Neon Park

Design by 121632
LD1 – 3D Level Design, 24/10/2013

Documentation version 1.0

Version 0.1
Theme documented + Isometric sketches and explanation added.
Version 0.2
Documented level iterations, revised documentation theme and isometric sketches. Added extra headings for easier navigation.
Version 0.3
Added section on the fourth iteration.
Version 0.4
Updated all pictures for a clearer font.
Version 0.5
Updated pictures for even more clarity.

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Theme

This level is based on the theme of Blade Runner, a film directed by Ridley Scott. In the movie Blade Runner, the main character travels through the streets of future Los Angeles This future, because it was imagined in the real world 1970s, heavily incorporates elements we would now consider ridiculous, such as a large amount of neon lights. These neon lights could be used as a great way to lead people through the level, especially with their great variety of colour.

Example of neon lights being used in one of the movie's locations, the food-stall filled streets of future Los Angeles

The second-most important element of the movie that I would like to employ is the fact that the modern city seems to be built on top of the old city, causing various objects such as pipes to lie on roofs, giving the city displayed in the film a very messy look. This can help create various cover objects and pipes could even be used as a way to lead the eye around the level, just like the neon lights will.

The film's city is also filled with interesting geometry, such as the building displayed below;


This building could easily serve as a very nice visual recognition point in the level. While this specific tower is not used, I was inspired by its shape to create a pillar-like structure.

Besides this pillar, the following was incorporated into the level; the level is built out of an abandoned plaza or park in the middle of the city with a decorative pond, a large restaurant-building, some fire-staircases to an upper level and the level is bordered by the immense skyscrapers seen in the movie. I have also used neon lights to direct the eye, but have not placed objects such as pipes. While it is not directly a scene of the film, good work by the artists will easily make it recognizable as the 'bleak' future of Blade Runner.

Iterations

Sketches

With the ideas mentioned in the Theme section, I started to work on sketching the level. At first, I created levels in two different settings; one in the streets in-between all the food stalls and one on top of the rooftops. However, I quickly realized while sketching that both of my levels were going to be too symmetrical and that neither had all of the benefits of this theme that I wanted; the rooftops could easily introduce interesting geometry, while the streets had the neon lights that I could use. Because of this, I started to merge my two designs together, starting by making my first isometric sketches in three-point perspective:
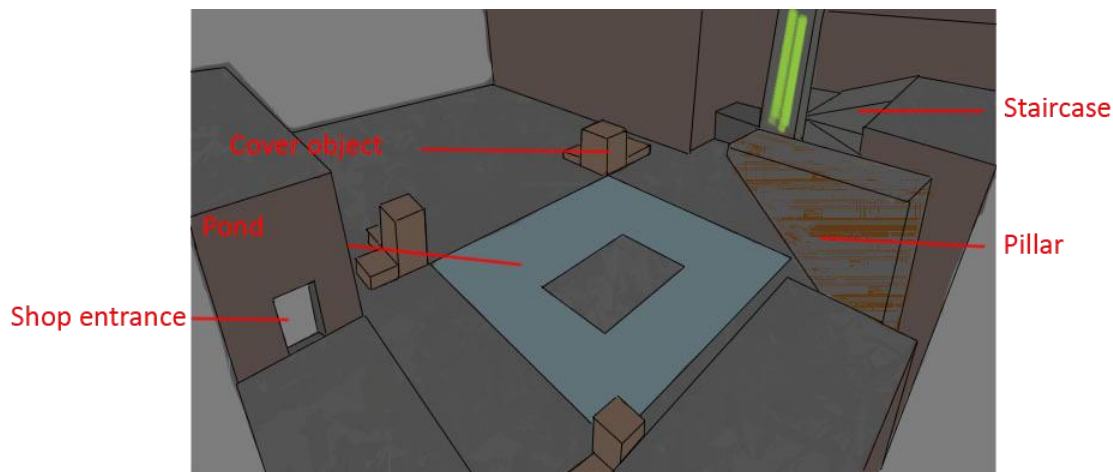
The basis I worked from for this sketch was the idea of having at least three height levels, with various objects at levels in between these. Next to this was that the bright lights mentioned in the theme section would have to appear in the level to help navigation. The third goal was to have a fairly open map with a lot of visibility so the four players can always see one if not two other players. My last goal was to have a very simple map with no trigger events or lifts and the like. A player had to be able to look at it and understand how it works right away.

