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COMP486

THE  
NIGHTRUNNERS

USER MANUAL

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# INTRODUCTION

Welcome to *The Nightrunners*. Thank you for taking the time to play this game. *The Nightrunners* is a 2D platformer game in a tech-noir setting in an era set in the future. You, the player, take the role of a Runner – a member of an underground network called The Nightrunners. As a Runner, you specialise in physically transporting data from one client to another. It may be the future, but it is not without its own dystopian elements. Advanced technology also led to the rise of mass surveillance, and before anything is sent from one place to another online, it is intercepted by the government and scrutinized thoroughly to ensure no plots of mischief or destruction.

In the attempt to reclaim personal privacy, The Nightrunners network of Runners was conceived. Because transporting data from one point to another can come from anyone and be for anyone, a Runner can find themselves in very interesting places and situations. In-game, this is conveyed through beautiful parallax backgrounds that change as the Runner advances into the next level. While the sceneries and the path to the teleportation box may vary, there is one constant danger whose purpose is to eliminate the Runner and its kind: Security Alpha.

# HOW TO RUN

When the game (or a new level) begins, you, the player assumes the role of a Runner. In this game, you assume the role of a male-presenting Runner dressed like a character from a film noir. Unlike that of a film noir, the Runner has a futuristic weapon hoisted around his waist.

## PRE-REQUISITES

- The Nightrunners was developed using Android Studio. Download it [here](#).
- This app is written of Java 8.
- In order to run the project, you need an Android emulator running with a minimum SDK of Android 21 and up to SDK 31.
  - The app is tested and guaranteed to run on a Pixel 2 API 30 emulator running Android 11.0 with a 1080x1920: xxhdpi resolution.
  - The app was also tested and guaranteed to run on a physical Samsung Galaxy Note 8 machine running Android 9.

## BUILDING

To build *The Nightrunners*:

1. Download the ZIP file containing the project.
2. Once downloaded, open up Android Studio and import the project.
3. Build the project from the gradle file through Build > Make Project.
4. Run the project using an emulator or a physical device that matches the conditions listed on the Pre-Requisites section of the manual's HOW TO RUN section.
5. Run the project.

# HOW TO RUN: TESTING

The test suite of *The Nightrunners* uses the dependencies JUnit 4 and Mockito 2.19.0 which is adds onto the app-level gradle file. Instead of hardcoded values, the test suite uses Mockito to mock these elements which allowed an increased focus towards behavioural testing. This includes checking if the methods are returning something, if the output is not null, and to verify whether or not the class calls the appropriate method.

