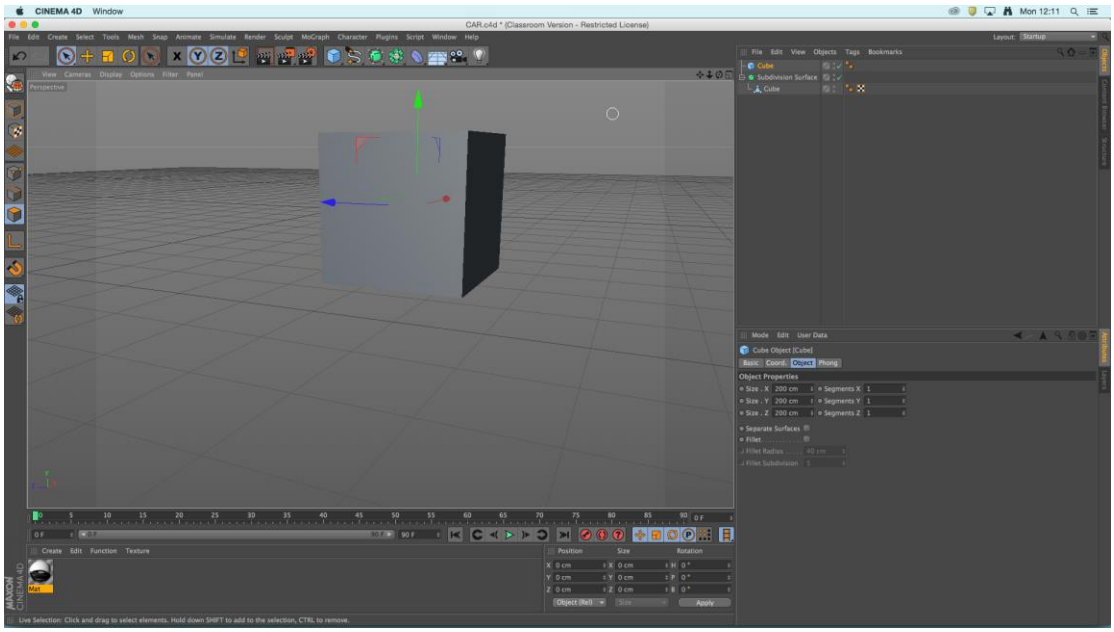
Development

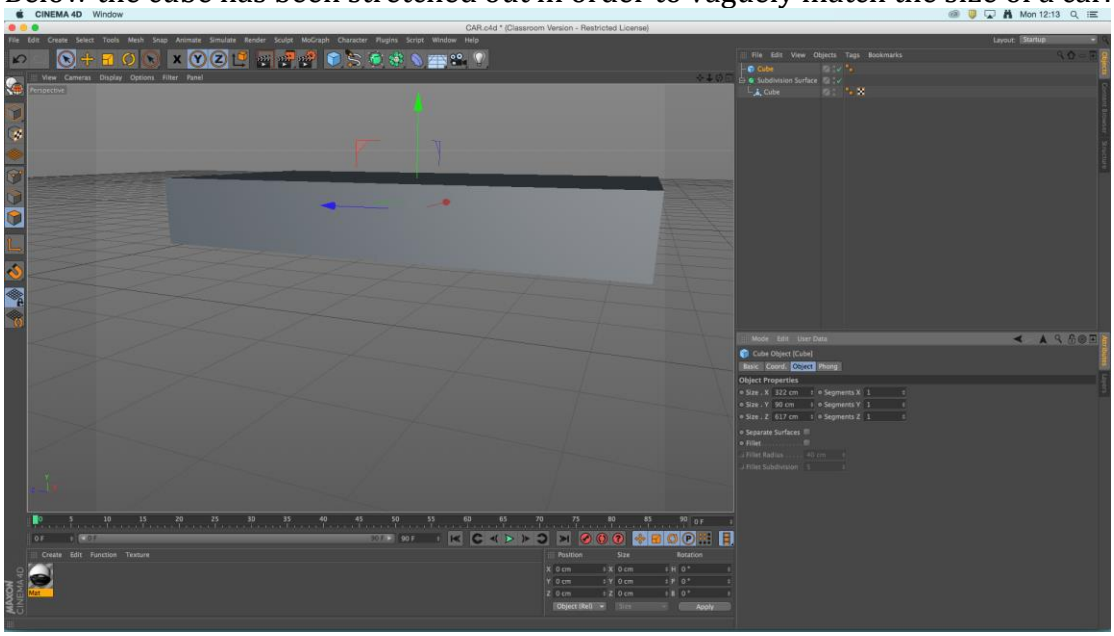
3D Experimentation

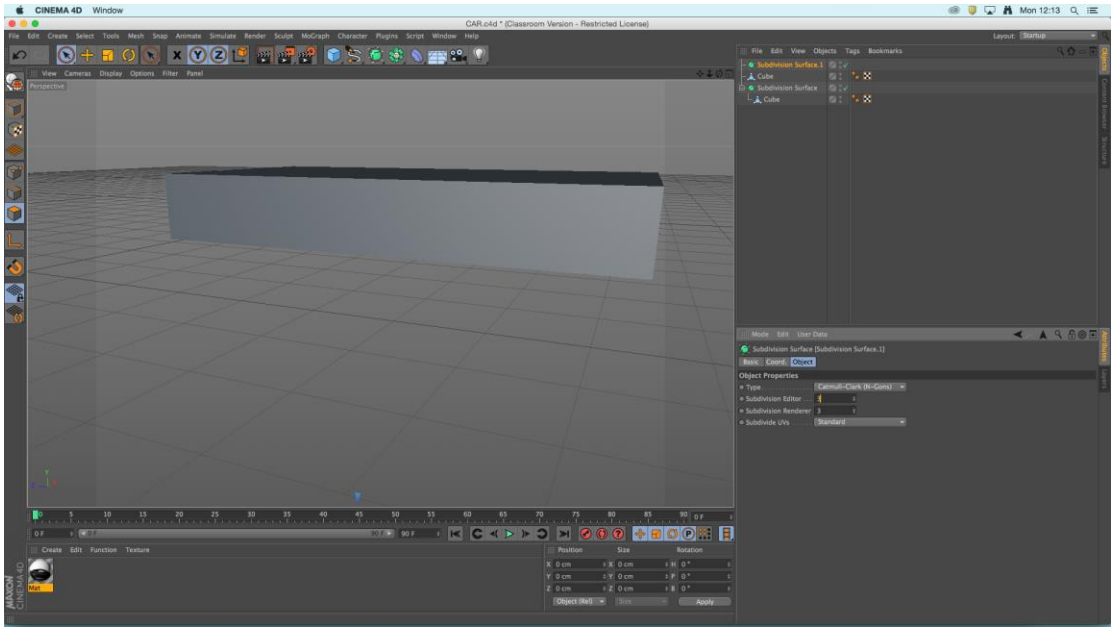
Cube Method

The first attempt I made to make the car was using the cube method which included making a primitive cube and cutting it into pieces.

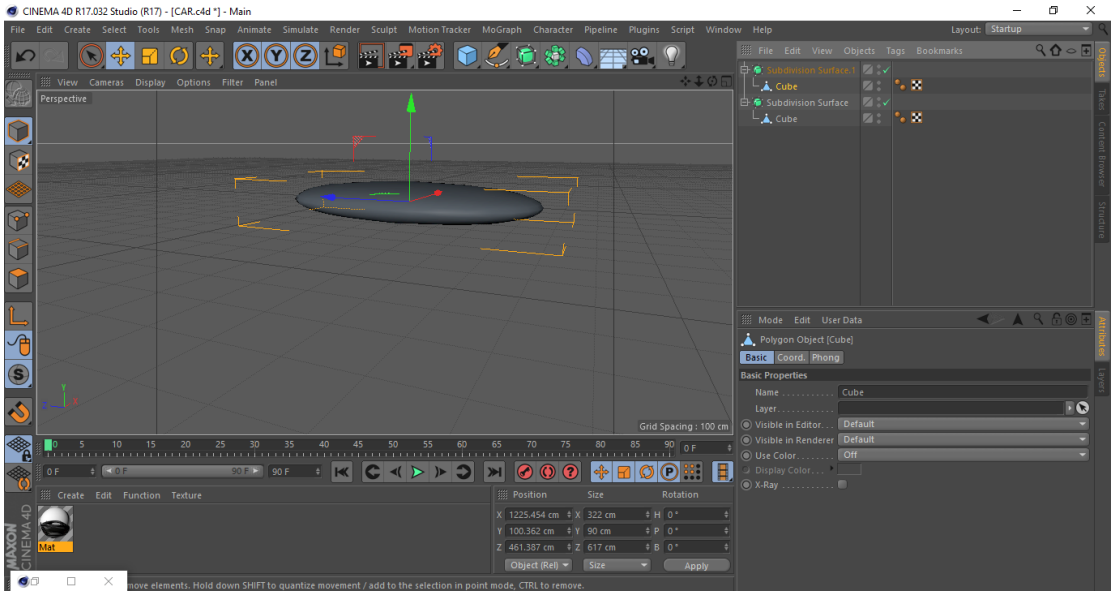


Below the cube has been stretched out in order to vaguely match the size of a car.