With this sketch, I introduced some interesting geometry such as the pillar on the right, the pond in the centre, the cover objects and the staircases in the back. All of these are very recognizable and easy to understand. There are no pickups in this sketch. The pickups are not added until the first UDK iteration. There are however two good spots for pickups easily visible in this sketch, such as the end of the pillar and the centre of the pond.

Overall, the level in this sketch seemed a little small, so I decided to try and sketch this proposed level from a different angle.
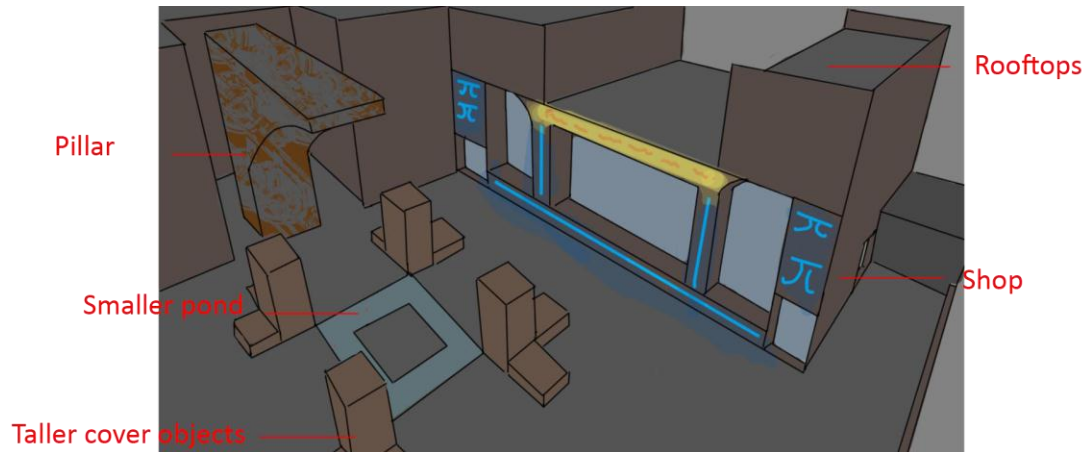
The level in this sketch seems a lot different. However, as said before this is intended as the same level from a different angle. With the previous sketch in mind, this is only three-quarters if not half of the level, as there is an entire section of higher ground around the pillar missing and the open staircases leading up. While drawing this I realized that the previous pond was far too big and would likely take up too much valuable space. The increase in height of the cover objects was something unintentional at first, but it worked out well in the end. Also, while this sketch does not include a drawn version of the inside of the shop I had already started thinking of one so that I had something to fall back to in case there was not enough space in the level already thanks to the rooftops.

UDK

Several contractions will be used to help show the location of the items in this section of the document. Below is a list of each contraction and their meaning:

HP = Health Pack
TP = Thigh Pads
BA = Body Armour
SB = Shield Belt
SR = Shock Rifle
RL = Rocket Launcher
LG = Link Gun
UD = U-Damage
Be = Berserker

For extra clarity, buff routes and the locations of health vials will be drawn in green, ammo pickups in blue, spawn points in yellow and the routes of jump pads in pink.

In this document the level and the iterations will be broken down in four sections; the first and largest section is of the overall level as seen from above. The second section is about the yellow and red room on top of the store.

