cad2024 電腦輔助設計與實習 彈珠台設計及程式報告



組員:

41223112-王學澤 41223146-蔡秉延 41223152-蘇宥齊

個人倉儲

https://github.com/mdecad2024/hw-WSE41223112 https://github.com/mdecad2024/hw-41223146 https://github.com/mdecad2024/hw-41223152

個人網站

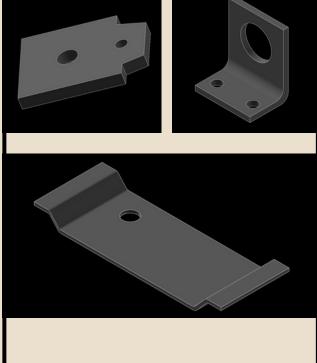
https://mdecad2024.github.io/hw-WSE41223112/https://mdecad2024.github.io/hw-41223146/https://mdecad2024.github.io/hw-41223152/

這是在nx 上面量尺寸, 再到solve space上面畫

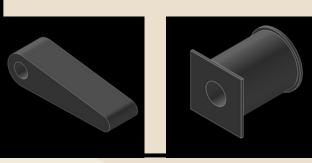
工作分配



蔡秉延



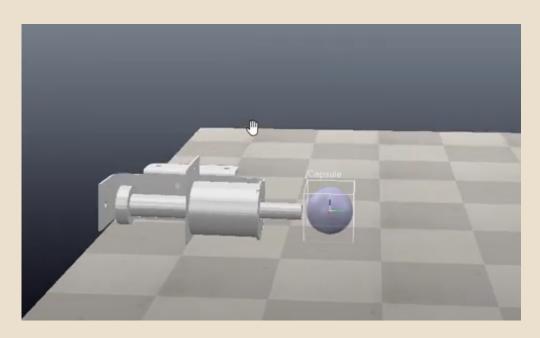
蘇宥齊



王學澤

工作分配-程式模擬

41223112-王學澤





發射器推桿外觀

123.py - SciTE Edit Search View Tools Options Language Buffers 1 123.py # pip install pyzmq cbor keyboard from coppeliasim_zmqremoteapi_client import RemoteAPIClient import keyboard # Connecting to the CoppeliaSim server client = RemoteAPIClient('localhost', 23000) print('Program started') sim = client.getObject('sim') # Get the handles for the sliders (prismatic joints) cw = sim.getObject('/cw_joint') ccw = sim.getObject('/ccw_joint') slider = sim.getObject('/Prismatic_joint')

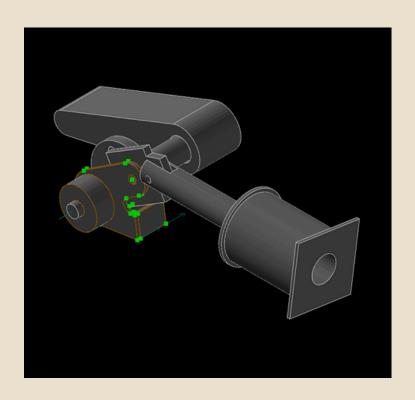
按鍵盤D會往下

按鍵盤E會往上

推桿程式

工作分配-程式模擬

41223152-蘇宥齊



```
sim.startSimulation()
  print('Simulation started')
   # Main control loop
- def main():
     # Keep runnin
while True:
                   nning until simulation is stopped
         # Controls for cw and ccw joints
         if keyboard.is_pressed('p'): # Move cw slider to -0.25 position
print("p is pressed")
sim.setJointTargetPosition(cw, -0.25)
         if keyboard.is_pressed('1'): # Reset cw slider to the original position
    print("1 is pressed")
             sim.setJointTargetPosition(cw, 0.0)
         if keyboard.is_pressed('w'): # Move ccw slider to -0.28 position
             sim.setJointTargetPosition(ccw, -0.28)
         if keyboard.is_pressed('s'): # Reset cow slider to the original position
           print("s is pressed")
sim.setJointTargetPosition(ccw, 0.0)
          # Controls for the Prismatic_joint
         # Controls for the Frishnate_Joint
if keyboard.is_pressed('e'): # Move slider to -o.15 position
print("e is pressed")
sim.setJointTargetPosition(slider, 4.0)
         if keyboard.is_pressed('0'): # Reset slider to the original position
            print("D is pressed")
sim.setJointTargetPosition(slider, 0.0)
         if keyboard.is_pressed('t'): # Stop the simulation
            print("t is pressed - stopping simulation")
sim.stopSimulation()
break
  # Start the main control loop
  main()
```

左右撥桿

撥桿程式

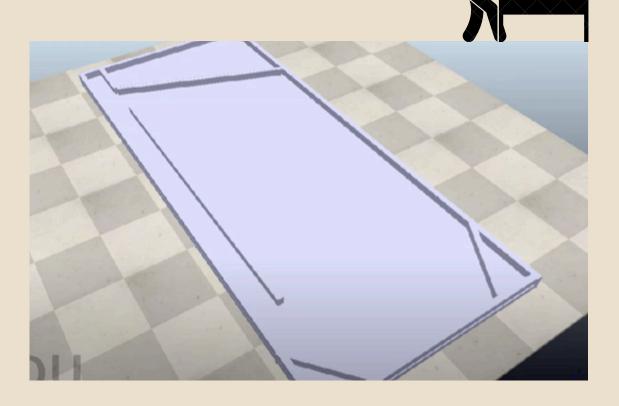
左撥桿 按鍵盤W、S可以控制撥桿上下

右撥桿 按鍵盤P、L可以控制撥桿上下

工作分配-設計彈珠台

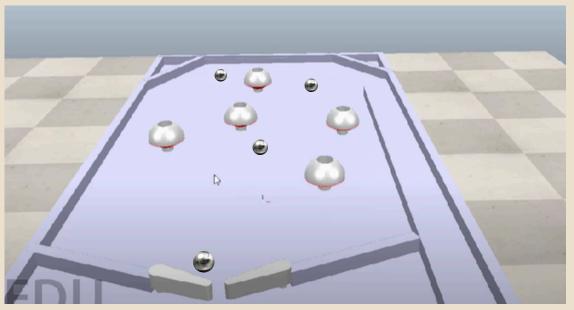
41223146-蔡秉延

機台主體設計



內部結構設計





成品