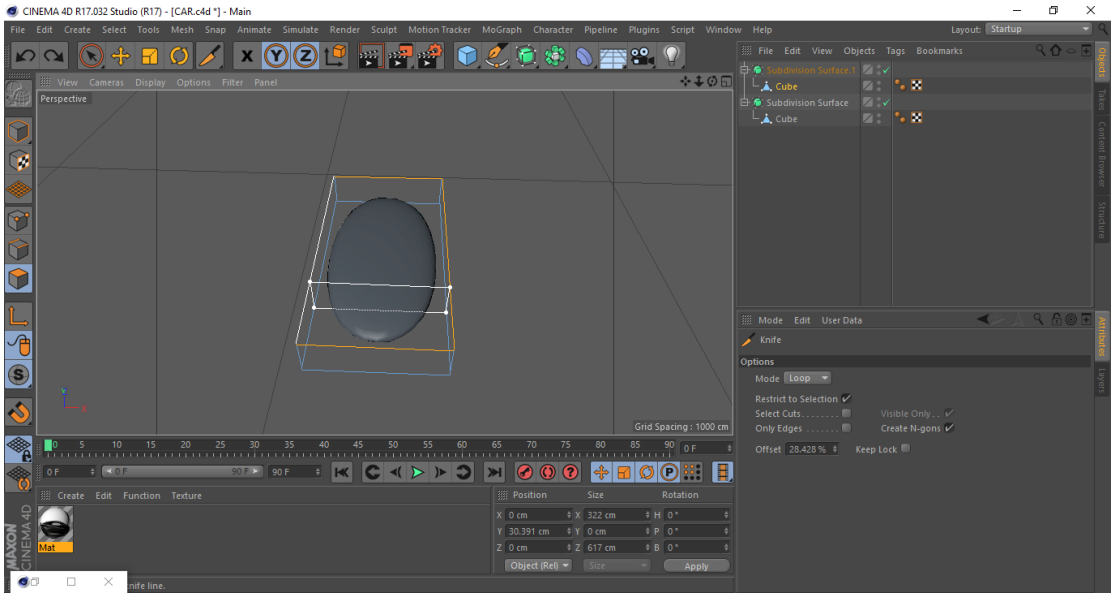


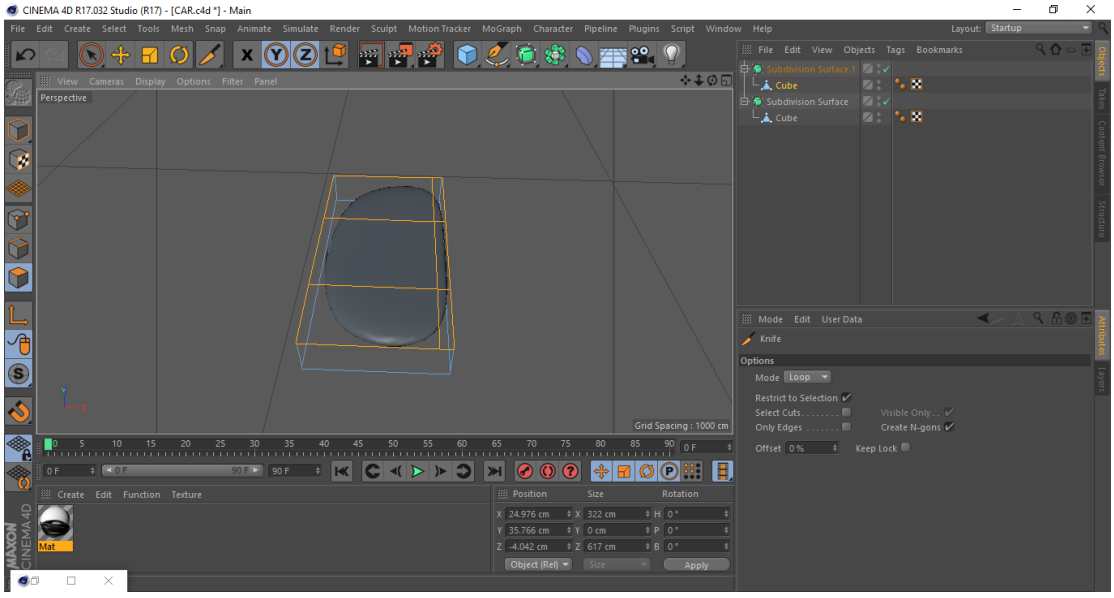


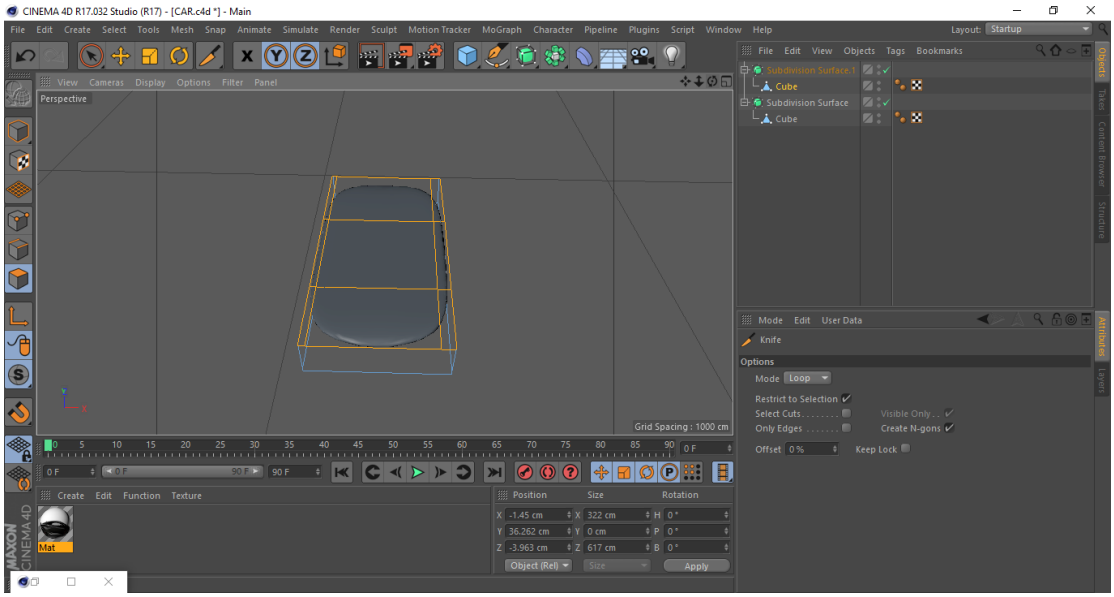
When dragged under the **subdivision surface** the cube deforms into the shape below.



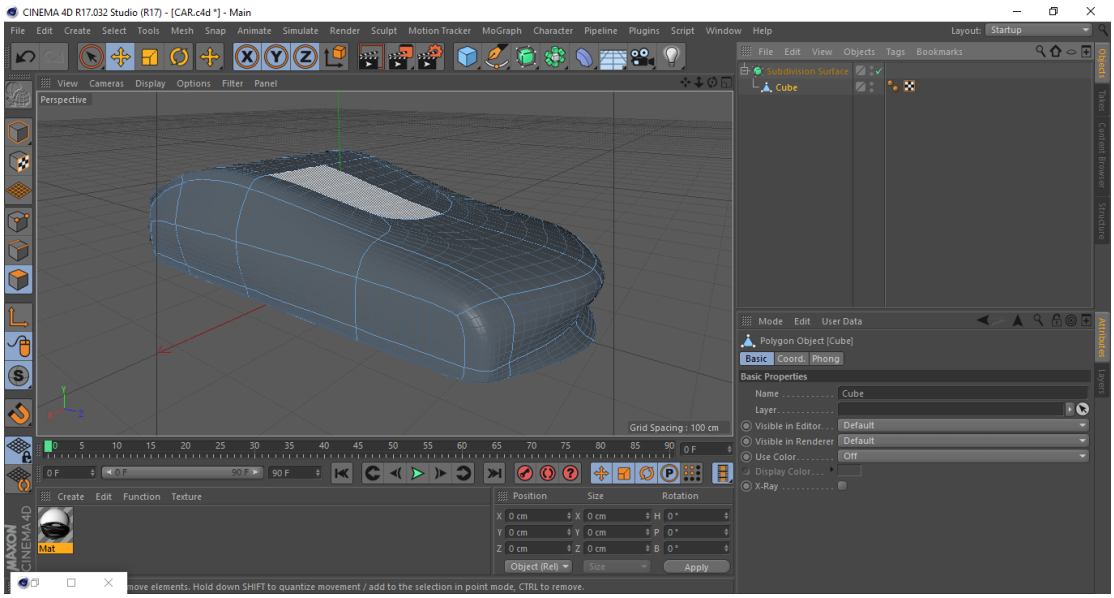
By using the **knife tool**, I am able to cut the shape into sections.

