

<https://gitlab.com/bmyagmarjav/Incognito>

1) Full name, email, and prism account name for each member of the team.

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2) Detail which requirements you have completed, which are incomplete, and which are buggy (be specific)

3D Game

- > The game is in 3D.
- > There are objectives; the player can both fail or win both of our levels.
- > The communication of success or failure is done through clear UI.
- > There are buttons in the main menu which can launch levels, lay out the controls, display the credits and exit the game.
- > The game will automatically restart on failure; in addition, the player may restart levels at any time through the pause menu UI.
- > Not a FPS.

"Fun" Gameplay

- > Goals/SubGoals effectively communicated through an automatic "prompting" UI system
 - >> This prompt system is dynamic depending on the player's current progress in the level
- > Player can make decisions in the game which have consequences.
 - >> Laser gates in the office stage.
- > Lack of "Fun Killers" including insurmountable obstacles and arbitrary events; game experience is consistent.
- > Success is rewarded with level completion; failure results in restart of the level.
- > In-game learning is present.
 - >> Pause menu has help screen for controls.
 - >> Prompt system communicates to the player on objectives.
- > Progression of difficulty.
 - >> Game has a minimum success case in collecting a minimum amount of gold, but the player can collect all gold as a greater challenge.

- >> Two stages, designed to offer different difficulties.
- > Avoided any "gamebreaking" strategies through acting on feedback from playtesting.

Skeletal-Animated Character and Controls

- > 3D humanoid character as laid out in Milestone 1.
- > Character controlled through Mecanim controller, blend trees and root motion.
- > Player has direct varied and real-time control over player-character at all times.
- >> Player can use two inputs: keyboard and mouse PC controls, and PS4 controller support.
- > Choice of controls intuitive.
- >> Movement with WASD and arrow key scheme, and ESC as the pause function.
- >> Any other controls are clearly defined and always available any time in the game.
- > Fluid animation with continuous motion is implemented with the use of blend trees and real-time rotation.
- > Player has dynamic range of control.
- >> Two different speeds to travel; creep and run.
- >> Roll option is available which is slightly faster than fastest base speed.
- > Low-latency responsiveness; controls operate character in real-time.
- > Top-down camera clearly follows the player-character in a smooth manner, keeping the player character front and center at all times and following it automatically.

3D World with Physics and Spatial Simulation

- > 3D world created in two different stages.
- > Varied topography with multiple elements.
- > Both levels created "in-house" with "in-house" and external/purchased assets.
- > Physical interactions are graphically and auditorily represented and conveyed.
- >> Footsteps.
- >> Switch sounds.
- > Both levels are limited spaces and have appropriate boundaries that the player-character cannot break through which prevents undefined behavior of "falling" through/out of the level.
- > 3D simulation in six degrees of freedom.
- >> Player character can even travel along Y-axis in military level.

- > Player character, AI and in-game objects make use of rigid bodies.
- > The world is interactive.
- >> Completely traversable through varied terrain across two levels.
- >> Laser switchboards in office space.
- >> Vehicle transport in military camp.
- > Consistent spatial simulation.
- >> While run speed has two modes, these stay consistent throughout.
- >> Gravity is constant and behaves as expected.
- >> All in-level elements - AI, vehicles, objects - follow these rules.

Real-Time NPC Behaviors and AI

- >> AI is a behavior tree emulating multiple "states".
- >> Patrol
- >> Just spotted player
- >> Chase
- >> Attack
- >> Look for player after losing sight
- > AI steers smoothly using root motion.
- > AI are positioned and designed to be believable and reasonably effective at providing a challenge while not being too overpowered.
- > AI has fluid motion.
- > AI is animated in all states, has auditory dialogue when noticing player. Passive while patrolling, aggressive after seeing player.
- > AI is reasonable to avoid or escape from while not being trivially easy.
- > AI is a fair challenge without being excessively difficult. Leading shot functionality was removed to make it more reasonable to run away from them.