Overall level

First iteration
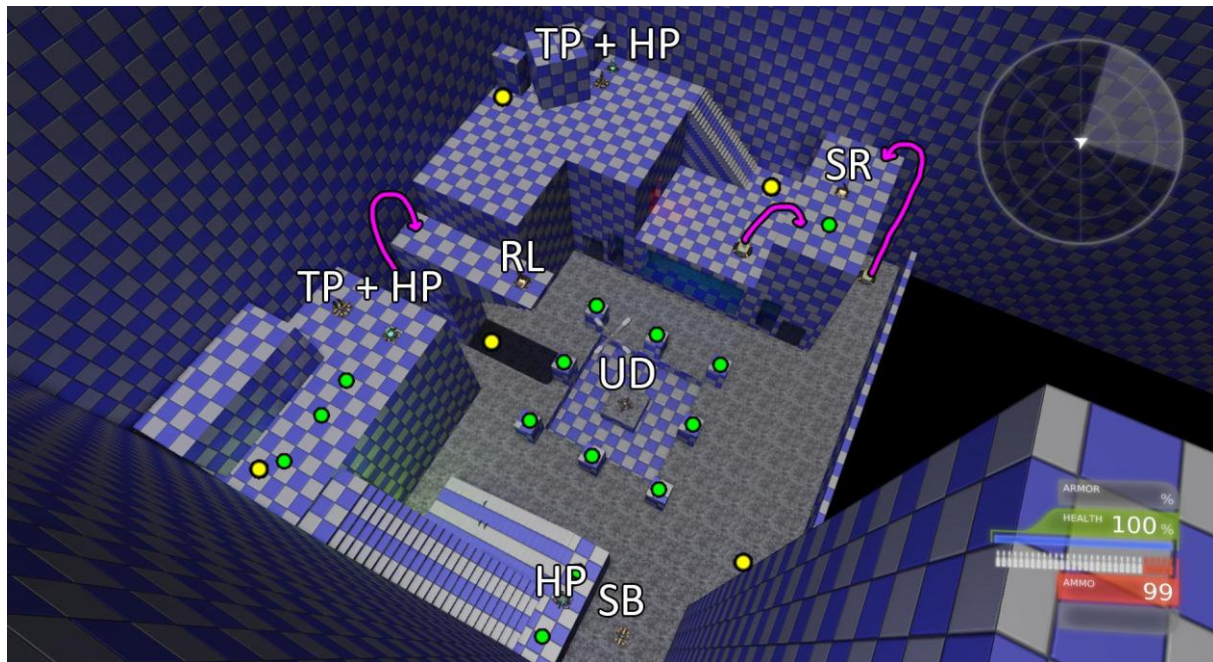
Shown above is the first iteration of Neon Park built in UDK. As can be seen, it is quite similar to the sketches displayed before. There are some changes though. More cover objects were added around the pond in the centre for two reasons; four pillars on each corner simply made no difference for a player's field of view during play and these cover objects hardly provided cover as most people will shoot from above.

While adding the extra cover objects I made sure that there was a possibility of jumping between them. Even if at this point there was not much use for them, I added a health vial on top of each cover object.

After testing this level with human players two issues were discovered; the open staircases were barely being used, and the large flat space just next to the pond was not either. This level also contained a lot of dead ends, such as the one in the alleyway next to the stairs right below the point the screenshot was taken from. The other dead ends were located inside of the two rooms above the store.

A second issue that came up when testing was that the jump pad from the ground floor up to the SR was barely used.

The walls around the level are large cube structures meant to resemble the large flats shown in Blade runner. The smaller walls on the right side of the level are more of a fence type construction, the open area is deliberately left empty because it should not distract from the level itself. It also leaves the area open for artist interpretation and creativity to help reinforce the theme. It could be a busy street with cars flying by or a construction site.

Second iteration
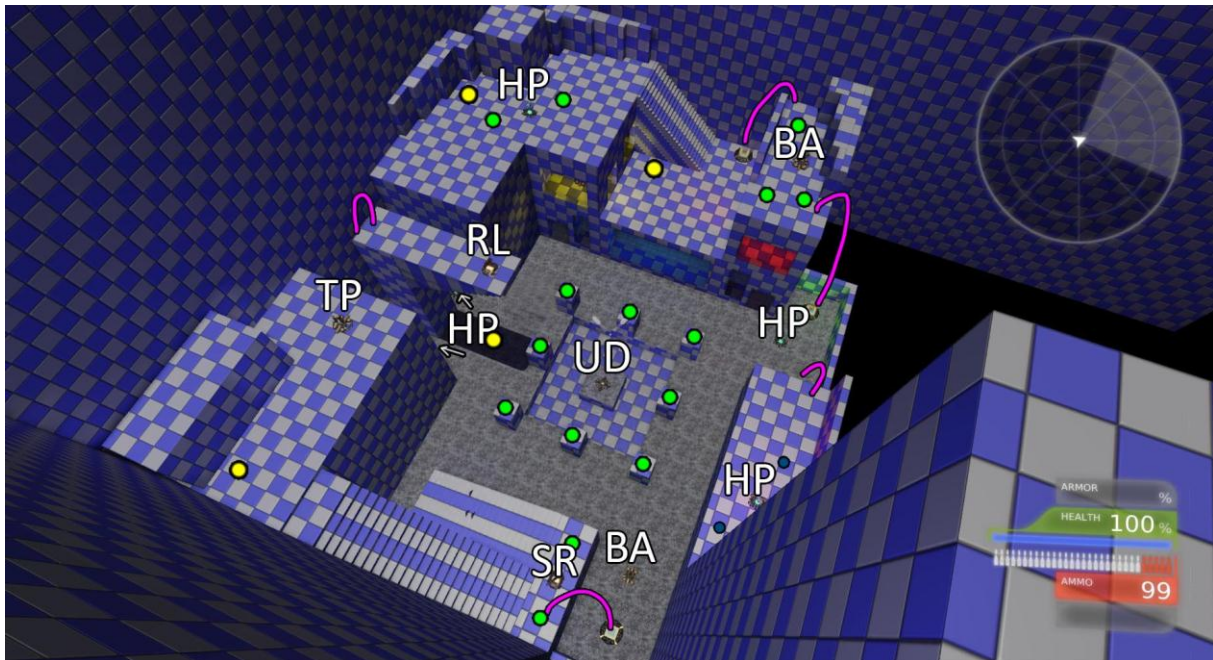
Shown above is the second UDK iteration of Neon Park. There are quite a lot of changes when compared to the previous iteration. The first big change in the geometry is the extra platform that has been added on the right. The reason this platform was added is because as said before, the space was unused. It is on the same height level as the 1st floor of my level to help movement between the open stairs and the store, causing this area to be used a lot more and the overall flow of the level to be improved.