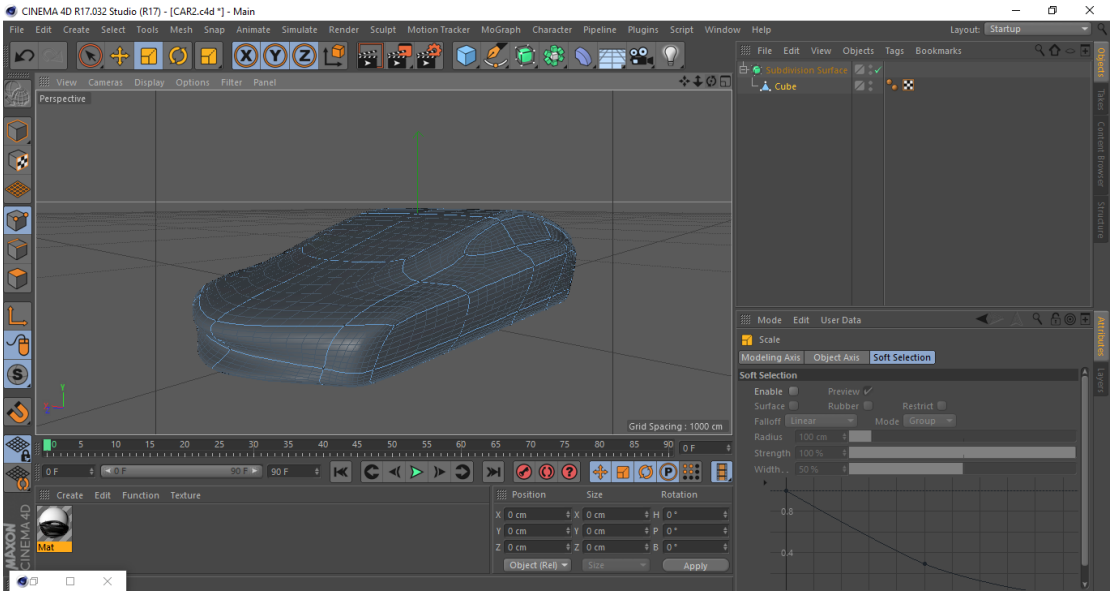




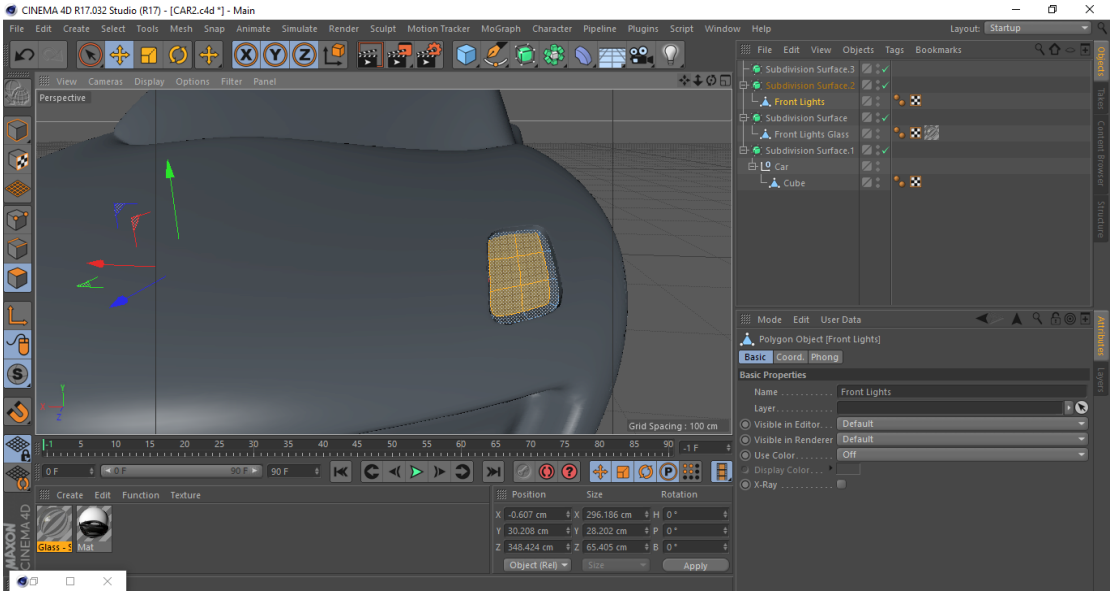


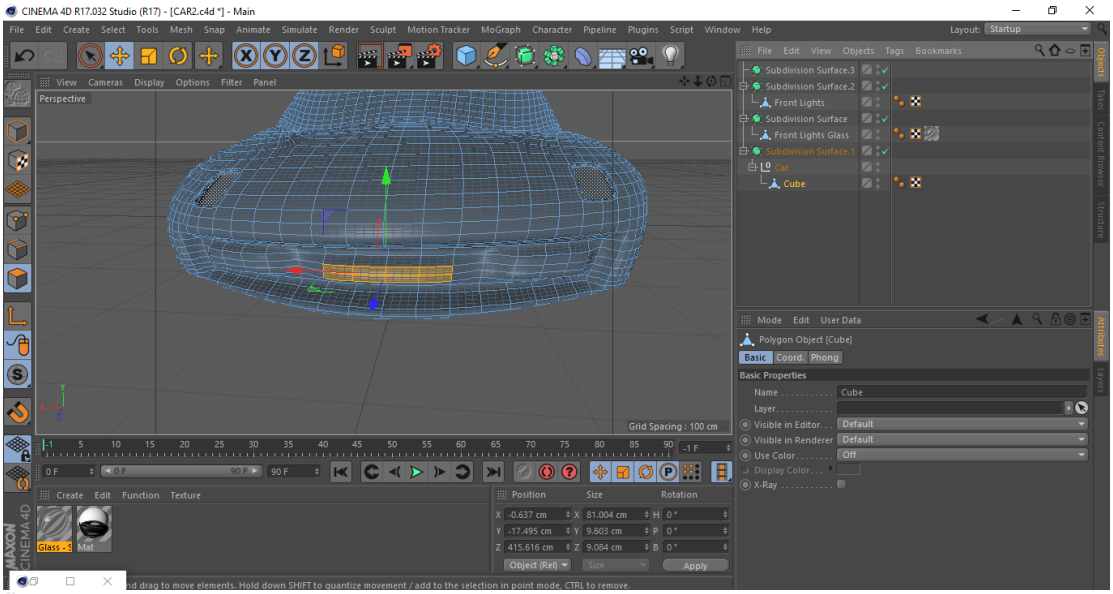
By selecting the sections of the vehicle I was able **extrude** and move different parts of the design to my liking.

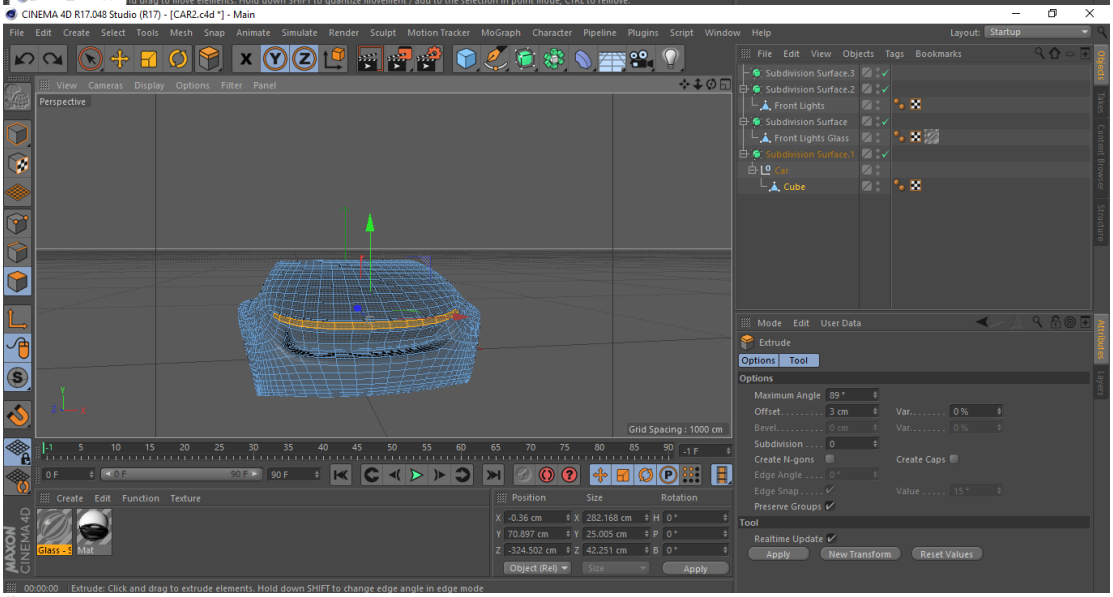


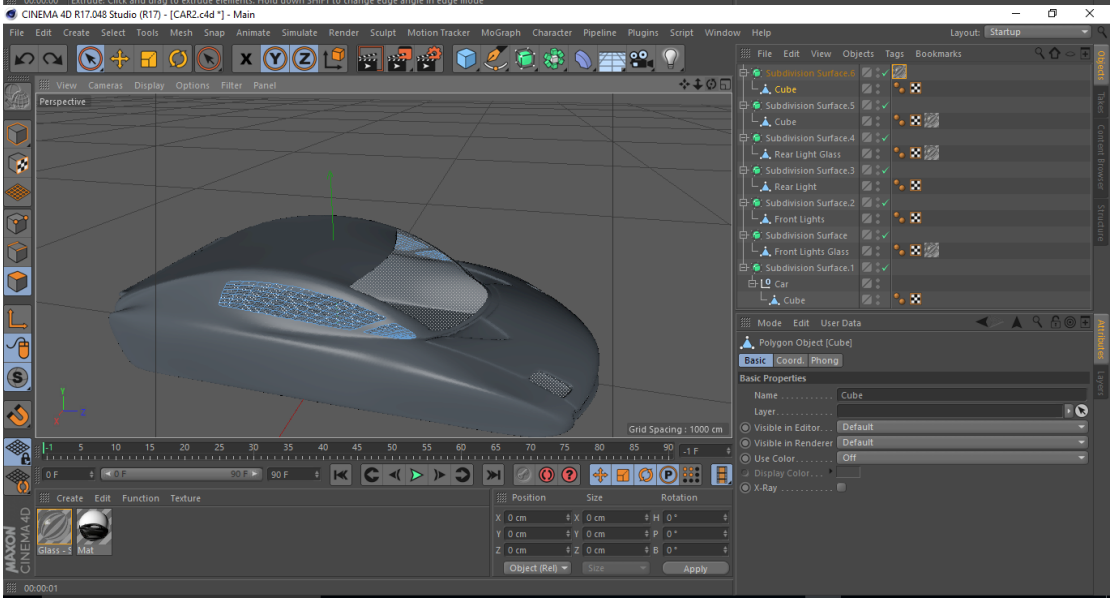


By making the subdivision surface **editable**, I was able to select individual properties such as headlights and extrude them to create a unique design.



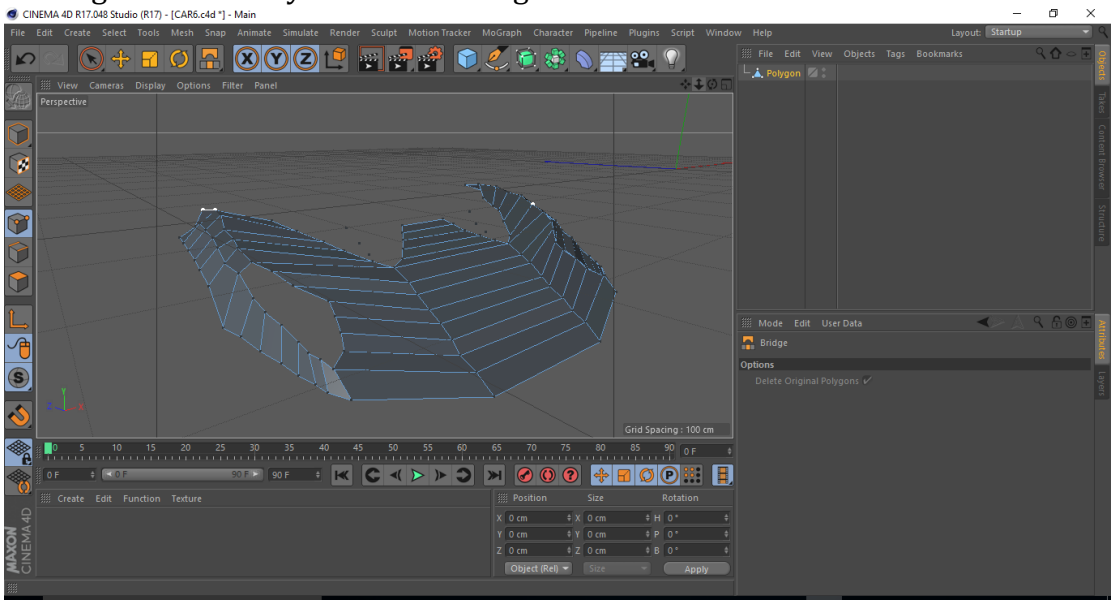

CINEMA 4D R17.032 Studio (R17) - [CAR2.c4d *] - Main
Perspective
Grid Spacing : 100 cm


CINEMA 4D R17.048 Studio (R17) - [CAR2.c4d *] - Main
Perspective
Grid Spacing : 1000 cm
Extrude: Click and drag to extrude elements. Hold down SHIFT to change edge angle in edge mode