Polish

- > Considered and implemented based on feedback from Milestone 4 playtests and professor feedback.
- Overall UI
- >> Complete gaming experience.
- >> Begin with polished main menu, with stage select, credits and help screens.
- >> Player may choose any level to play and complete.
- >> Levels launch and end seamlessly with the main menu.
- >> Player has full control on what to do throughout the game.
- >> Player can pause or exit the game.

- No visible debug output.
 - >> Game stages and the game itself can be exited from at any point through UI.
 - >> No "test-mode" glitches.
 - >> UI is finished with proper polished and consistent design throughout, whether in main menu, help screens, or pause menus.
 - >> Transitions when winning or losing stages and returning to main menu.
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- Environment and Player Interaction:
 - > Physically based animations/movements.
 - >> Laser effects in office level.
 - >> Smoke effect in military camp.
 - > Proximity-based events.
 - > Interactive virtual technology.
 - >> Laser switchboards in office stage.
 - >> Vehicle in military camp.
 - > Particle effects.
 - >> To denote loot.
 - >> Blood.
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- Appeal:
 - > No glitches/bugs in full game experience.
 - > Impossible to "break free" of the level with barriers that make sense while confining the level space.
 - > Player can travel anywhere in both levels freely without

interruption or insurmountable obstacles that leave the player-character stuck.

> Stable: similar experience seen on both Mac and Windows machines with similar specs.

3) Detail any and all resources that were acquired outside of class and what it is being used for.

Scripts:

AI: RAIN AI

Image effects: Unity standard assets

In-game camera: Stealth (Unity Technologies)

Artwork:

Character models/animations: Mixamo

Environment building: ProBuilder

Military camp assets: Military Pack Part1 (Manufactura K4, Unity Asset Store), Modular military Environment Pack Volume 1 (Profi Developers), Sci-Fi Arsenal (Kenneth "Archanor" Foldal Moe)

Office assets: Stealth (Unity Technologies)

Particles: Blood FX Pack (Robin Schmidt)

Skybox: Skyboxes MegaPack 1 (Cerberus)

Sounds:

"Incognito" music: <https://arcticstealth.bandcamp.com/track/incognito>

"Hunter" music: <https://www.youtube.com/watch?v=JiAlZIW7hsQ>

Shooting sound:

<https://www.freesound.org/people/senitiei/sounds/220612/>

"Hey!" sound:

<https://www.freesound.org/people/UncleSigmund/sounds/30989/>

"Huh?" sound: https://www.freesound.org/people/Adam_N/sounds/166129/

Sand step sound: <https://freesound.org/people/pgi/sounds/211457/>

Office/Wood step sound:

<https://freesound.org/people/Phil25/sounds/208104/>

Switch sound: <https://freesound.org/people/areed94/sounds/215306/>

Health item sound:

<https://freesound.org/people/InspectorJ/sounds/328168/>

Other sounds: Derived from Apple loops.

Other:

Font: Pirulen font, <http://www.dafont.com/pirulen.font>

4) Detail any special install instructions the grader will need to be

aware of for building and running your code, including specifying whether your developed and tested on Windows or OSX.

Game was developed and tested on Windows and Mac machines.

Windows:

> x86 64-bit Windows 8

Mac:

> Mac OS 10.11.6 El Capitan

5) Detail exact steps grader should take to demonstrate that your game meets assignment requirements.

Instructions

>Open the game and the menu should show up. Notice the game title, start and credits buttons, and the team name on the menu screen.

Interactions are intuitive, and are documented in step 4.

>Notice that the background is a view of a military camp (which will be used as a level in the future). Additionally, look for the smoke in the background. You should see it animated and rising.

>The buttons are spaced such that they don't overlap. The font is a custom font, Pirulen, that fits with the high-tech aesthetic of the game and is colored white to be readable on a black button. The buttons are also custom sprites, and are highlighted when selected by either the mouse or the keyboard. The glossy grayscale design of the buttons and the background reflect the secretive, covert theme of the game.

> Mouse over any button. You should notice the button lighting up.

Try to mouse over other buttons in this manner (they should all work). Now use the arrow keys on the keyboard. The buttons should light up one after the other as you cycle through them. In addition, the mouse cursor disappears when the keyboard is being used, and reappears only when the mouse is moved again.

