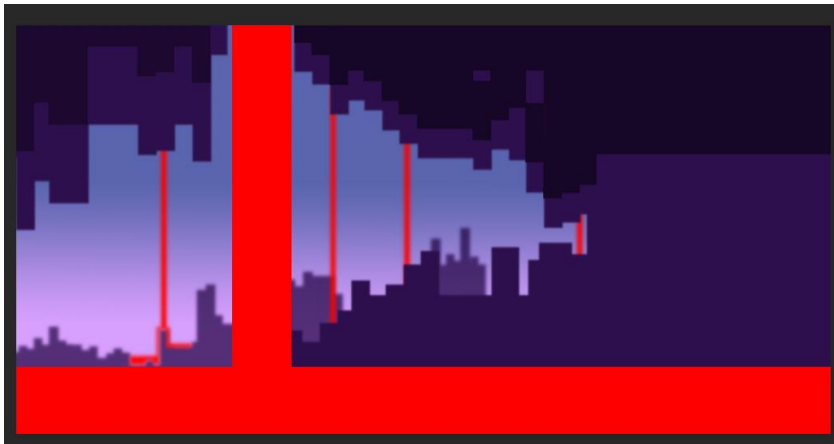
I made small purple rectangles, darker than the background to produce the rough terrain in the distance. Also gaussian blurred the surface and reduced the opacity to 72% to give it a sense of it being far away. I added lava flowing down from the top layers of the world which has gaussian blur applied on it.



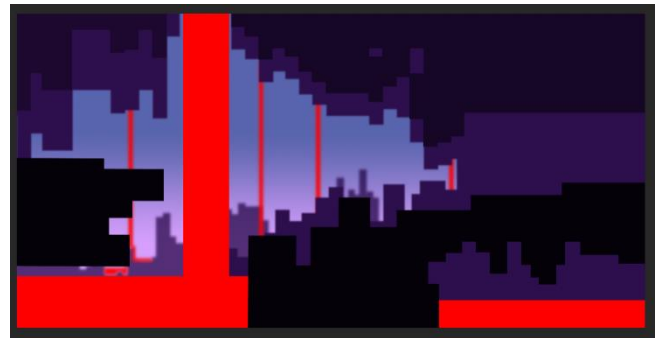
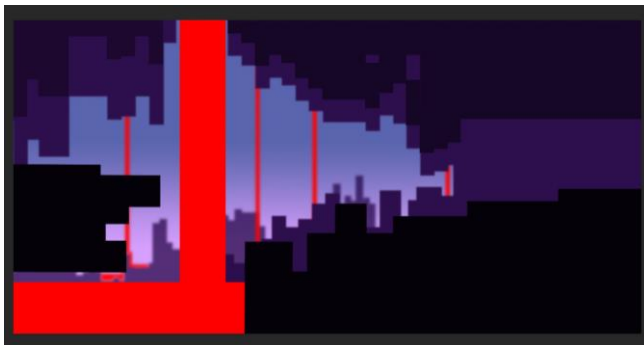
For the next layer I did the same as before where I made small rectangles and copy-pasted them to create pixelated edges of the outer cave with a mild application of gaussian blur, but this time using a darker shade of purple. The purpose of this is to show a perspective of a player inside a cave in the underworld with a hole showing the state of the larger scene outside. Each block is an individual rectangle placed one by one after cloning it with the same effects.



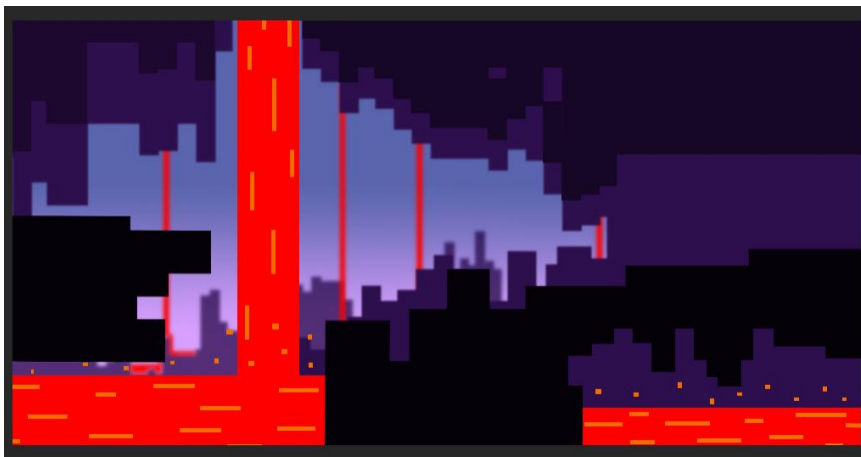
I then moved on to make a lava pool closer to our perspective using the rectangle tool with a neon orange fill.