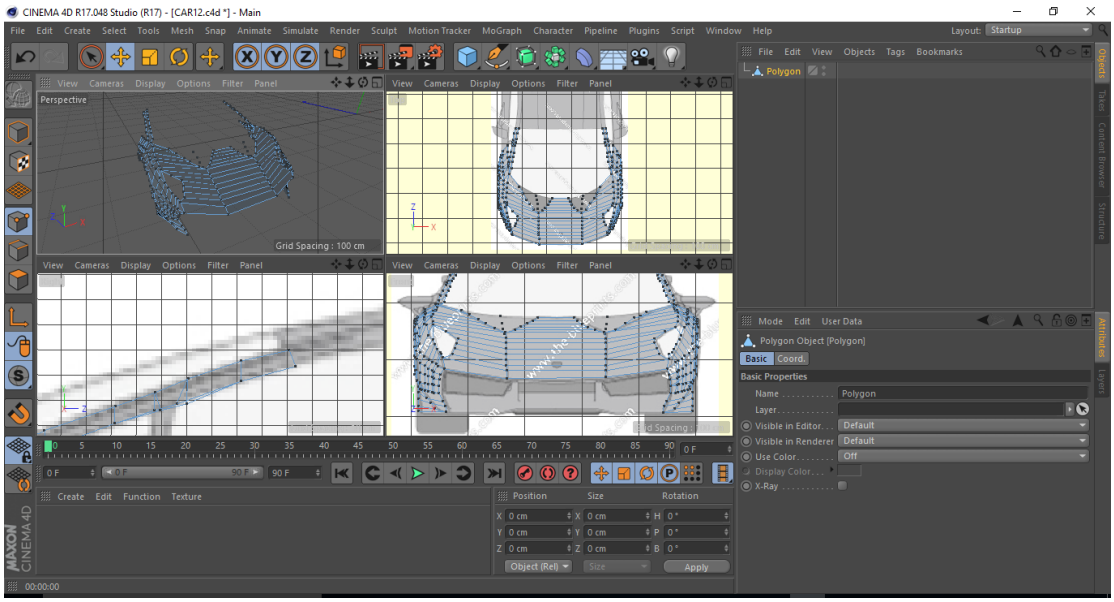

CINEMA 4D R17.048 Studio (R17) - [CAR2.c4d *] - Main
Perspective
Grid Spacing : 1000 cm

New Method: Polygon Method

Using an empty polygon, clone tool, mirror tool and background images which have been aligned from all angles. I found this method to be more precise, although it is severely time consuming.

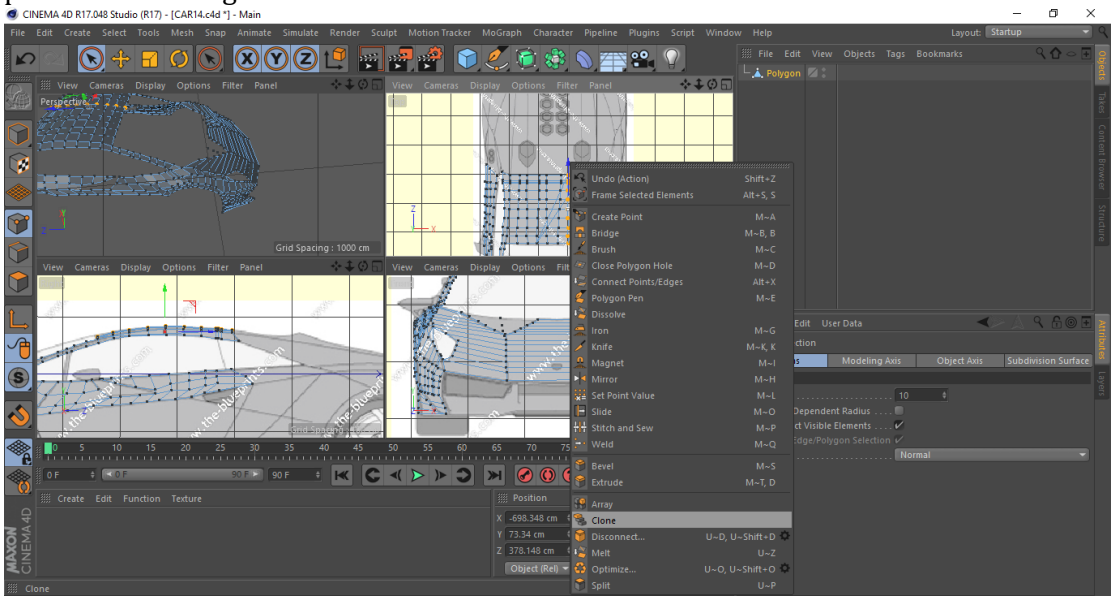


Front of the car

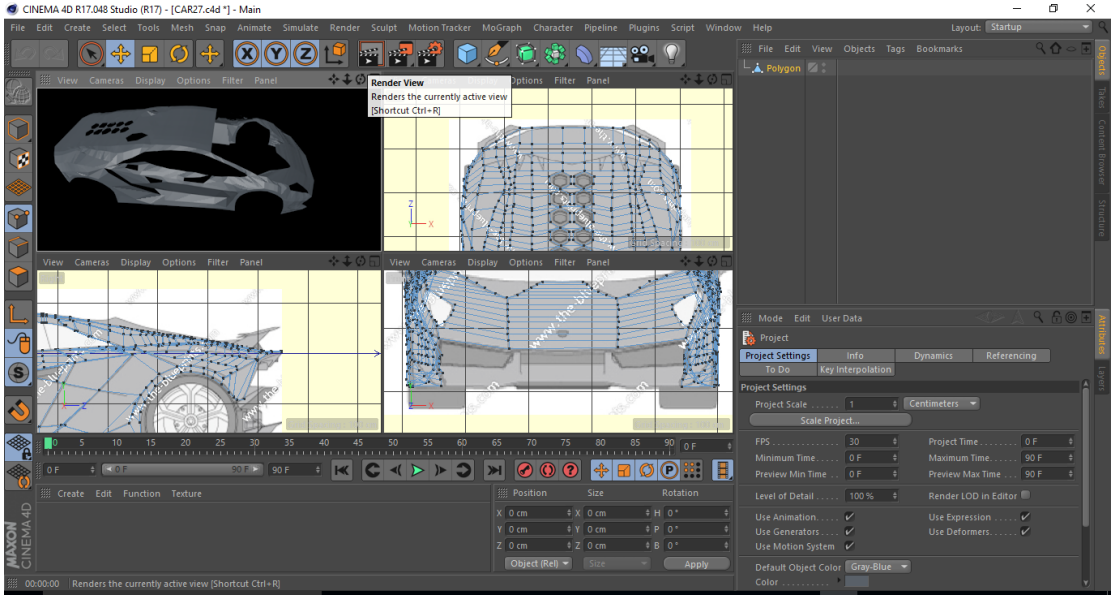


Side of the Car

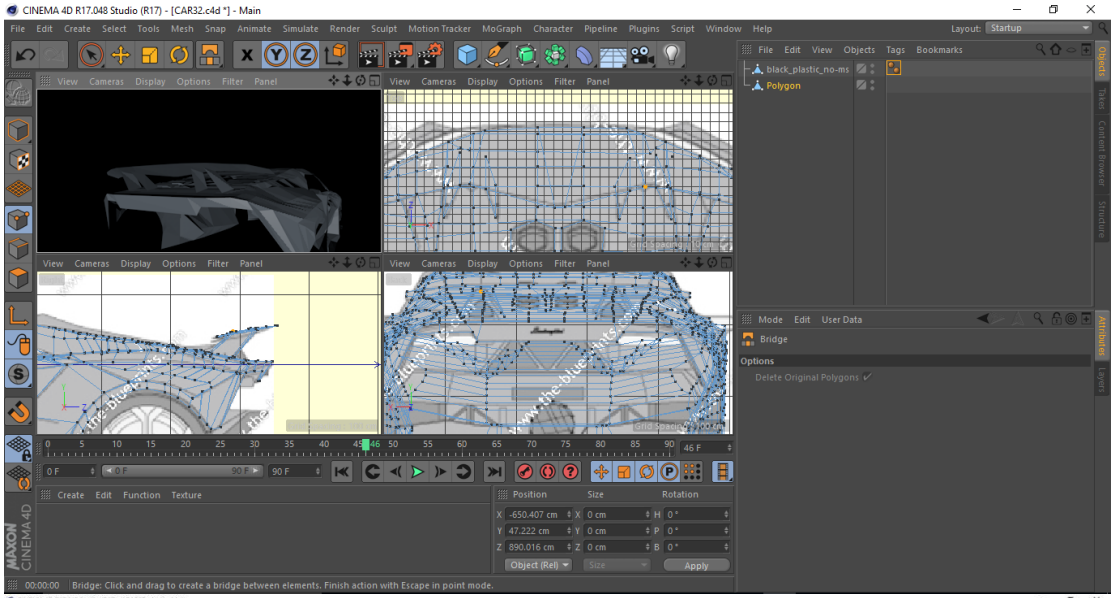
Clone tool is used to make the development process quicker by repeating multiple points and moving them around a similar location to save time.

