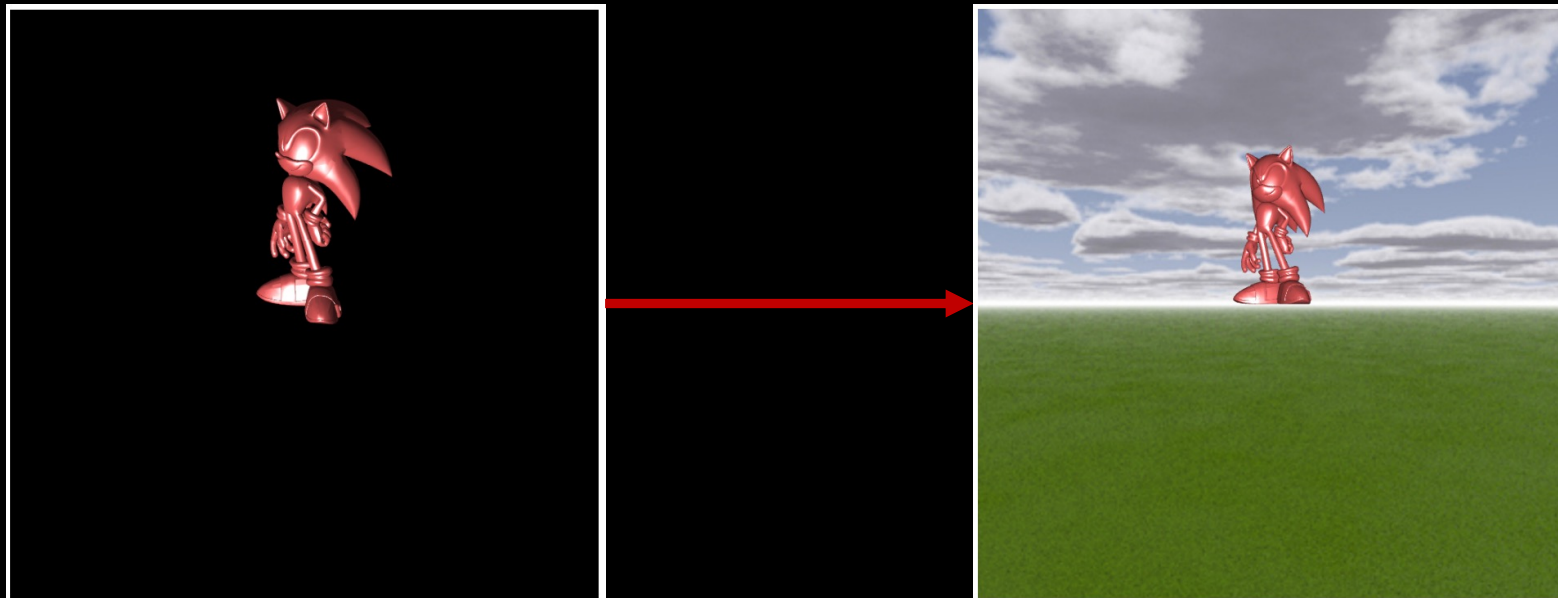




# Lab 10

- Download the lab10 template
  - This template is similar to Ex07-3
  - It gives you a sonic with nice illumination, but this is all it has
  - Also, it uses the model matrix to rotate the sonic instead of changing the view matrix
- Goal:
  - Add environment map (use quad and cubemap) to this scene
  - When users press “w” or “s”, let the camera move forward or backward
  - When users use mouse to click and drag, rotate the camera view direction
  - I suggest that you can set the initial camera position to (0, 0, 5) and the initial camera direction to (0, 0, -1)
  - After you implement the environment cubemap, move the mouse cursor on the canvas if you do not see the environment cubemap
- **Essentially, this lab is to combine Ex07-3 and Ex 10-3**
- [https://www.youtube.com/watch?v=P2INiWHc-XY&list=PLsId7efYPyAah0Z64j9DpedSVAcvzOSKb&index=12&ab\\_channel=Ko-ChihWang](https://www.youtube.com/watch?v=P2INiWHc-XY&list=PLsId7efYPyAah0Z64j9DpedSVAcvzOSKb&index=12&ab_channel=Ko-ChihWang)



# What You Should Do for “Submission”



# Submission Instruction

- Create a folder
  - Put the html and js files in the folder
  - Zip the folder
  - Rename the zip file to your student ID
    - For example, if your student ID is “40312345s”, rename the zip file to “40312345s.zip”
  - Submit the renamed zip file to Moodle
- Make sure
  - you put all files in the folder to zip
  - You submit the zip file with correct name
- You won't get any point if
  - the submitted file does not follow the naming rule,
  - TA cannot run your code,
  - or cannot unzip your zip file.