graphics-final-project

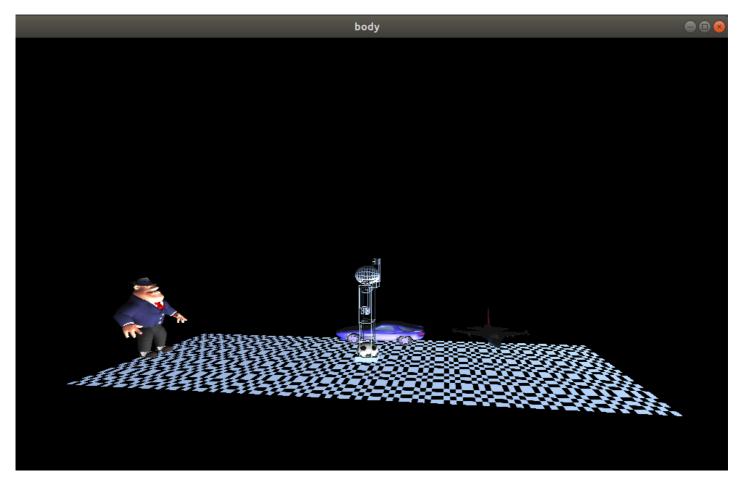
SBE306B_Spring20_Project_Group_xx

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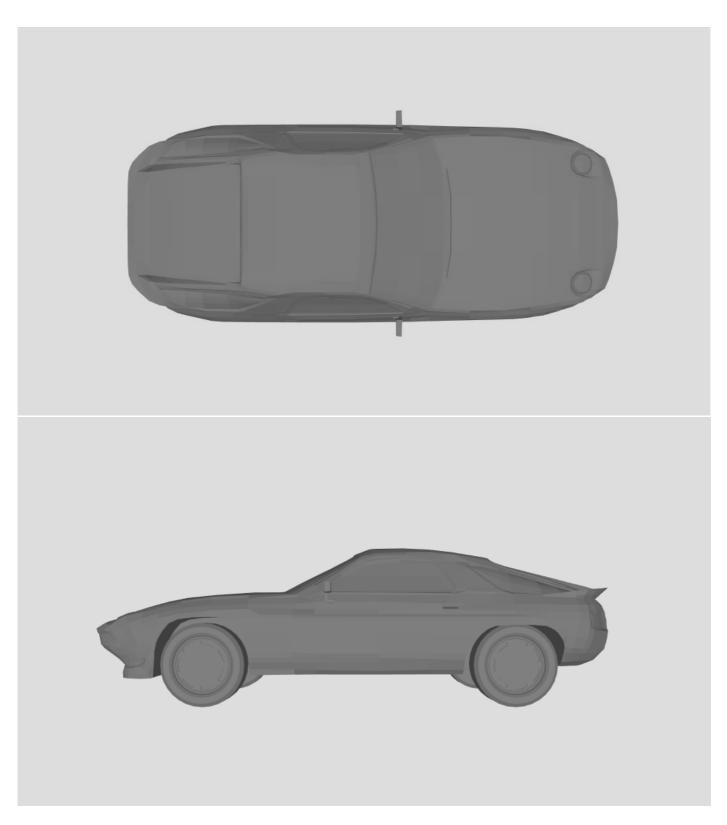
Implementation:

Final result

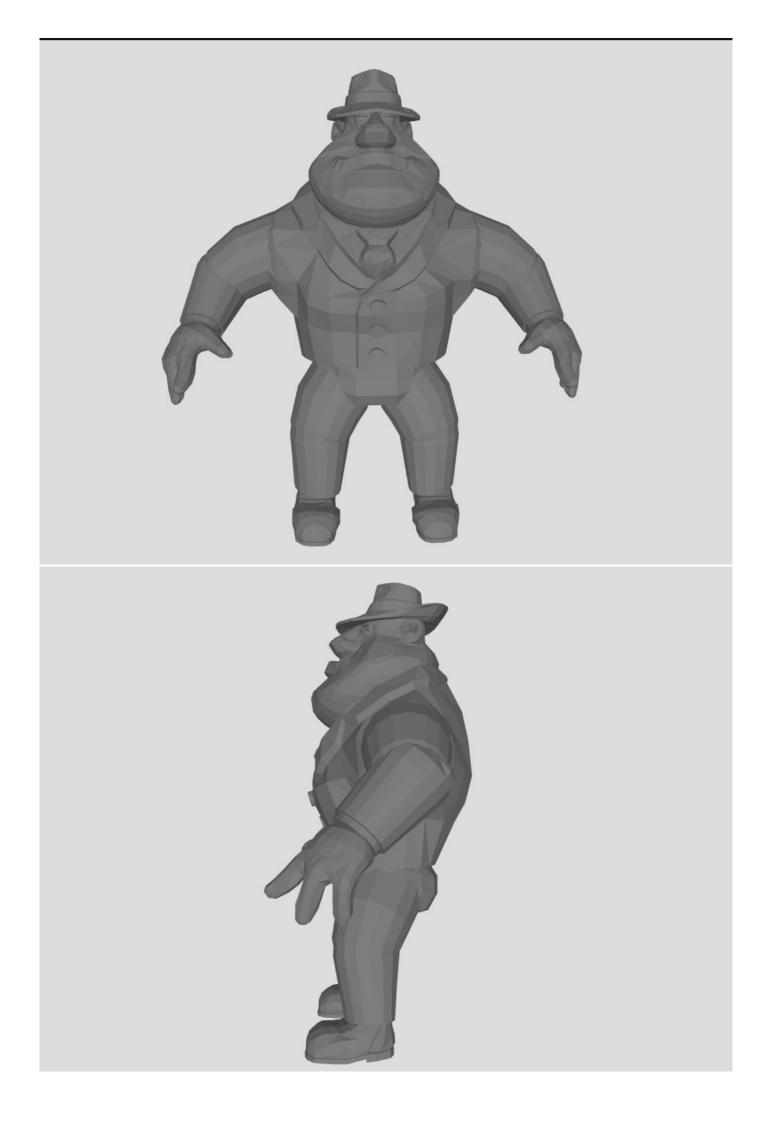


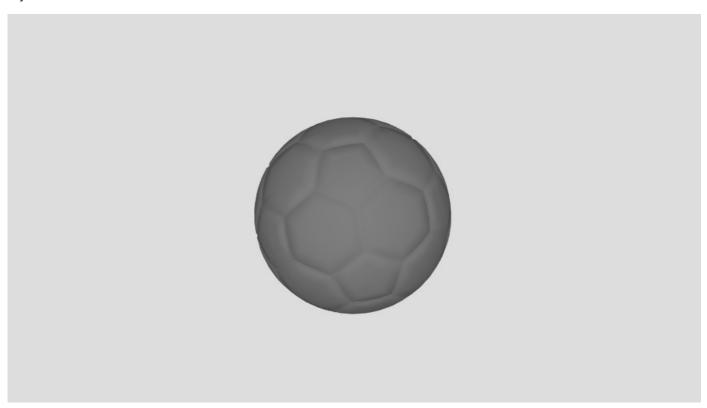
Loaded objects

object 1

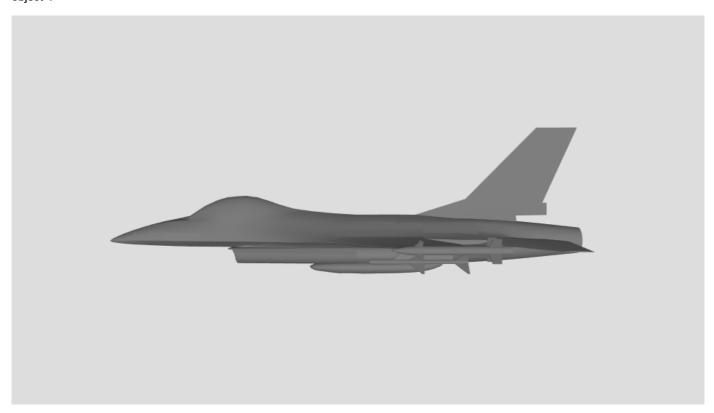


object 2





object 4





animations

Robot wave

https://vimeo.com/user115583615/review/419045016/af9ce62da6

Robot play soccer

https://vimeo.com/user115583615/review/419044923/8fe10457c5

Car Movement

https://vimeo.com/user115583615/review/419045103/cfb1d502f8

Plane Movement

https://vimeo.com/user115583615/review/419045055/33750ed128

Texture Mapping

View 1

https://vimeo.com/user115583615/review/419044762/9448b7b9e7

View 2

https://vimeo.com/user115583615/review/419044849/b8a0a99f55

Issues

Texture Mapping

• not any images can be mapped and still look nice, it has to be cropped to it's smallest element to look better.

Lighting

• had to figure out where to position the light source in respect to the floor to be illuminated properly.

Idea of the animations

1. the 'car' moves along the z axis of the floor and turns around every time it reaches the edge 2. the 'plane' spin around it's Y axis 3. the 'Robot' waves his BOTH hands 4. the 'Robot' moves his leg to kick the ball and the ball bounces every time it reaches either the 'robor' or 'al Capone'.

Conclusion

- the scene is controlled from the menu, you can gradually choose objects to start moving.
 Beside the animations controls, you can choose the texture mapping of the floor from the same menu.

Use in biomedical field

• it can be used to import objects constructed from several scans like mri or other imaging machines, then the user can view it in 3d scene for better view, looking to it from different angles and positions.