> Once the start button is highlighted, press the up arrow key. The highlight should cycle down to the quit button. If you press the down arrow key, the highlight should cycle back to the top. Pressing Return/Enter will choose the button.

> Pressing the Help button will open a new screen with a visual on the controls of the keyboard and mouse laid out

> Two buttons should be visible, to cycle between the PC and Controller controls. Pressing these two will change the graphic.

> This screen can be exited from with the "ESC" button

> Select the credits button in the main menu. The credits will then

show, documenting all of our contributions and all the 3rd-party resources that were used in the game.

>> The credits scroll upwards in an animated fashion.

> The Play button opens another UI which displays the two levels we have made in a clear and crisp fashion; the Office and Military Camp stages with buttons to launch either one.

>> This screen can be exited from using the ESC button.

Playing the Stage:

> Select the Office or Military Level in the stage select screen.

> The level should load up.

> A prompt will quickly show and disappear displaying the initial objective.

> The player now has control over the player character.

>> The player can freely traverse the level collecting loot.

>> The loot is randomly distributed throughout the level, making each playthrough unique and interesting.

>> Once the minimum amount is achieved, another prompt notifies the player that they may now escape the level, or go on to collect all the loot for an extra challenge.

>> The amount of loot is indicated with the loot inventory UI in the top right of the screen.

> The player may make use of the minimap in the top-left of the screen.

>> This map may be expanded to have a clearer view using "e" (PC) or Circle (PS4)

>> Enemies are substituted with red circles and gold pieces as gold ones.

>> The exit point is shown as a blue circle.

>> If present, health restoration items are visible as purple circles.

>> In this way, the player can quickly and easily refer to the points of interest.

> Once the player has collected enough gold and reached the exit, the game will end with the player's success and return to the main menu.

Avoiding AI:

> In both stages, there are AI acting as obstacles from completing the level.

> They periodically patrol the entire stage in a fixed route but with some dynamic choices.

> The AI will detect the player-character based on proximity and auditory cues (footsteps).

- > Once detected, the AI will attempt to swarm the player and attempt eliminate the player with guns.
- > The player has a fixed amount of health which is displayed in the top right of the screen.
- > Once the health is depleted, the player loses the stage and must restart.
- > The success of the player is dependent on how well the player can traverse the levels and avoid the AI to collect the loot.

Interaction within the Level:

Office:

- > In the office stage, there are certain rooms that are blocked off with lasers that may have loot within.
- > Contact with the lasers results in instant death and loss of the game.
- > There are virtual switchboards which can toggle these laser gates on or off; however, switching one off leads to other lasers turning on.

Military Camp:

- > In contrast with the confined space of the Office level, the Military Camp is a much bigger space to travel through with more objects and points of interest to check out.
- > There are catwalks, extending the traversal of the level in the Y-direction as well.
- > Interactable vehicle near the start of the stage can be used to traverse the stage.
- >> To enter the vehicle, press the interaction button while near the vehicle.
- >> WASD controls used with Down to move forward and Up to move back, and other keys to steer.
- >> The roll button exits the vehicle.
- >> This vehicle can only be used once and gold cannot be collected while inside which balances it out well. The vehicle can be used to scout around before resuming the level on foot.
- > There are health powerups in addition to gold which are randomly distributed and denoted by the purple circle in the minimap, which completely refill the health bar.
- >> These powerups are consumed even when the player's health is at its maximum value.

Pausing and/or Exiting the Level:

- > Pressing the ESC or pause button pauses the game and brings up the

pause menu which can be used to take breaks.

- > There is a Restart button, which reloads the level, in case the player wishes to start again for any reason.

- > This menu can be similarly traversed as the main menu, with similar highlighting of buttons, font and controls.

- >> The buttons can be cycled through, with "Up" on the top most button highlighting around to the bottom button and vice versa.

- > The Help button is accessible here as well, which brings up the same controls screen as seen in the main menu, in case the player needs to refer to them again.

- > There is a Quit button which returns the player to the main menu.

6) Which scene file is the main file that should be opened first in Unity?

Assets/Scenes/menuWithBase