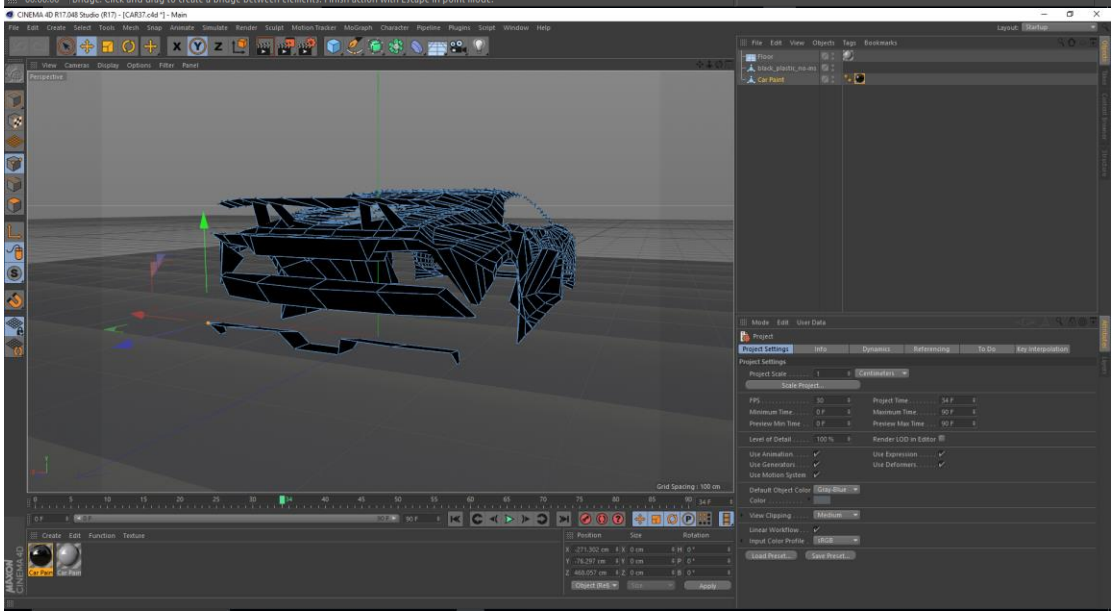


Top of the Car

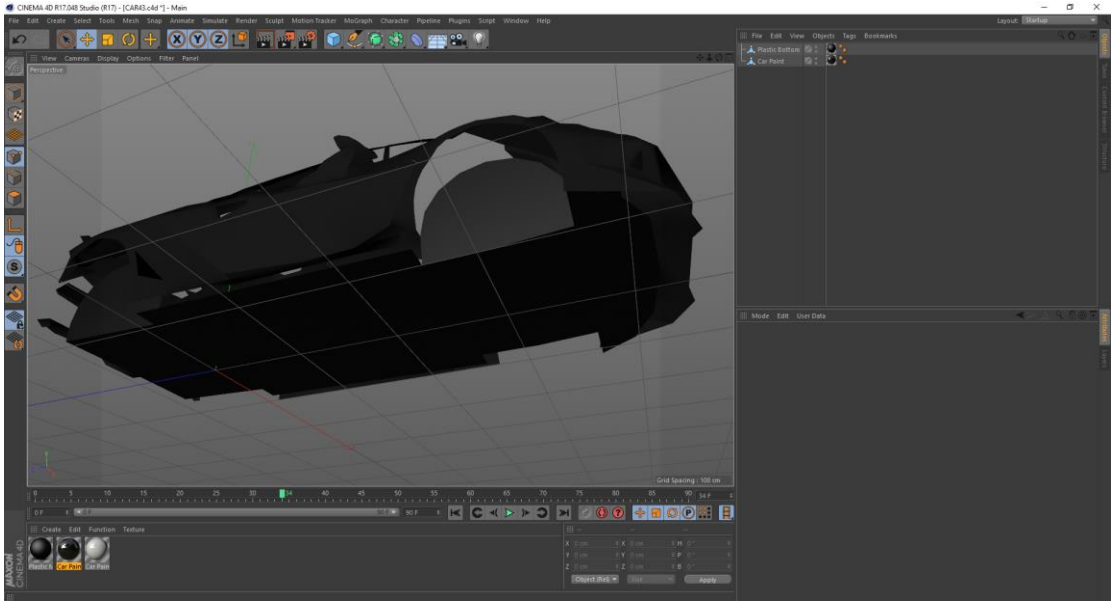


Back of the Car

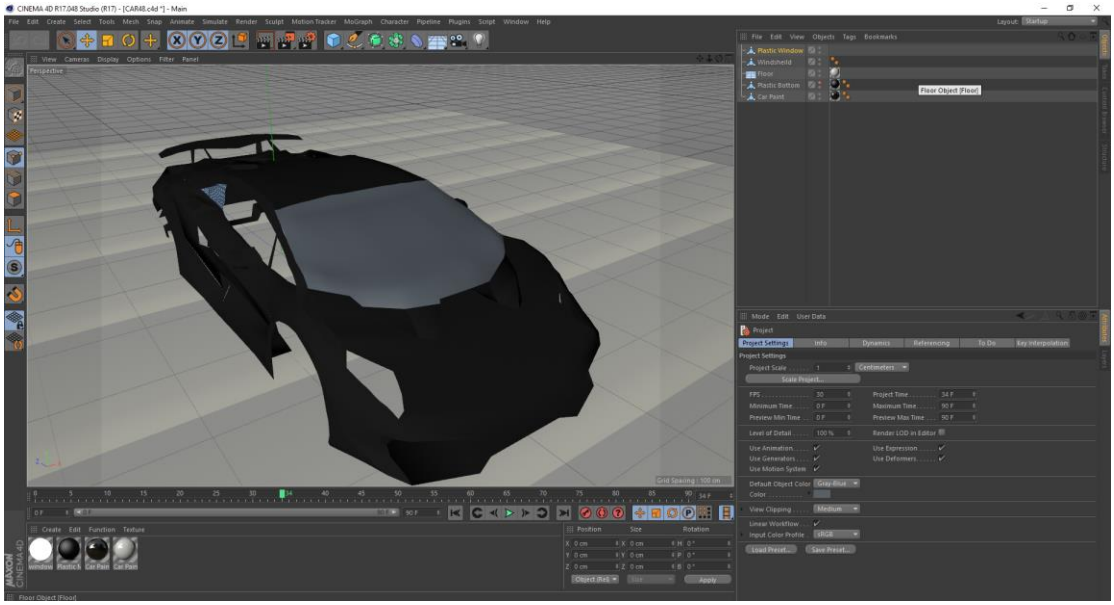


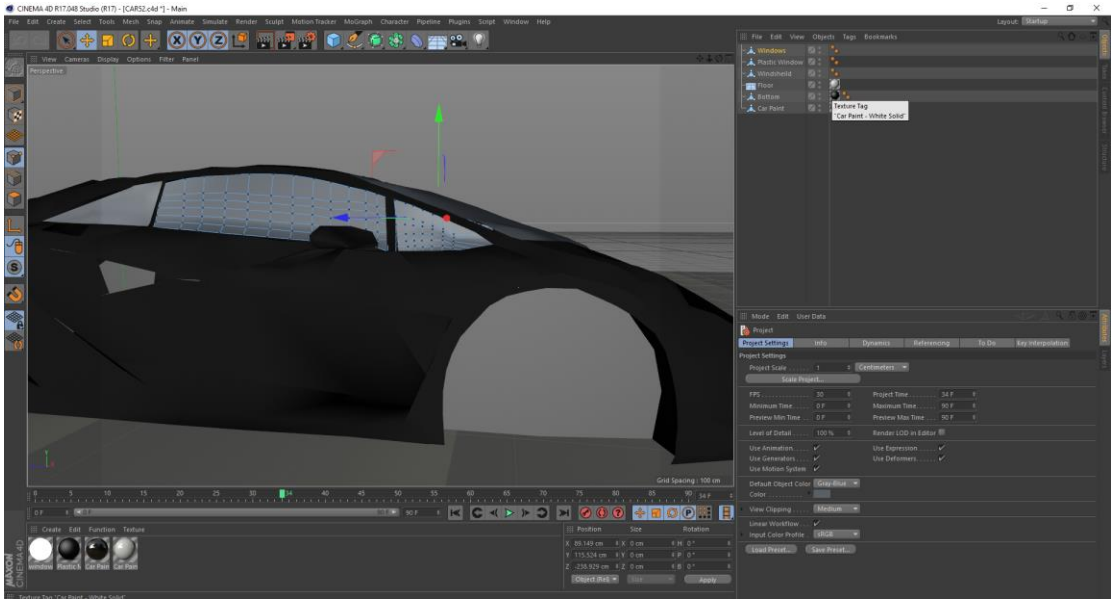


Bottom of the Car



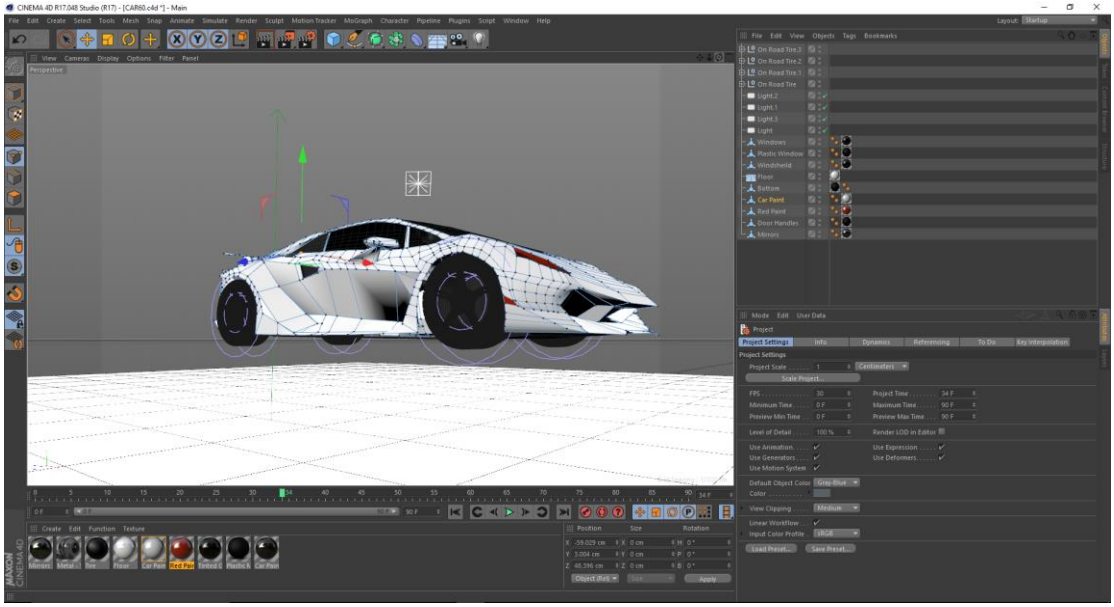
Car Windows

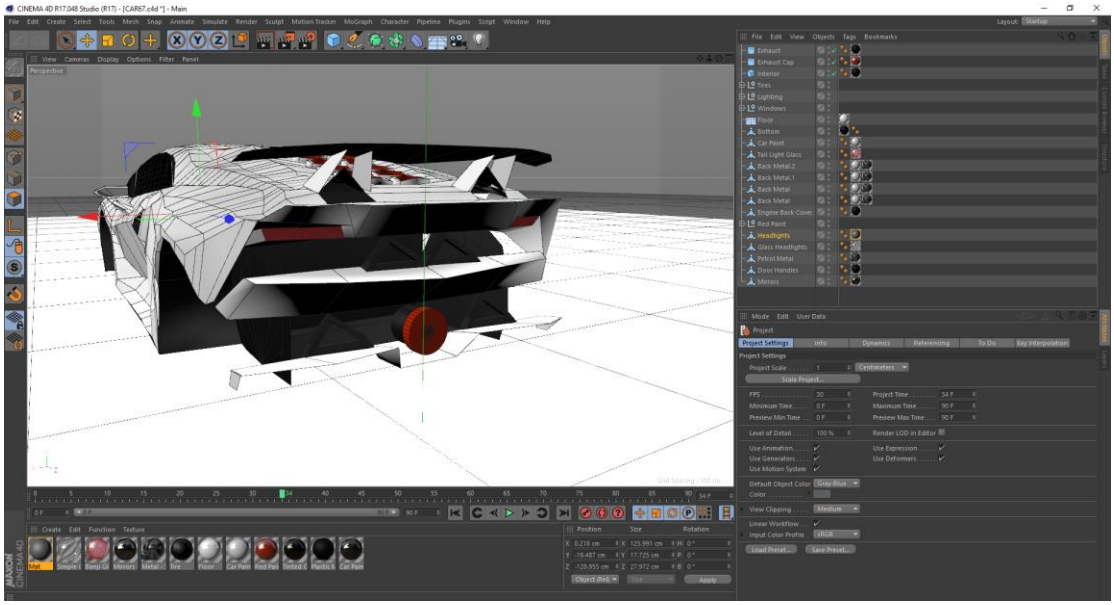




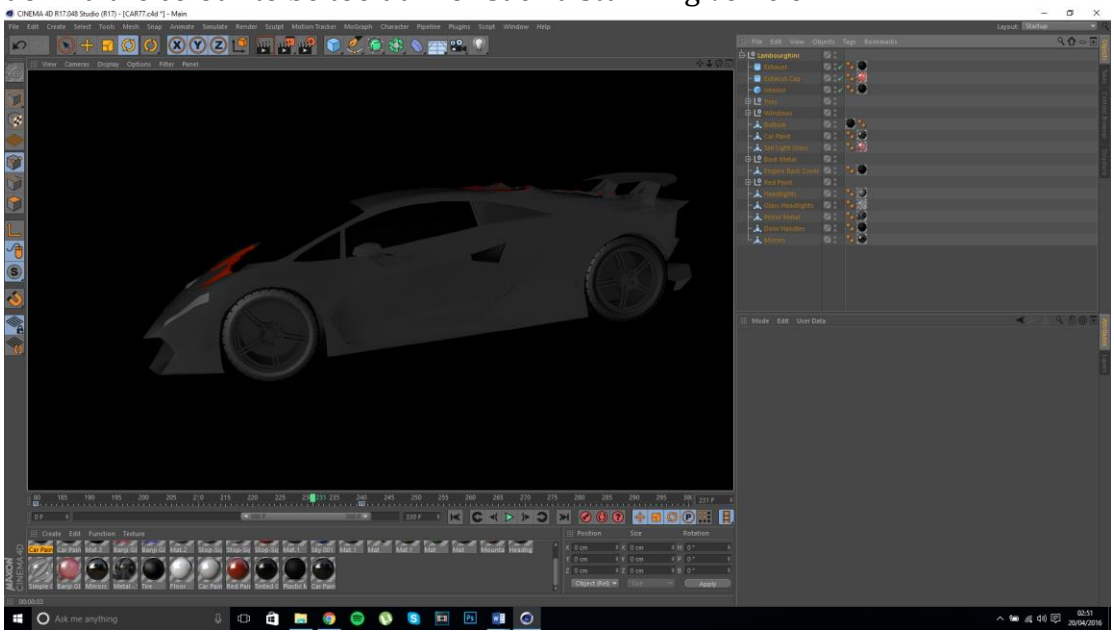
Texturing Samples – White Metal

Although the metallic white may be a tempting choice it appears as if the white colour would be best provided to the Police vehicle as it is part of the traditional red, white and blue colour found on ordinary police vehicles in several countries around the world.

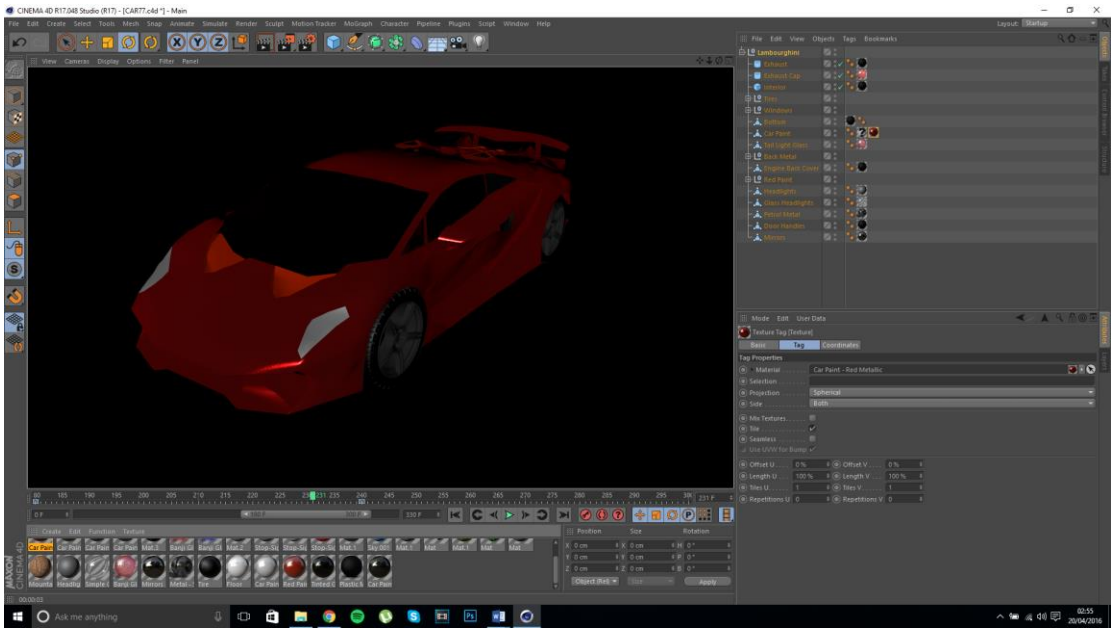




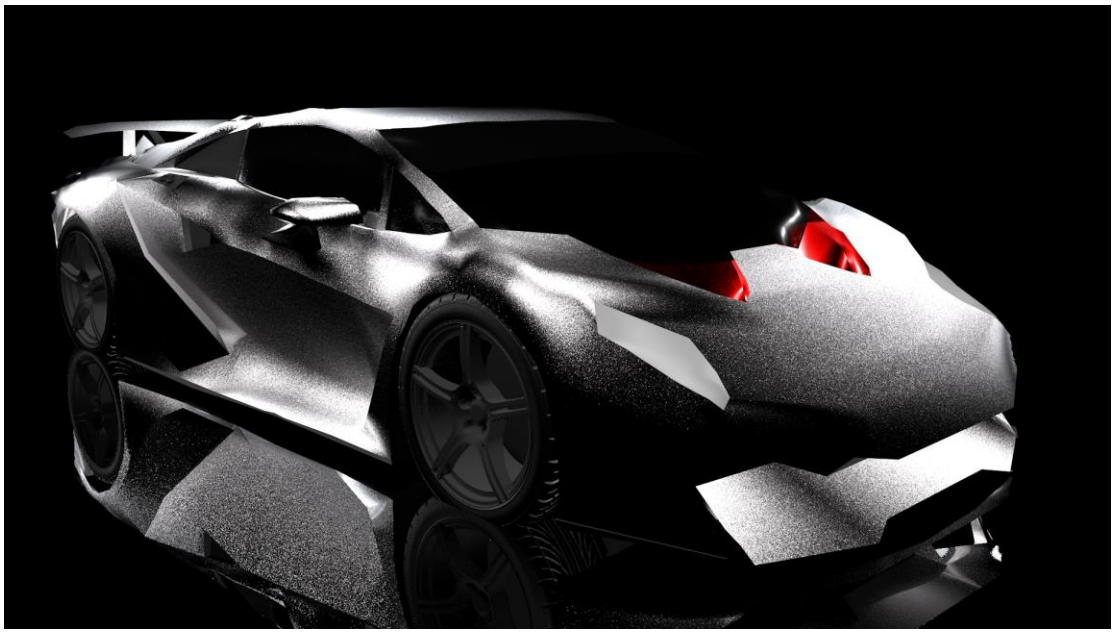
