



Using the model and animations packages downloaded in class, you are to create a game called Metal Cog Solid and complete the required documentation.

Your mission is to sneak into an enemy base that is protected by guards. The guards will remain in a patrol state until the player comes within their cone of vision. Once the player has been seen, the guards will chase the player to their last known location. If the player has been caught by the guards, the game is over, and the player lost. If the player can reach the goal destination before being caught, the game is over, and the player has won.

To help you make this project, videos have been made and posted to Canvas. You may use Visual Scripting or C#-- videos have been made for both.

### **Documentation:**

A partial Game Design Document template has been provided, which you must fill out. Alternatively, for extra credit, you may fill out the complete GDD for Metal Cog Solid. Both of these templates can be found in the Week 5 module on Canvas.

A one-sheet template has also been provided that must be filled out. This can be found in the Week 5 module on Canvas, as well.

### **Learning objectives:**

- Learn how to set up and use a finite state machine (FSM)
  - Use the FSM to create artificial intelligence (AI)
- Learn how to use sound effects
- Learn how to use Unity's Navigation Mesh System

**Required assets:**

- Polygon starter pack: <https://assetstore.unity.com/packages/3d/props/polygon-starter-pack-low-poly-3d-art-by-synty-156819>
- Basic Motions Free: <https://assetstore.unity.com/packages/3d/animations/basic-motions-free-154271>

**Rubric: (Total of 30 points possible + 4 points of extra credit)****Documentation:**

Complete One Sheet Template +3

Completed GDD template +8

**Setup:**

Project named FirstNameLastName\_Game105\_Test3 +1

GDD and One Sheet is in a folder named Documentation +1

**Game:**

Player can rotate and move forward and backward +2

Player cannot fall off the world +1

The camera follows the player +1

Player and enemies use appropriate animations when moving +4

Once the player reaches the Goal location, a “You Win” message is displayed on screen +1

Enemies rotate in place looking for the player +1

Enemies cannot see the player through walls +1

Enemies will go to the player’s last known position once they have been spotted +1

If the enemy touches the player, display a “You Lose” UI message, and destroy the player +2

If the enemy reaches the player’s last known position without touching them, they return to their rotating state looking for the player +1

**Submission:**

Only the Assets/Packages/Project Settings/Documentation folders are included in the .zip +2

**Extra credit:** Complete the full GDD template and include with your submission. +4