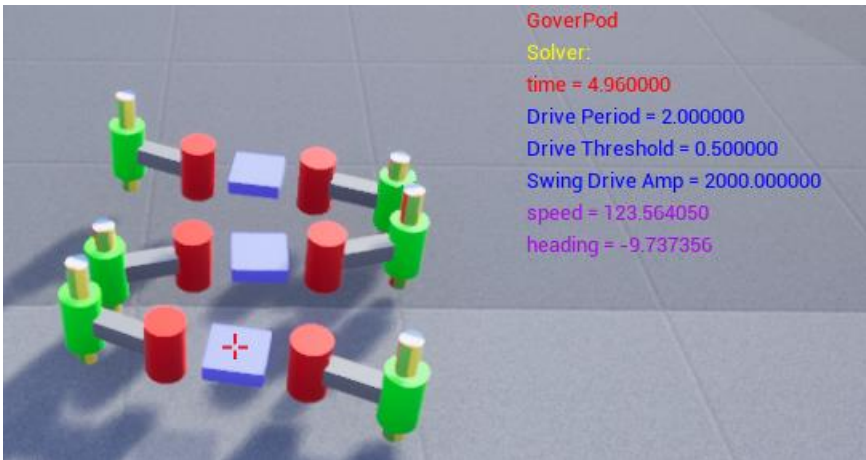# GoverPod Mini-Project Brief

CBP 10-02-23

Here's what you get when you open map **GoverPod_Map1**

and here's some ideas for investigations.

Robot Motion – Principal Parameters

Effect of parameters on the robot motion. In particular how to get it to move fast.

- Important Parameters
    - Drive Period
    - Drive Threshold
    - Swing Drive Amp
    - Lift Drive Amp
- How to describe robot motion
    - Measure its forward speed (Octave file autogenerated)
    - Observe it X-Y trajectory (Octave file) does it move straight or arc. If the latter what is the radius?
    - Look at variations in speed (Octave file)
    - Direct observations of the robot motion in Unreal. You could consider,
        - The whole robot
        - Its Legs and Feet

Robot Motion – Additional Parameters

How do the joint parameters affect its motion?

Additional Investigations

Up to you. Here's some ideas.

- Test the robot going up inclines of various slopes.
- Test the robot traversing uneven terrain (create some sleeping policemen)
- What happens if you amputate one leg?