Something that this platform also added is a nice way to easily get on top of the cover objects around the pond, making them more useful. I also discovered that the player can quite easily rocket jump from most of these cover objects to somewhere useful, such as the yellow room, the 1st floor roof, the open stairs and the platform.

An issue that came up when testing the change however is the inability to easily go to and from between the red room and this platform. It is possible to jump from the red room to the platform, but it is only possible to jump from the platform to the red room with a rocket jump.

The second biggest change is the removal of the area next to the store. As said in the previous iteration, the jump pad located there was hardly used. To help make this jump pad useful it was moved inwards to help increase its visibility and added a health pickup to lead players to it. However, during play testing this jump pad was still not frequently used. Because of this, a green light was added to it to have even more attention drawn to it, leading to it being used more.

There are a lot of smaller changes in this iteration. The SB was replaced with a BA in the alley and a jump pad was added behind it to no longer make it a dead end. I also moved the shock rifle to the open stairs so players would use the area more and it proved to be quite an effective change. I also added various curves on top of the rooftops to both decrease their size and to improve the overall flow of the level. To further help the flow, most pickups were moved into the player's route.

Another change is the separation of thigh pads and health pickups. In the first iteration, these were often placed together but that caused those areas to feel overpowered.

Changes were also made to both of the rooms on top of the store and the 2nd floor rooftop on top of the store, but those will be discussed in greater detail in their own respective section.

Third iteration
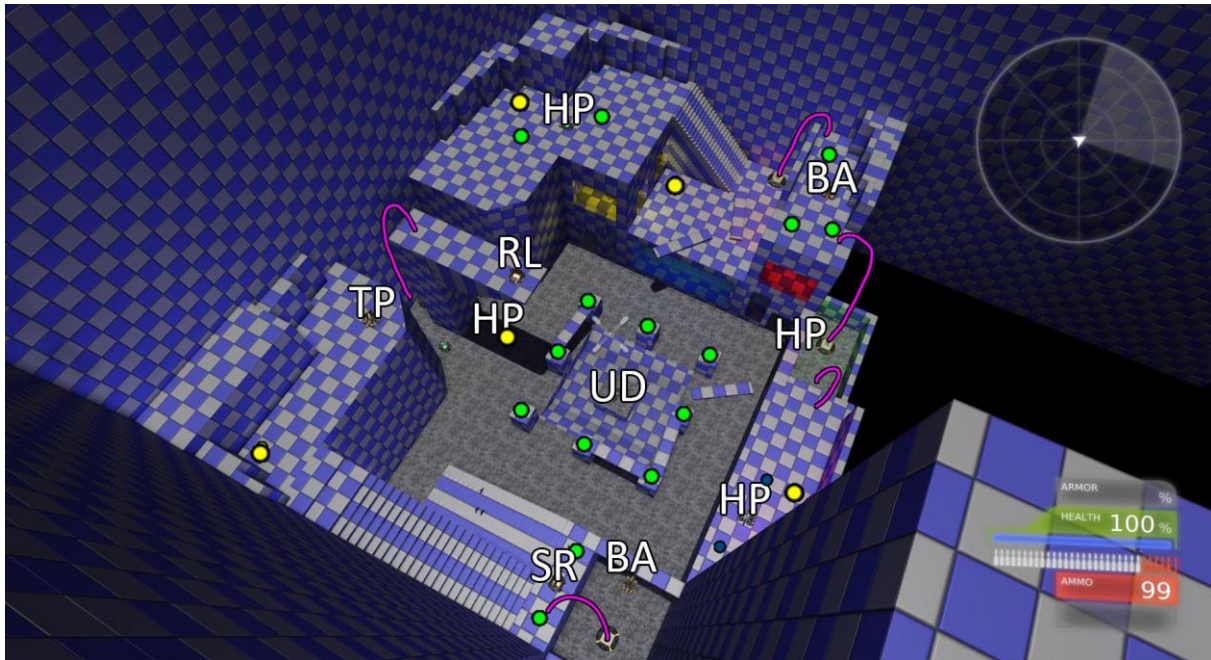
Shown above is the third UDK iteration of Neon Park. This iteration is mostly polish, and because of this there are only minor changes. The most important would be the addition of various planks throughout the level. The primary use of these planks is to improve the flow.