## RUNNING

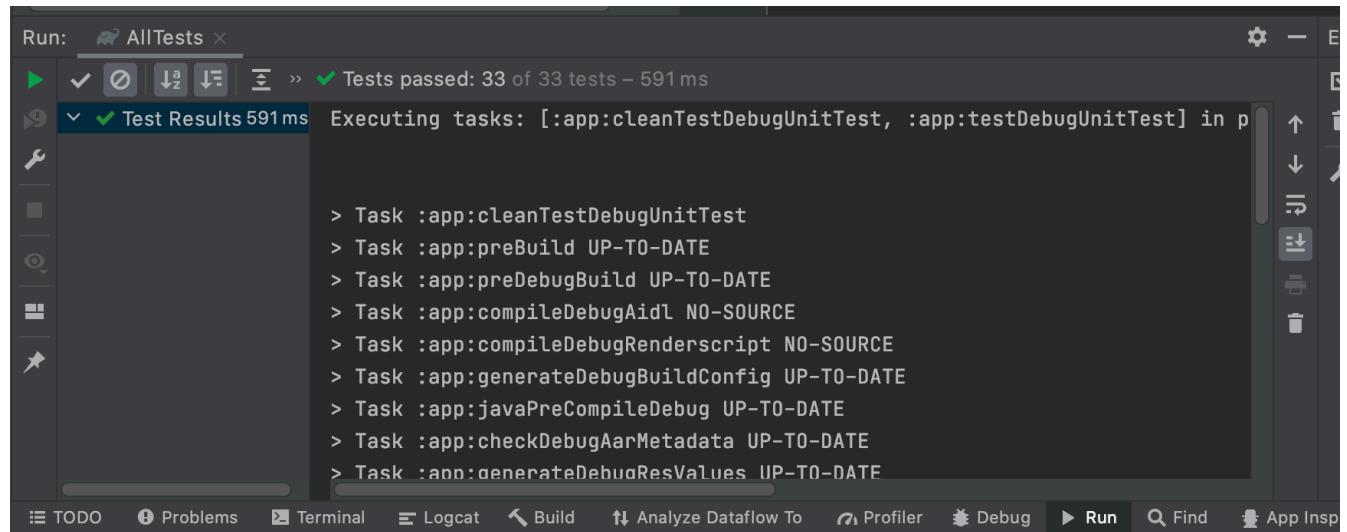
- The test suite is under java > com.comp486a1.thenightrunners (test)
- Each test can be run individually, but the AllTests class can run all tests using JUnit's RunWith and Suite imports.
  - You can do this by doing com.comp486a1.thenightrunners (test) > AllTests > run the AllTests class.
  - To run tests individually, you can do this by com.comp486a1.thenightrunners (test) > [Java class of the test; e.g: AnimationTest] > running the said class.

## EXPECTED VALUES

- All tests should show that they have passed in the Run window of Android Studio. For example, if you run AllTests class, it will run a total of 33 tests. It should say the following:

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# GAMEPLAY

When the game (or a new level) begins, you, the player assumes the role of a Runner. In this game, you assume the role of a male-presenting Runner dressed like a character from a film noir. Unlike that of a film noir, the Runner has a futuristic weapon hoisted around his waist.

## THE GOAL

The goal in every level is simple: successfully traverse the level from the starting point, until you reach the teleportation box that will take you into the next level. To successfully do this, you must avoid or eliminate the enemy units that you, the Runner, will encounter during the level.

## COLLECTIBLES

There are two kinds of collectibles that the Runner can obtain during the course of a level. They are the following:



**HEART** - These hearts represent the player's "lives" in the game. One heart is one life, and they can be collected at different points during a level. When the player dies from falling off the map or from enemy unit damage, you lose one of your collected hearts. Replenish your "lives" by collecting these hearts!



**DATA DISC** - These discs represent the information that the Runner collects and transports for their clients. There is a set amount of discs in a level, but to ascend to the next level, you are not required to collect them all. However, to truly beat the game and succeed with the final level, collecting all data discs is crucial.

## WEAPONS

The Runner has only one weapon, which is the gun holstered around their waist. Enemy difficulty in this game is determined by how many times you need to shoot an enemy unit before it is eliminated.

## ENEMY UNITS

The following units are the most common types of Security Alpha units the Runner will encounter throughout the game:



**HUMAN GUARD** - The human guard is Security Alpha's cyborg unit. They are part-human and part-machine, although the ratios of these two elements are not exactly known. Their walking path involves moving from one point to another, and kills the player upon collision. A human guard has 2 health points (HP), and it takes 2 shots from the player's weapon to



**DRONE** - The drone is Security Alpha's flying unit. Unlike the human guard, who travels from one point to another, the drone advances towards the player as soon as they are within a certain vicinity. Fast, agile, unexpected, but easier to kill. It only takes 1 shot from the player's weapon to eliminate this unit, but challenge is making sure that one shot lands where it needs to go.



**BOSS** - The final and the most difficult enemy of a Runner. Boss units are the last challenge in every Runner's data transport. If the Runner has failed to collect all the data discs in the entire game, they cannot defeat these large and imposing units.

## WORLD OBJECTS AND PEOPLE



**TELEPORTATION BOX** - The teleportation box serves as the level's exit point. To advance to the next level, one must find the location of the teleportation box. Once found, the player may enter the box to advance to the next level.



