# SEMESTER WORK. TASK 1.

# REFERENCE

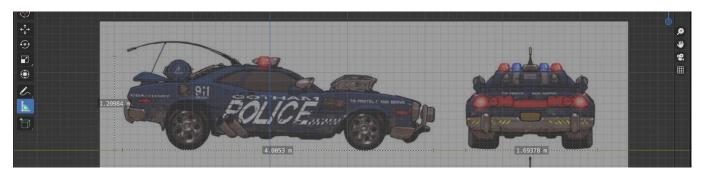
I found a reference of this car on DeviantArt.



Link: <a href="https://www.deviantart.com/chuckdee/art/DCOMMO-GothamSquadCar-256809787/">https://www.deviantart.com/chuckdee/art/DCOMMO-GothamSquadCar-256809787/</a>

### WORKFLOW

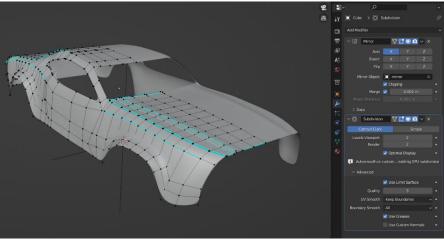
I added a reference to the scene in several angles. I lowered the transparency a bit and fitted the picture approximately to the real size of the car.



#### Car Body

I started with the body of the car. I added a plane to the scene and extruded the vertices relative to the picture, repeating the silhouette of the car. Next, I delete the front and side windows. Because most of the elements are symmetrical, I added a Mirror modifier. I also added the **Subdivision** modifier.

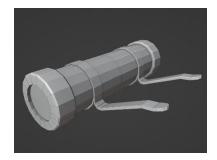




Next, I extruded the space between the door and the body, the side piece, the space for the taillights, and the vehicle registration plate.

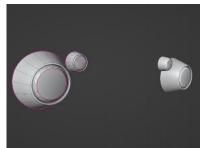
#### Other Elements

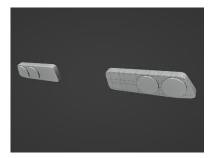
Then I started to create the individual elements of the car, which I will later join with the **Boolean** modifier.

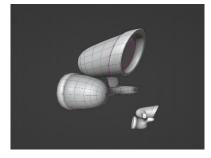












### Wheels

For the wheel, I first created a disc and tire separately. Then I joined them into a single mesh and removed unnecessary faces. I use only one geometry for the wheel. The other wheels were created with the **alt + D** key combination and the **Mirror** modifier.





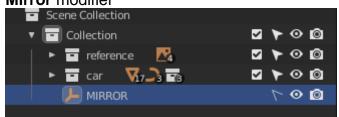




### TOOLS / MODELING TECHNIQUES

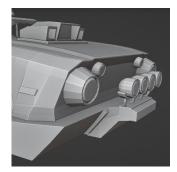
#### Mirror Modifier

In order not to ruin anything by accidentally shifting the origins, not to bother with finding the mirror axis, etc., I added a plane axis to the center of the scene and turned off its selectable toggle. Now I can use it as a *Mirror object* in **Mirror** modifier



#### Subdivision Modifier

I used this modifier to give a more organic shape, smoothing out sharp corners, etc. I used 2 levels of subdivision.





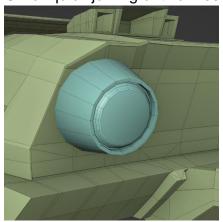
#### **Boolean Modifier**

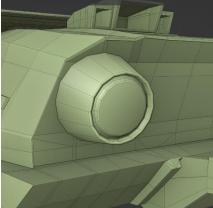
I have used this modifier for several purposes. For example to create holes in the wheel disc:

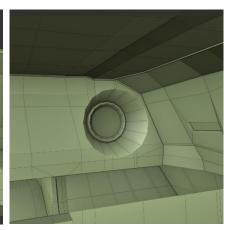




Or for quick joining of two meshes:







#### Other Modifiers

I also used the **Bevel** modifier to round corners, and the **Solidify** modifier to pull out difficult shapes.

#### Tools

The tools I used most often were **Knife** and **Extrude**. I also used **curves** to create the two bottom and front pipes. Then I just converted them into a mesh.

# TIME

It took me about **35 - 40 hours** to make the model.