The most important planks that have been added are between the pink platform and the open stairs and between the pink platform and the red room. Thanks to these planks, the jumps between all of these areas are much easier, not to mention the fact that it is now possible to jump from platform to red room without much trouble. I avoided placing the planks between these areas diagonally to help keep a simple architecture in my level for the artists. The planks between these areas can be seen as the top of a gate to the courtyard and because of this they are placed between two solid walls. While play testing the desired result was achieved even without diagonal planks so I did not feel the need to change them.

While it is slightly difficult to see, two extra planks were added on top of the store. The one facing the RL was added to make the jump from the rocket launcher to this roof seem more possible and easier. After play testing however, it turned out that this plank also drew the player's eyes as if this plank were an arrow. Because of this, players jumped onto the cover objects more. While this was a nice addition to the flow of the level, it seemed too strong. Because of this, I added another plank on the roof pointing towards the stairs to mitigate the other plank.

In the previous iteration, after jumping through the window in the red room the player felt drawn to the jump pad in the alley next to the open stairs. Because of this, I added a plank here to draw the player towards the centre of the map. This also drew the player towards the jump pads if they jumped down from the RL.

The planks between some of the cover objects were added to make jumping between them feel more attractive and fun.

An extra change is the corners next to the RL pillar. The corners were cut diagonally to help guide the player behind the pillar, towards the jump pad located there. I also increased the space near the start of the open stairs to make that area feel better. As an added result, the area around the thigh pads on the second floor feels much better flow-wise.

Fourth iteration
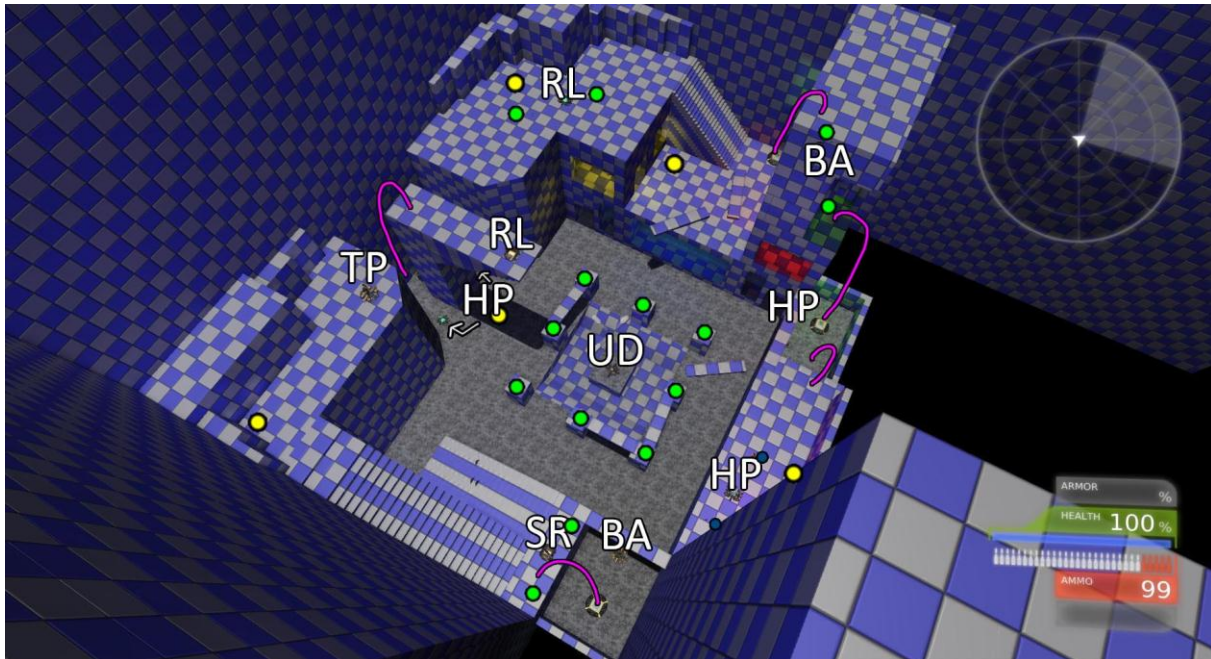
Shown above is the fourth and final iteration of my level.