Solid Grey – The solid grey texture gives off a very matte like texture however I do find the colour to be too dull for such a stunning vehicle.



Metallic Red – The metallic red gives off an enticing colour which is beautifully reflective due to its metallic properties. On the other hand, I want this particular vehicle to be particularly impressive and this colour simply doesn't produce this effect.

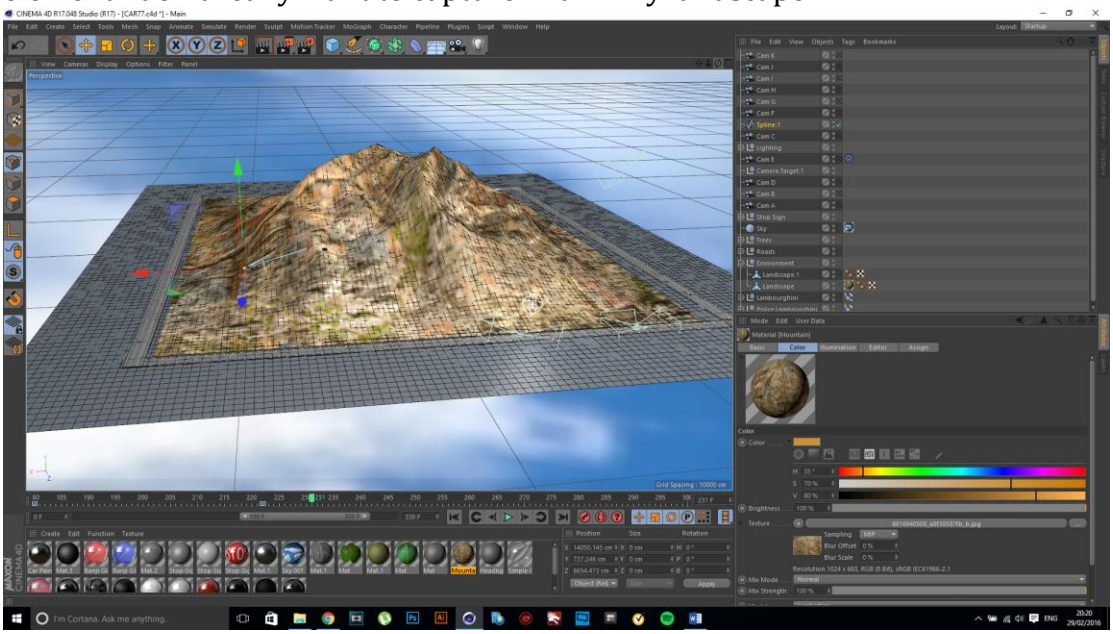


Final Texture and Car Design – Carbon Fibre Black
The carbon-fibre material is found on a majority of Lamborghini's making it my number one choice for the vehicle. This does effect render times harshly but also produces the wow factor I was attempting to capture.