For the player to walk on, I made the ground (platform) of the cave which is a very dark purple made with multiple rectangles merged together. With the bottom right looking quite empty, I made another small lava pool inside a smaller cave.

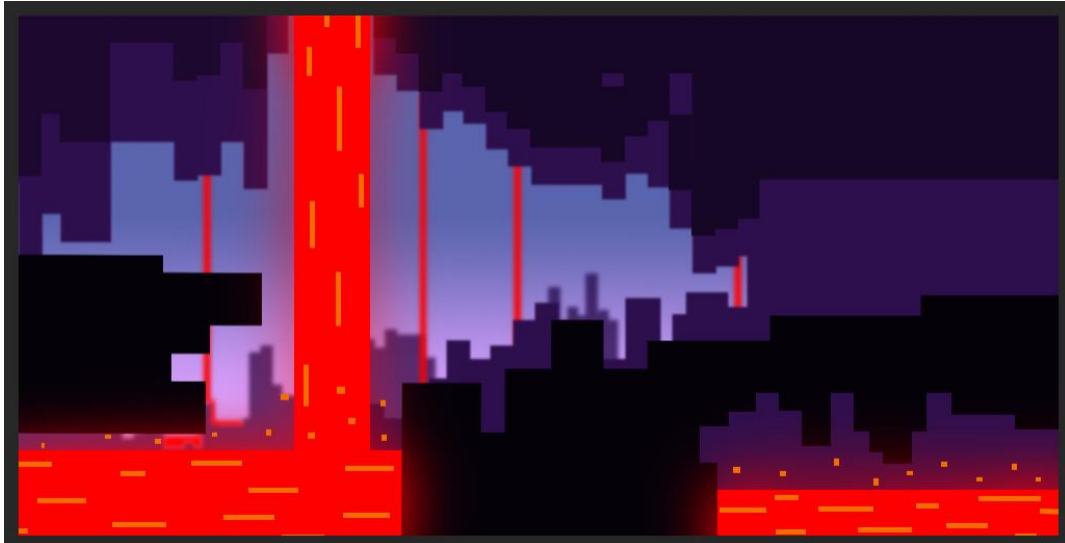


To add movement/life to the lava, I added small brighter streaks of orange to show a direction of flow since it is liquid. Also added specks of orange above the lava to portray lava spouting and bubbling out because of the heat.