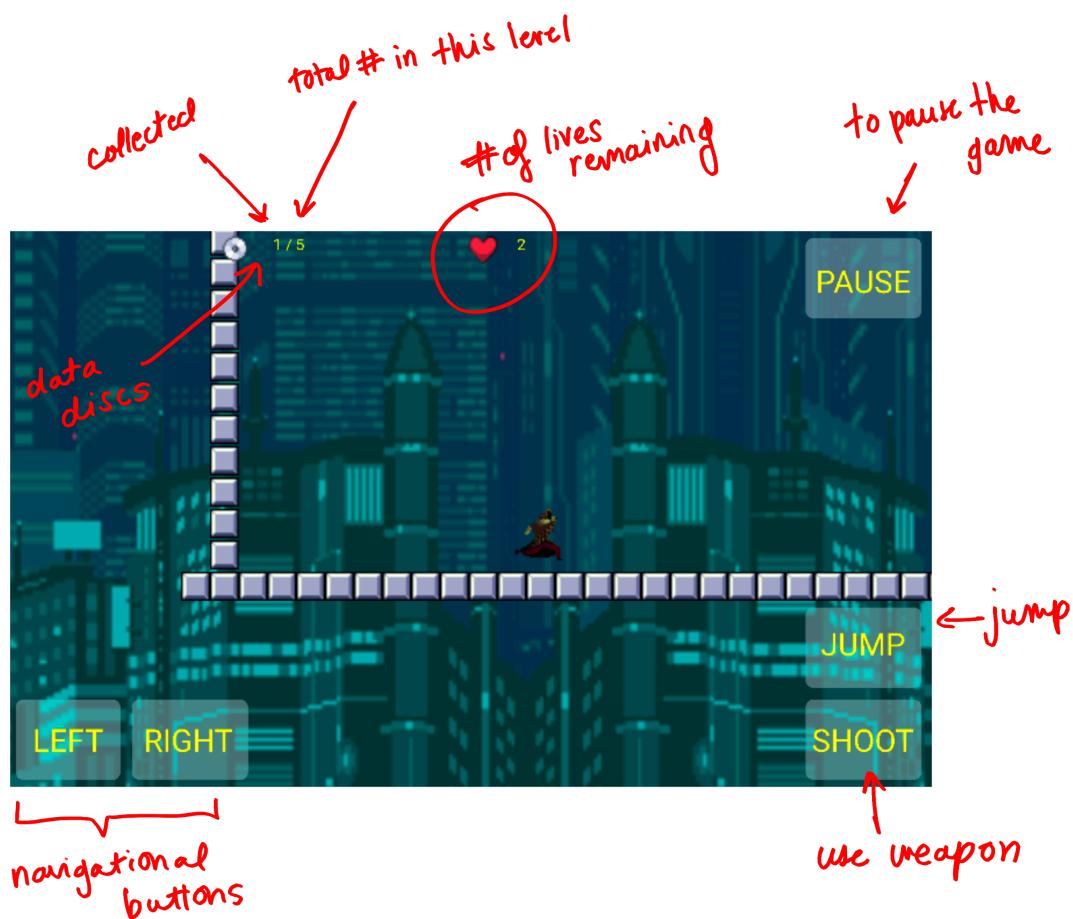
**THE HANDLER** - Each Runner in the Nightrunners network is assigned a Handler. A Handler is in charge of making sure all data transports are smooth, successful, and that the Runner makes it out alive. In this game, The Handler is non-interactable NPC that can be seen standing beside the teleportation boxes in each level.



**(YOU) THE RUNNER** - The Runner is the character that you, the player, control throughout the game. As a Runner, you collect the data discs that is scattered throughout each level of the game. These discs are part of your job as a data transporter, to stay alive and protecting your cargo (the data) is a crucial part of your job.