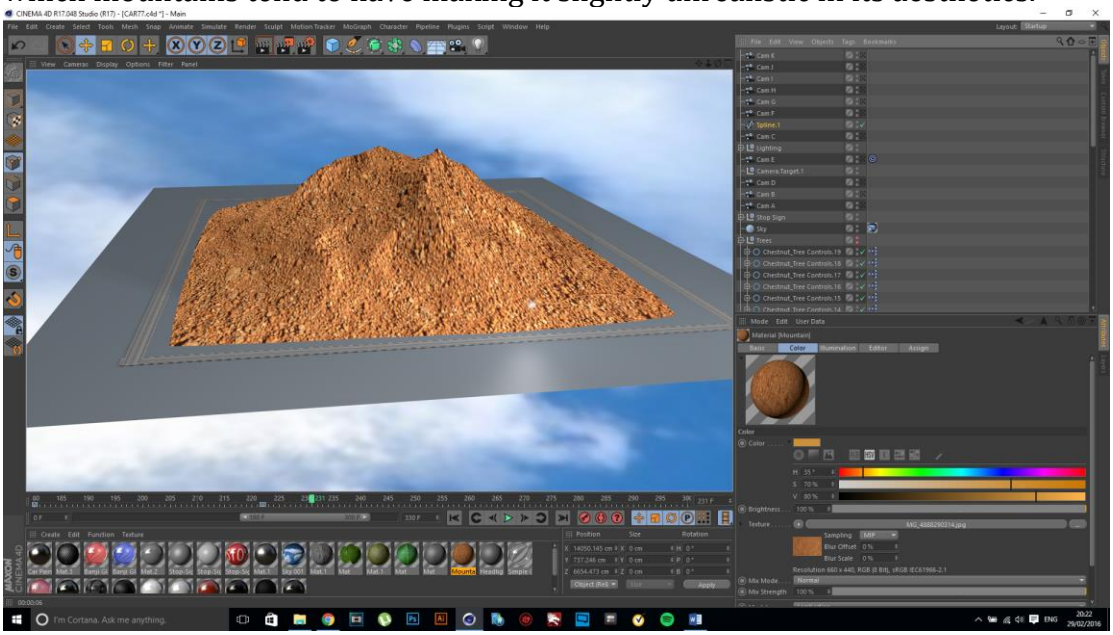


Environment Texturing Experiment

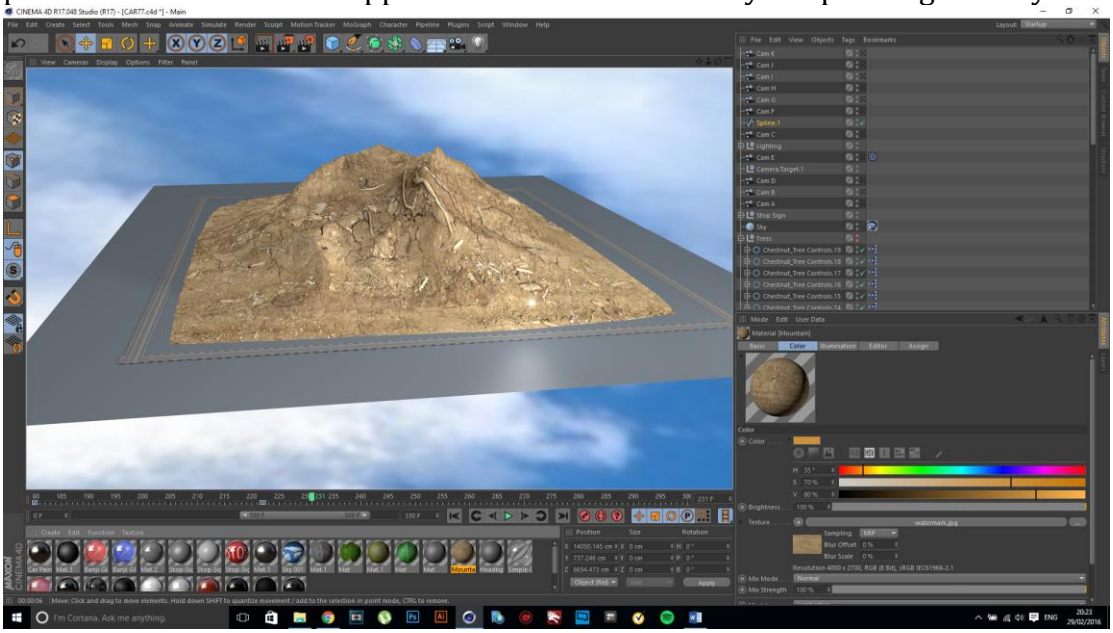
This mountain texture presents additional amounts of greenery which is an element I don't really want to capture within my landscape.



This desert like texture appears to have an element of harsh desert which is something I wanted to capture however it appears to not have enough crack which mountains tend to have making it slightly unrealistic in its aesthetics.



The mountain texture I attempted to experiment here doesn't hit any of the points I wanted it to as it appears un-colourful and very not pleasing visually.

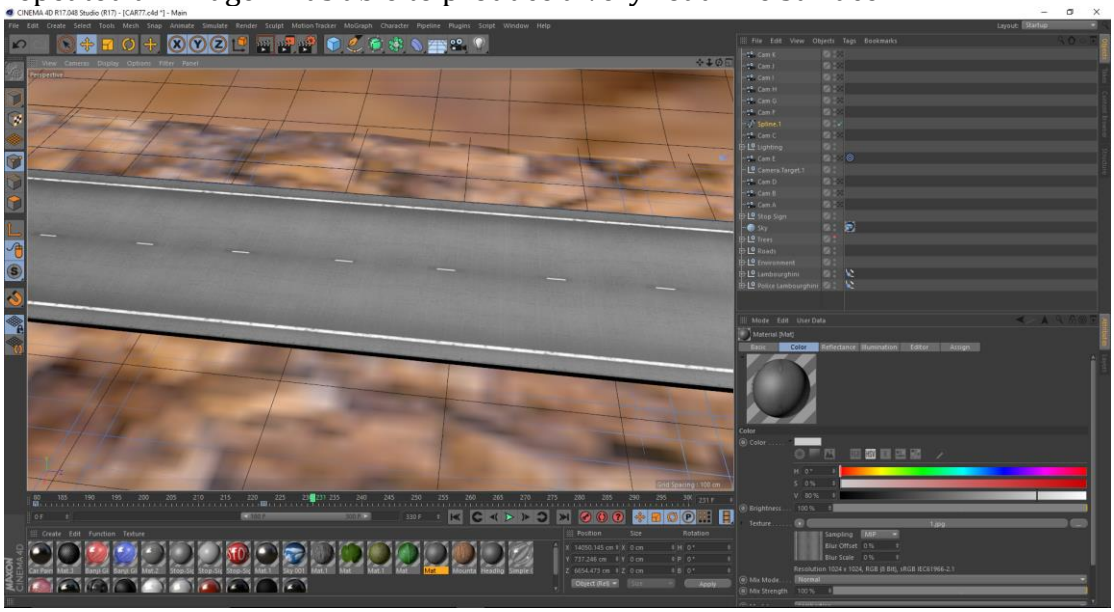


Final Choice

This was my final choice due to its subtle desert properties while providing the mountain with many aesthetic features found with mountains as there is subtle dark areas and cracks found on it.

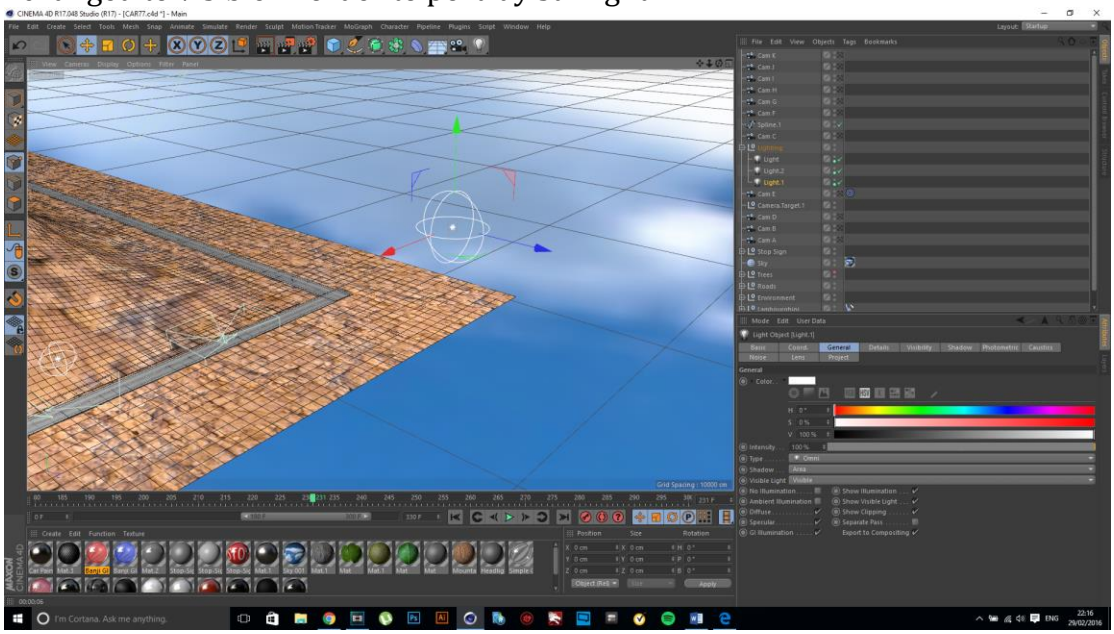
Road Texture

The texture for the road was initially left as grey however as I stretched and repeated an image I was able to produce a very road like surface.

