• A PDF guide (~3-5 pages) to your game with the following 17 numbered items, in this order:
1. the name of your game, your names, and your 165 section number(s)

Name: Graveyard Patrol
Samantha Trevino, Sean Hobson
Section 1

2. at least one image (screenshot) showing a typical scene from your game being played

3. instructions for compiling and running your game, including the network server

To run our server and game, please run the compile.bat and run.bat files in the Server folder first. Then run the compile.bat and run.bat files in the Client folder. If there are a bunch of errors, you will need to clear out all the class files from tage and a3 directories, and then compile and run again like above.

4. any special device requirements, such as particular input device(s)

Basic functionality can be achieved via an Xbox controller which is <u>required</u> (or generic gamepad; Playstation controllers do not work). Some features are only available on the keyboard.

5. how to play your game, including what things happen and how the scoring works

Exorcize as many ghosts as you can before the time runs out! Use your car to patrol the graveyard and get rid of as many ghosts as you can by running over them. Each time you run over a ghost, you receive one point. Once you get to ten points, there

is a special surprise that falls from the sky! Try to catch them before they bounce away, you'll be rewarded with bonus points and a little friend.

6. what player controls are available (what keyboard/gamepad buttons do, etc.)

Use the right stick to move the camera around the car avatar, the left stick moves the car avatar. Button 1 zooms the camera out, button 2 zooms the camera in. The L key on the keyboard toggles the headlights on the car. The space bar on the keyboard toggles the XYZ axis and adjusts the lighting. Press F to see the ghost do an animation of moving their sides side to side. Press Enter if you'd like to see the physics work more quickly and not have to wait to get to 10 points.

7. a list of initializations done in the scripting

One of the ghosts spin upon startup, and the speed at which it spins is initialized in the script titled setGhostSpinSpeed.js. A light object is created and instantiated in the world via the script titled CreateLight.js. The color of the light instantiated from CreateLight.js can be changed when you hit the spacebar, as directed by the script UpdateLightColor.js.

8. a brief summary of any changes (or none) that you made to the network protocol

None.

9. a list of changes and additions that you made to TAGE

In Utils, we added 3 things. We added a parameter String ext that is used as the extension of the image. At the bottom of the utils class we added toDoubleArray and toFloatArray.

10. a statement indicating the (1) genre, (2) theme, (3) dimensionality, and (4) activities utilized in your game (see week 1 notes [1a] for examples)

Genre: Adventure
Theme: Cartoon ghostbusters
Dimensionality: 3D camera motion
Activities: Collecting
We made a collecting style adventure game with a cartoon ghostbuster theme where you use 3D controls to move around the world.

11. an explanation of where (in the game, not the code) each project requirement is satisfied
Project Requirements:

External models: Car model, ghost model, grave

Networked Multi-player.

Scripting: Ghost spinning

Skybox and Terrain: There is a skybox, and terrain.
Lights: There is a global ambient light, and a spotlight that is used as the headlights of the cars.
HUD: There is a score and a timer in the hud
3D Sound: The ghosts have a cartoon-ish evil laugh that they randomly do to give the player an idea of where they are.
Hierarchical SceneGraph: After you collect one of the falling physics balls, a little ball will follow you to show off how great you are for catching it.
Animation: The ghosts have animations of their arms
NPCs: The ghost that moves back and forth is an NPC
Physics: The bonus balls that fall from the sky have physics effects on them.

12. a list of the requirements that you weren't able to get working

We weren't able to implement any physics besides the basic physics that were given in the example code. We weren't able to get the NPCs working besides the basic NPC part. We were trying to make the NPCs run away from the player when they got close, but ran out of time.

13. any technique you used in your game that goes beyond the requirements

None.

14. the contributions of each team member, including who designed which model(s)

Samantha created the ghost and grave models. Sean created the car and hill height models. Samantha created the texture for the car and the ghost. Sean did all of the sound. Samantha did the lighting and networking. Sean did the scripting.

15. a list of items that you created yourself (models, textures, heightmap, etc.)

Hill height map
Ghost model
Car model
Grave model
Background music
Ghost dying sound effect
CarUVTexture
GhostTexture

16. evidence of permission to use any item (models, textures, etc.) not listed in #15

Skybox: that skybox website generator.
https://wwwtyro.net/2016/10/22/2D-space-scene-procgen.html
“You can find the space scene generator here and the source for it here. It has a completely free license, so feel free to do whatever you want with the code and the images you generate with it. Attribution is of course appreciated, but not at all required - I won’t even be mad. Go nuts!”

Grave texture: CC0 Public Domain. Free for personal and commercial use. No attribution required.
https://pxhere.com/en/photo/1429287
“Texture natural stone masonry and paving
The free high-resolution photo of stone, texture, masonry, wall, natural, rock, stones, background, seamless, stacked, pattern, fence, design, old, wallpaper, construction, surface, rough, solid, grunge, concrete, backdrop, architecture, house, garden, soil, geology, granite, cement, stone wall
@Oleg Prokopenko, taken with an COOLPIX L820 04/17 2018 The picture taken with 4.0mm, f/3.0s, 10/2000s, ISO 125
The image is released free of copyrights under Creative Commons CC0.
You may download, modify, distribute, and use them royalty free for anything you like, even in commercial applications. Attribution is not required.
“

Grass:
FreeStockTextures - that's us: Paweł Woźniak and Ewa Sajdak. We are not professional photographers but we put all our efforts into taking better and better pictures. What's most important for us - it gives us satisfaction and lots of fun. We hope that you will find this site useful and that our textures will help you to create outstanding projects. You are free to use the textures for commercial purposes without attributing the original author or source. Please read the license agreement.

Ghost laughing sound effect:
Mixkit.com
Download as many videos, sounds and templates as you need, with no attribution or sign-up required.

Mixkit is brought to you by Envato, the company behind some of the world’s leading marketplaces for creative assets and creative people.

17. which RVR-5029 lab machines (at least two – it’s networked!) on which your program was tested and is known to work correctly on.

XCOM, Centipede