# GAMEPLAY - CONTROLS

In this section, we will briefly explore the gaming interface as well as the basic player controls. The following is an in-game screenshot from the Night City level, the first level, of the game running on a Pixel 2 API 30:



## LEGEND



**NAVIGATIONAL BUTTONS** - As a Runner in this 2D world, the player is granted mobility in two directions: left and right. Unlike retro platformers where it is often difficult or impossible to walk back once you walk forward, *The Nightrunners* allows the player to travel from one end to another end as they like. This feature is especially useful on some of the levels later in the game.



**DISC COUNTER** - Each level has a fixed number of data discs that can be found in that specific level. In the HUD, this information is conveyed through the format (discs collected) / (total number of discs in this level).



**JUMP** - This action button allows the player to jump in three different ways: jump in place, jump while running forward (right), and jump while running backward (left). The jump forward is higher than the jump backward, which can be quite a challenge if a level requires the player to move back and forth across a level.



**SHOOT** - This action button allows the player to fire their weapon. Each press of this button fires a single shot, which removes 1 health point (HP) from an enemy unit that it collides with. To fire multiple shots of your weapon, simply tap this button repeatedly.



**LIFE COUNTER** - This part of the HUD shows you, the player, the amount of "lives" you have left in the game. Everytime you lose a life from an altercation with an enemy unit, or by falling off the map, this number decreases by 1. The game is over when this counter reaches 0. To keep it from going to 0, make sure to replenish the counter by collecting the hearts that you find on each level.



**PAUSE** - This action button allows the player to pause the game.

# MEET:THE WORLD

In this section, we will focus on the lore of *The Nightrunners* and the characters, organizations, and the era that bring this world to life. You don't need to know all of these details to enjoy this game, but nonetheless, it makes for engaging reading to those of you who would like to learn more.

## THE WORLD

*The Nightrunners* is set in a tech-noir society centuries from our current time. Computers have advanced further, but how about us? We did, in a way, but there is a yearning for the "old ways" – leading to a movement that preserved certain subcultures and elements that should have been long gone. This included styles of dressing, the presence of "old style" buildings existing alongside glass-panelled, modernist architectures. The oldest parts of cities remained the same, save for the holographic projections here and there.

Advancements, it seems, had a price. A more connected world allowed the establishment of mass surveillance, with the government intercepting every little thing that travels across the web. This move was motivated by a campaign to fight against those who plot against the government's authority, which slowly evolved into the authorities using this newfound power for something even more sinister and intrusive.

Thus, the Nightrunners network was born.

## NIGHTRUNNERS

An answer – although some may argue is an act of rebellion – to this new normal of mass surveillance. They are an underground network specialising in data transport, with that data being about anything, from just about anyone, and delivered to anyone in the city. Because of this, Runners find themselves traversing many different cities, and manoeuvring through many interesting situations. This required Runners to not only be skilled physically, but also have good marksmanship and a clever head on their shoulders. Data transport is just one part of the job, protecting the data they carry and staying alive are also equally crucial.

## SECURITY ALPHA

Security Alpha is a private security company with a long-term contract with the government. Conditions of this contract include acting as the main and acting police force, thus, making them a threat to any Runner who stumbles onto their path. As enforcers of government law, Runners are seen as the very symbol of defiance to the mass surveillance movement. Composed of units made of man, machine, and the in-between, they are instructed to attack Runners wherever they may dwell and patrol their common routes. Not only have they made data transport more difficult, they have also made it a quite a life-threatening occupation.

# ACKNOWLEDGEMENTS

*The Nightrunners* stands on the shoulders of very talented creators that helped bring this vision to life. Credits to these creators will be found in this section.

## GAME ENGINE

*The Nightrunners* is built using the 2D platformer game engine we covered in Unit 3 of John Horton's *Android Game Programming by Example*, which is the textbook that we are using for this class. Not only has this been an incredible resource, it also helped me understand how to build a 2D platformer using Java and developing for Android devices.