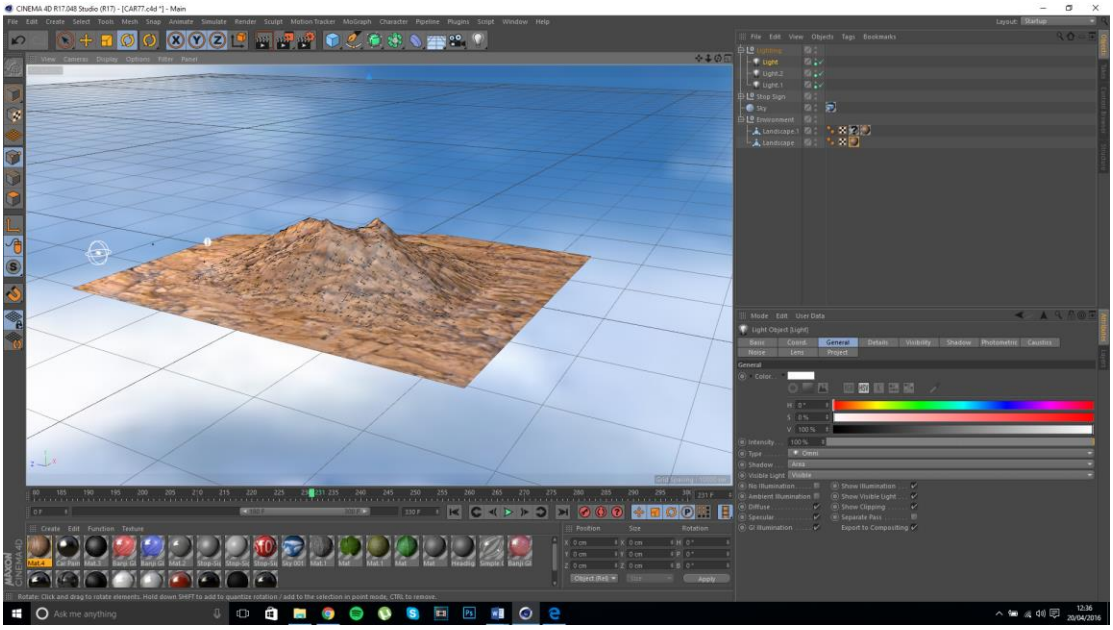


Lighting experiment

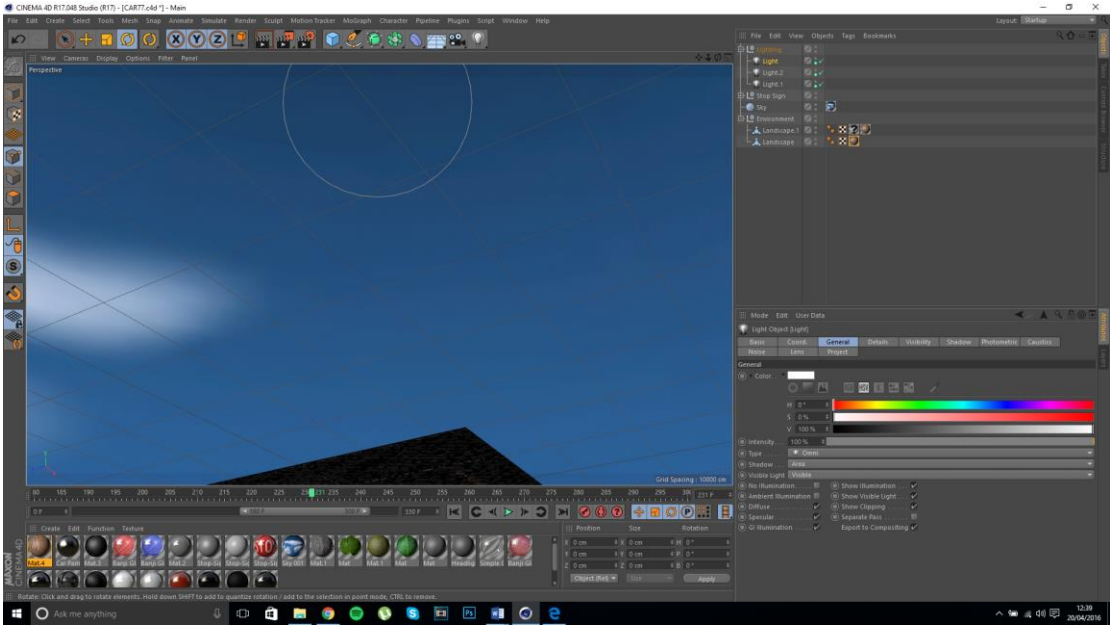
This was the location of the first light and was originally set to invisible however I changed to visible in order to portray sunlight.



This light is used in order to light the vehicles and the road

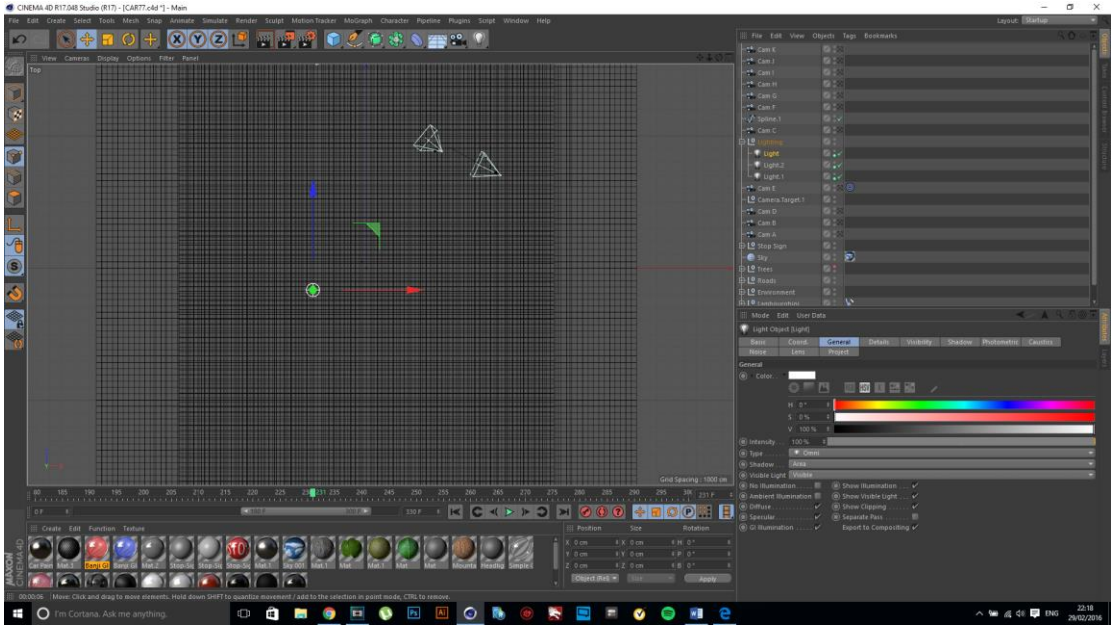


In order for me to light the entire mountain I will require a powerful light that emerges from deep in the sky and onto the mountain.



The circle in the image represents the source of the light and the mountain is marked out in black below it.

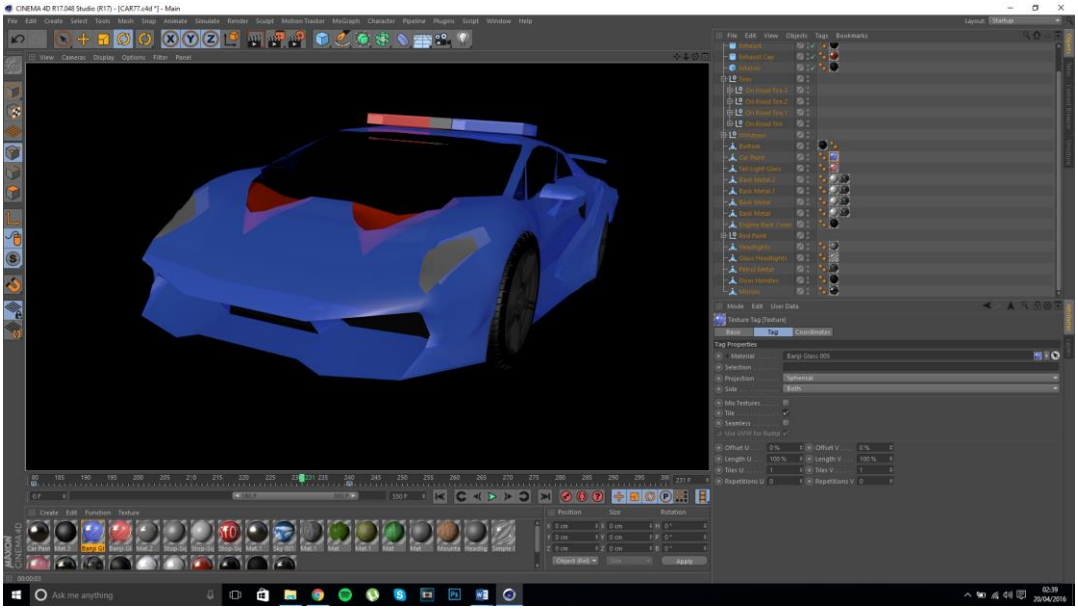
In order to light up the entire mountain I had set a light very far above the mountain however this didn't light it up correctly until the intensity changed to 100%.



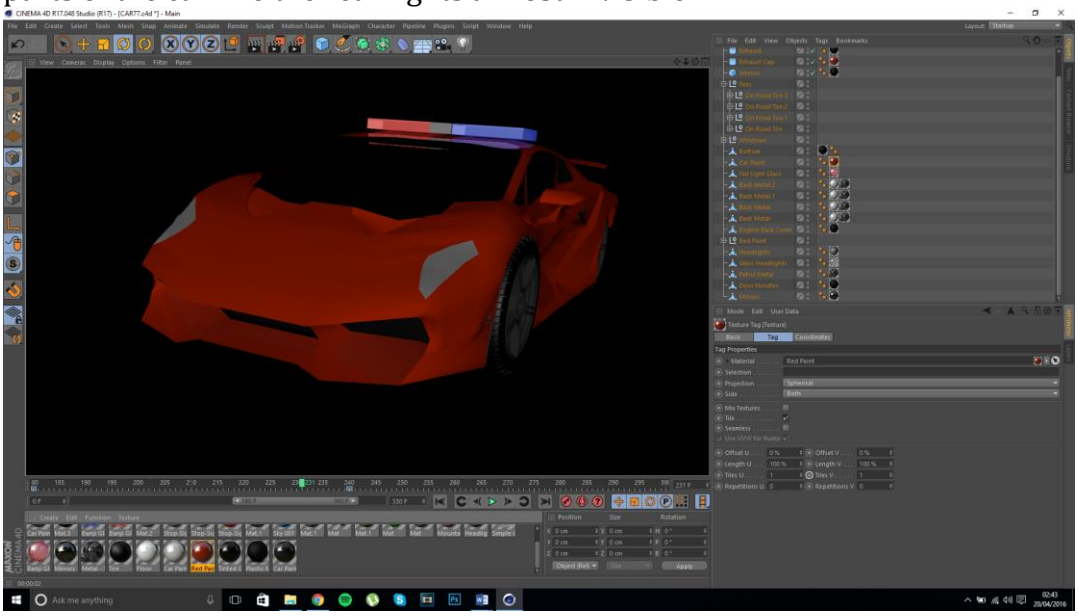
Stop Sign – The sign was made using typical stop sign colours and type.

Police Lamborghini

Blue with glass like texture – This texture appears to be very reflective but compliments the car very well however lacking typical metallic properties.



Red Paint with Matte texture – This texture appears to be neither reflective nor metallic which also blends in with other parts of the vehicle making specific parts of the car like the rear lights almost invisible.



White Metal (Final Version) – The white is very beautiful in my opinion as it does not blend in with any other part of the car as well as being reflective to respectable degree. The white colour element is typically found in police cars making it the obvious best choice.