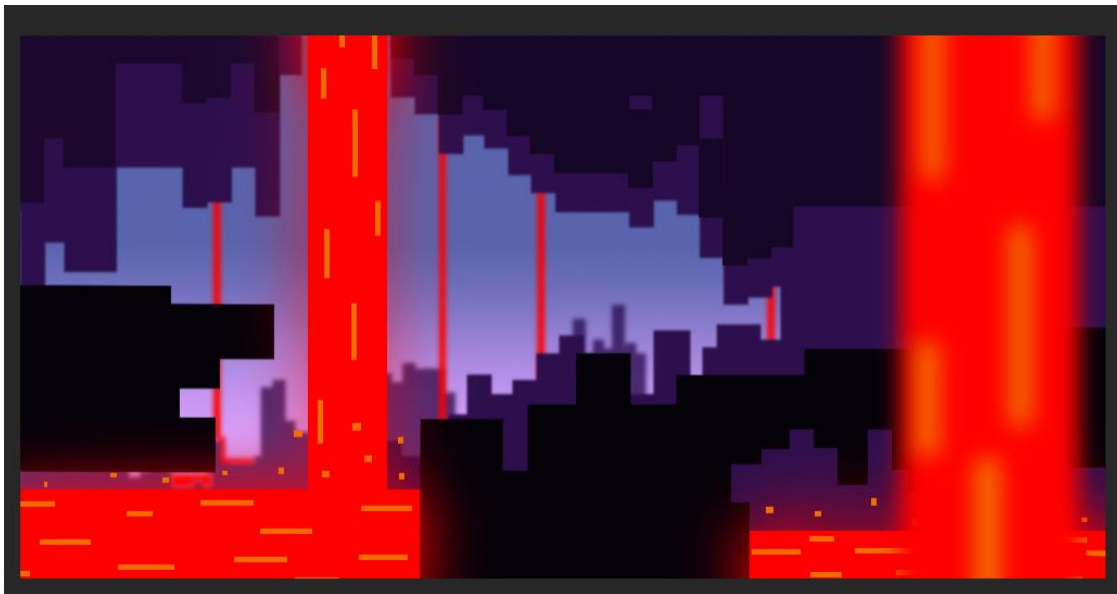




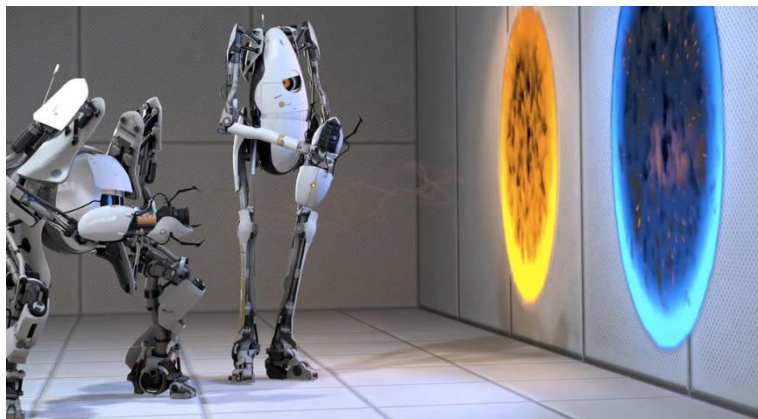
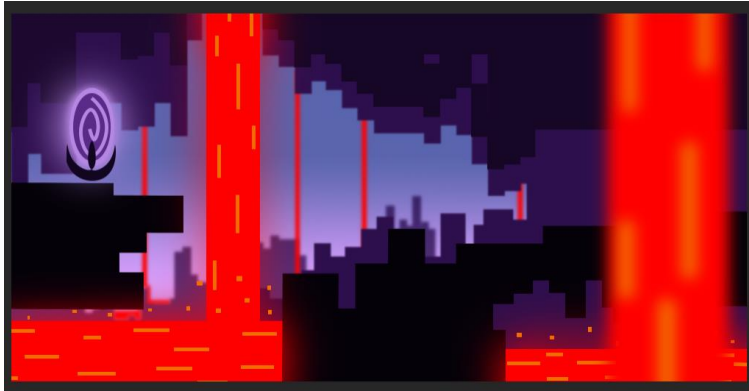
Since lava emits light, I added a glowing effect to it by drawing streaks of light orange under the lava edges and then applying the gaussian blur which smudges it out. I made sure to add more streaks near the purple surfaces around the lava to emphasise the interaction of the light reflecting off the surface.



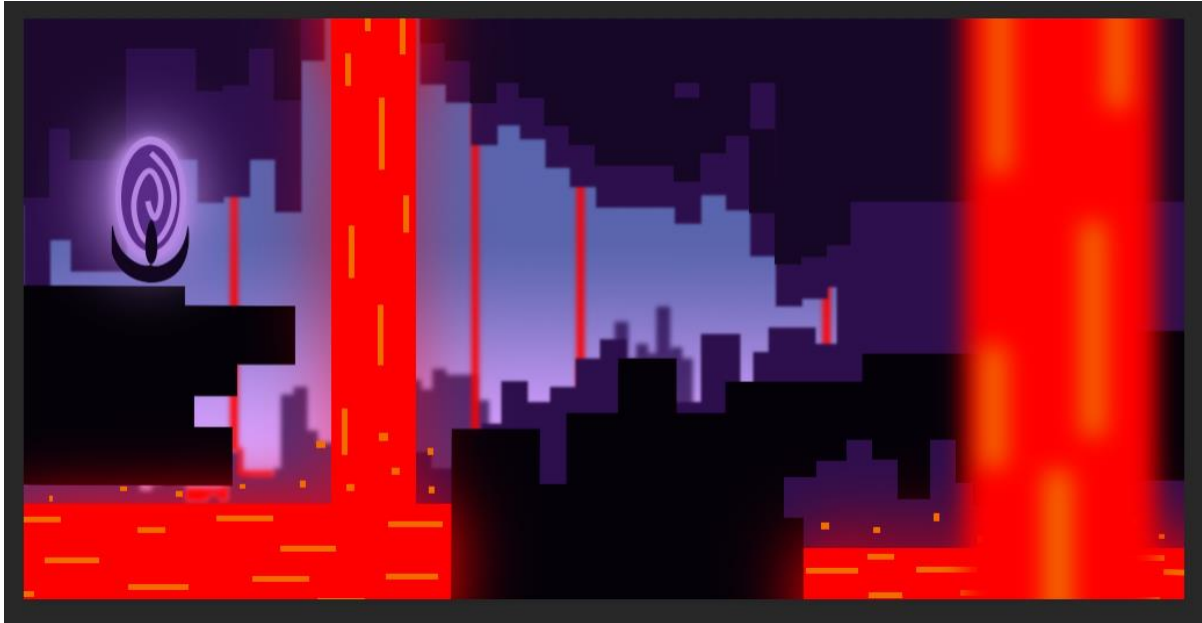
I produced another “lavafall” but this time closer to our perspective to improve the illusion of depth in the scene. Then used gaussian blur on the “lavafall” which was made using the rectangle tool as before.