The biggest and only change in this iteration is the addition of a roof on top of the red room rooftop. I will go into further detail on this in its own respective section.

Extra lights were also added to the level and the dominant directional light was reduced in brightness. This was done because the movie itself is set in a fairly dark and grimy city as mentioned in the section on Theme. Because of that, the art style for the walls, floor and buildings of this level would likely be dark as well. The lights added make the level work even if the level would be darker.

The lights also help reinforce the theme of the level. As it is named Neon Park, players would likely expect a lot of neon lights in it. The various extra coloured lights help fulfil this expectation.

Red & Yellow rooms

Shown to the left are the three different iterations of the red room in Neon Park.

In the first iteration, there was only one door to the outside and the BA was located inside of a dead end. The room was yellow for navigation and because it matched the BA.
There is also a spawn point in this room as indicated.

In the second iteration, I opened up the area a lot by adding two large windows. This removed the dead end. The location of the berserker was also swapped to this location as it was a more open area than the other and a powerful pickup should not be hidden in a safe area. Because of this the light has been changed to red as well. In this iteration however most players were drawn to jump out of the window towards the pink platform instead of going outside through the door.

In the third iteration this was solved by moving the stairs around so that the exit is where the spawn point is located. The door and window were also removed and replaced by a large open section of the wall. The BE was moved towards the door to help guide players outside as well.

The spawn point in this room feels strong at times as the player can spawn and pick up the BE, but because each spawn point has a fairly good pick-up close by there was no need to change this.

Shown to the right are the three iterations of the yellow room in Neon Park.

In the first iteration, just like the red room, there was only one door leading outside. The room was coloured red to improve navigation and because of the BE pick-up located inside of it.

Just like the second iteration of the red room, this area was opened up more by adding two windows. The BA was also moved here at first, but it was changed to a TP to help balance the level. The light was changed to yellow to match the armour. One issue in this iteration is that the player walks right into a wall as soon as they have made it up the stairs.