## ASSETS - DRAWABLE

*The Nightrunners* uses many assets from talented creators who have granted permission that allow me to do so. The assets are all from creators who have a similar thematical vision and style with each other, and this has helped make *The Nightrunners* to be visually consistent as much as possible.

### Cyberpunk Street Environment

This [asset pack](#) is from a creator ansimuz, and a heavily modified version of this asset can be found in the main screen of the game, Night City (first level) of *The Nightrunners*. The work is protected under [CC0 1.0 Universal](#) ([CC0 1.0 Public Domain Dedication](#)) license, which allows me certain rights including using this both for commercial and personal uses. This also allows me to modify the work as I see fit, and hence why it looks very different in the game in compared to the original.



THE ORIGINAL VERSION, AS SEEN ON THE PACK'S ITCH.IO PAGE.



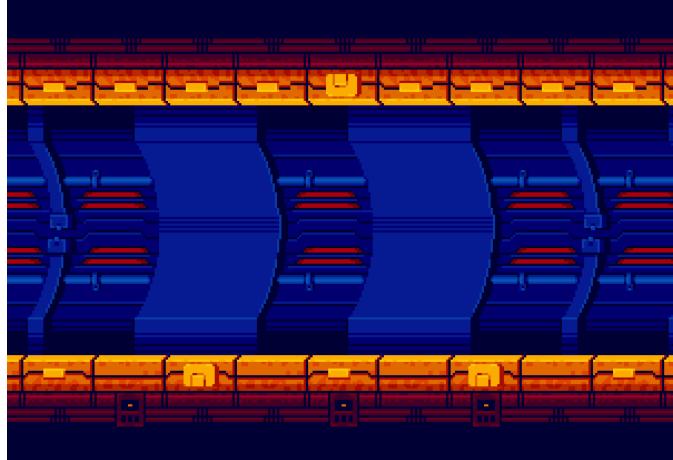
THE ASSET, AS SEEN ON THE MAIN SCREEN WHEN YOU LAUNCH THE GAME.

THE MODIFIED VERSION, AS SEEN ON THE FIRST LEVEL OF THE GAME. THE FOREGROUND WAS NOT USED, AND THE COLOUR PALETTE HAS SWITCHED FROM WARM TO A COOL TONE.

**WARPED Zone 202**

This [asset pack](#) is yet another one from ansimuz. This asset can be found in the Military Base (second level) of *The Nightrunners*. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

You may use these assets in personal or commercial projects. You may modify these assets to suit your needs.  
Credit is not required but appreciated it.



THE ASSET, AS IT APPEARS ON ITS ITCH.IO PAGE.



THE ASSET, AS IT IS TO BE USED IN THE GAME. THE YELLOW TILES ARE USED AS THE PLATFORM IN WHICH THE RUNNER MOVES ON.

### WARPED Miami Synth

This [asset pack](#) is also from ansimuz. This asset can be found in the Military Base (third level) of *The Nightrunners*. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following in the public-license.txt file included in the download:

**LICENSE:**

You may use these assets in personal or commercial projects.  
You can modify these assets to suit your needs.  
You can re-distribute the file.  
Credit no required but appreciated it.



THE ASSET, AS IT APPEARS ON ITS ITCH.IO PAGE.

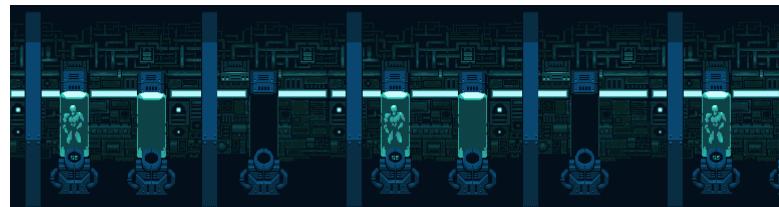


THE ASSET, AS IT IS USED IN THE GAME. ONLY THE SKY AND BUILDING ASSETS WERE USED FOR THE PARALLAX EFFECT.