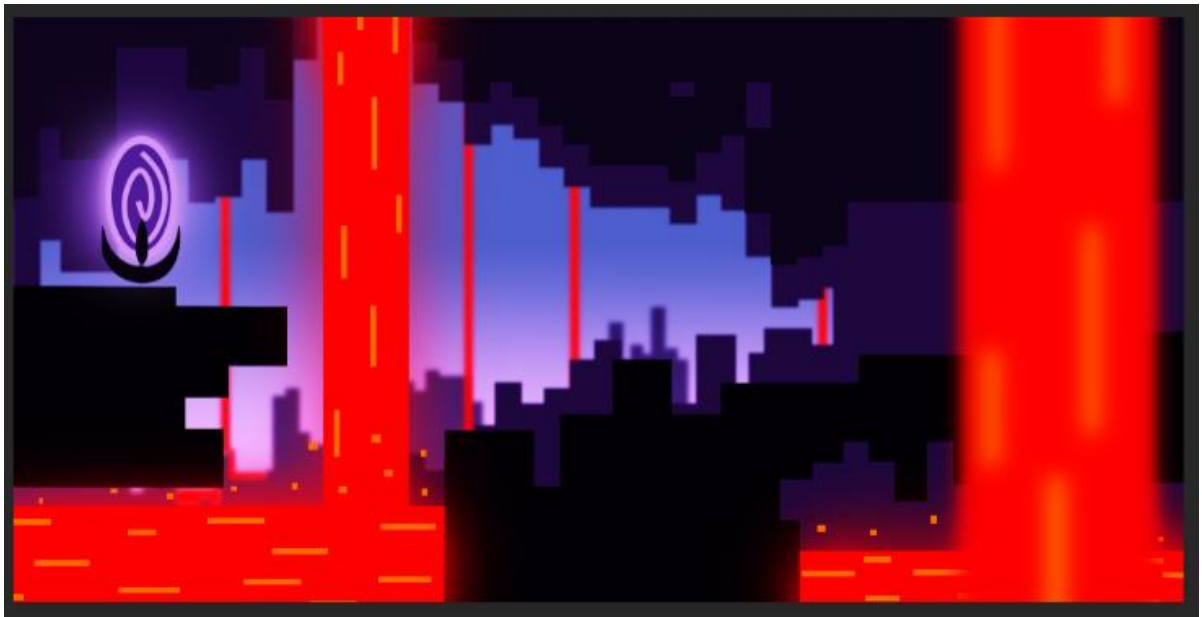
I made a portal to show how the player could have entered into this world, hence giving a bit of a story to the scene. The shape of the portal was inspired from the portals made in the “Portal” game by Valve. I made a floating black base for the portal and also made the portal itself float above the base. Again, used gaussian blur to create a purple glow around the portal.



Finally, applied more contrast to the scene making the colours richer and darker.



Before contrast



After contrast

## References

Scene 1 inspiration

<https://www.vectorstock.com/royalty-free-vector/city-game-background-2d-game-application-vector-13551430>

Hot dog stand

<https://www.pressdemocrat.com/article/news/dueling-hot-dog-vendors-jockey-for-prime-turf-in-rebuilding-coffey-park/>

Night in the woods

<http://www.nightinthewoods.com/>

Scene 2 inspiration

<https://twitter.com/PocketGamer/status/618056856502558721/photo/1>

“Portal 2” game

<http://film.byu.edu/aperture/?p=288>