In the third iteration the stairs were moved in this room as well so that the exit faces the windows. This helped improve the flow of the level and it helped give the players a second direction to move through from this room as the player can see both window and door.
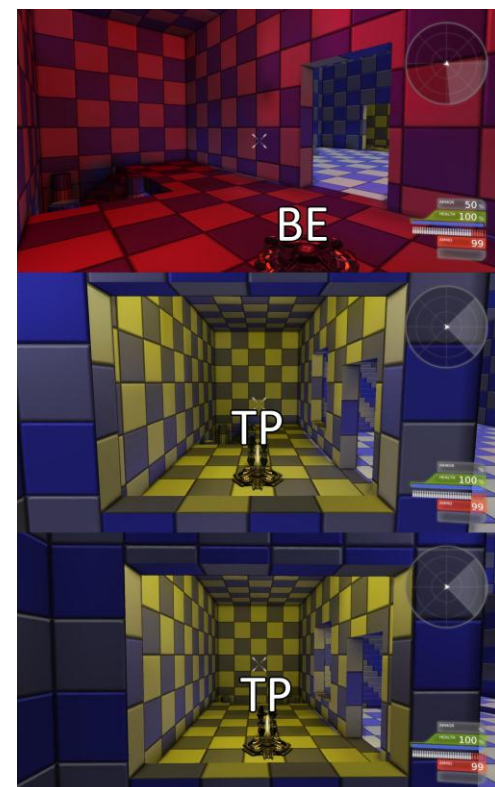
2nd floor rooftop
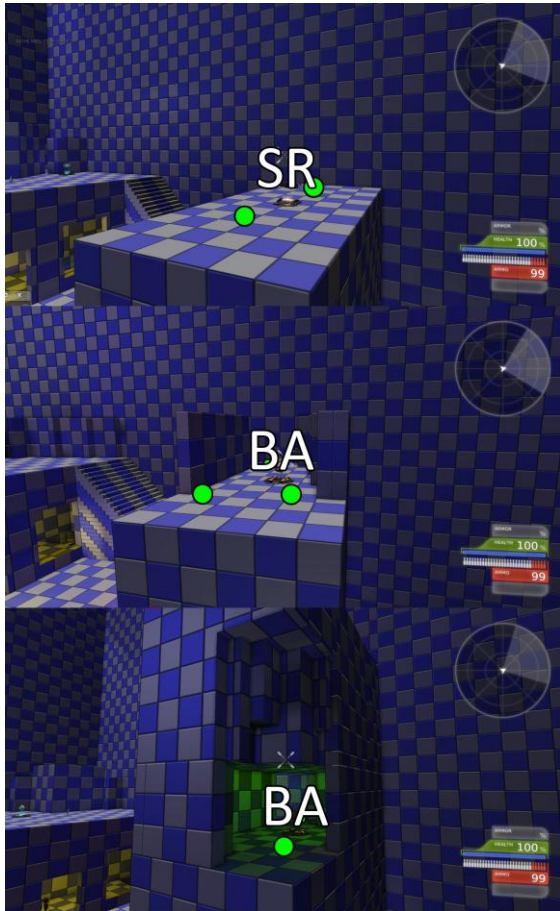
Shown to the left are the three iterations of the 2nd floor rooftops in the Neon Park level.

In the first iteration, the rooftop had a shock rifle placed on it. However, the player had a lot of vision of the level on top of this roof and it was fairly easy to dodge whatever came their way.

In the second iteration, the shock rifle was replaced with a BA. Two walls were also added as a means of blocking the player's field of view, but after multiple play sessions it became clear that these did not do as planned. It was still too powerful a location in my level.

Because of this, a roof was added to the rooftop in fourth iteration. A lot more walls were also added causing it to be more of a tunnel area that the player would not want to stay inside. A light was added to brighten the area, which was turned green to help navigation, as the jump pad leading up also had a green light near it.

Store inside
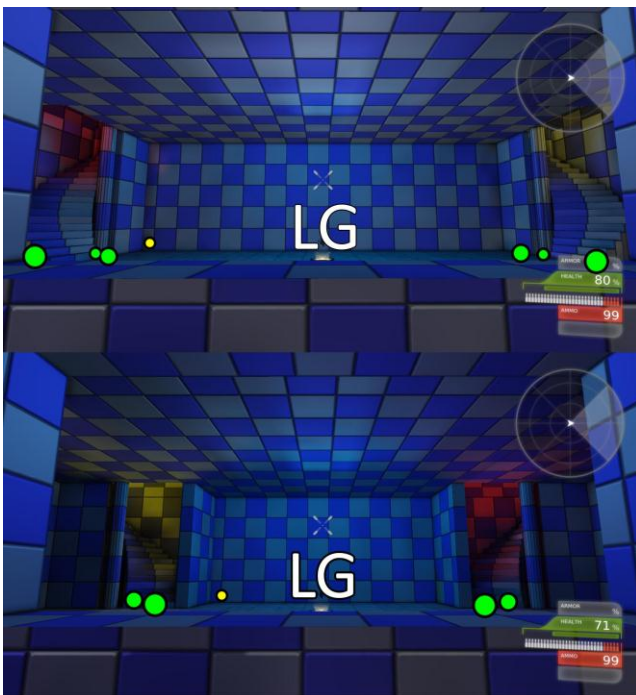
Shown to the left are the first and last iteration of the inside of the store.

In the first iteration, there were buff routes towards the stairs in a half-circle, to help people be guided from the door to the stairs instead of walking into the side.

In the last iteration, the stairs had been moved to help the flow in the red and yellow rooms and because of this the location of the buff routes changed. They were also reduced in number from three vials to two because there were almost too many vials in the level.

There is also a spawn point in the left of the room. While this is quite close to the LG upgrade, other spawn points are all also close to a good pick up so there was no need to change this.