

- Gears Demo in OpenGL -

Goal:

Now we want to examine THE OpenGL Demo program: Gears:

Exercise 17.1: Gears-Programm

Copy the file `gears_01.c` from the quickstart folder of exercise 17 into your Makefile project of the previous exercise. Compare the structure of the program with the example code of `spheres_01.c`. What is similar, but what else is fundamentally different? Hint: what is the content of these “display lists”?

Now create a new make target named `gears_01_host` used to build the executable of `gears_01` for the host. Construct it, construct an appropriate run configuration and execute the program locally on the host.

Exercise 17.2: And the same procedure for the Target

Create another make target named `gears_01_target` to build the ARM version of our program and check it using `file`. After defining a new remote-run configuration, including the argument `-display :0`, you run the program on the target as well.

Exercise 17.3: One additional step...

To better understand the power of display lists, you create another list for a 4th gear with yellow color, which is driven by the blue gear.