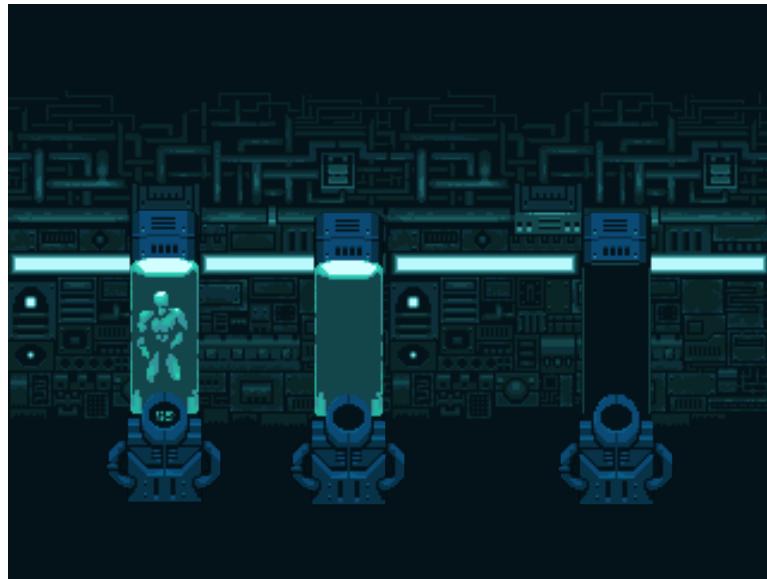
### Warped Sci-Fi Lab

This [asset pack](#) is another pack from ansimuz, and unlike Cyberpunk Street environment, this asset was not modified – only enlarged. This asset can be found in the Research Lab (fourth and last level) of *The Nightrunners*. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

Use it for free on your personal or commercial projects.



THE ASSET, AS SEEN ON ITS ITCH.IO PAGE.



THE ASSET, AS IT IS SEEN IN THE GAME.

### Free Pixel Art Tiles

This [asset pack](#) is from the creator TotonLotus. The tiles from this asset pack can be found in Night City (first level), Synth City (third level), and Research Lab (fourth level) levels of *The Nightrunners*. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

LICENCE:

This asset pack can be used in both personal and commercial projects. You can modify it to suit your own needs. Credit is not needed. You may not redistribute it or resell it. If you'll use this asset for commercial use please consider donating.



TILE FOR LEVEL 1



TILE FOR LEVEL 3



TILE FOR LEVEL 4

### User Interface Icon Pack

This [asset pack](#) is from the creator Kazzter. The data disc and the heart symbols come from this asset. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

*License:*

You can use these icons in any project, commercial or not. You can modify the files for personal use, but you cannot share them, or upload them publicly. Giving credit is not mandatory, but I'll appreciate if you do.

If you have any questions you can comment here.

Good development! o/

- Kazzter



THE "LIVES" SYMBOL,  
AS SEEN ON THE  
GAME'S HUD AND AS  
A COLLECTIBLE PER  
LEVEL.



THE DATA DISC  
SYMBOL, AS SEEN  
ON THE GAME'S HUD  
AND AS A  
COLLECTIBLE PER  
LEVEL.

### Cyberpunk Character Pack 2

This [asset pack](#) is from the creator 0c0. The player's Runner character as well as the The Handler, both come from this pack. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

#### Notes:

Feel free to use and modify the characters depending on your current project. If you have any suggestions regarding other characters, items or backgrounds, which can fit with this pack, please let me know. In case you want to offer me credits, please use my current username. Also, keep in mind that you can use this in your commercial projects, but please do not resell the assets individually.



THE RUNNER, AS IT APPEARS IN THE GAME. THE COLOURS FOR THIS SPRITE ARE SLIGHTLY MODIFIED TO MAKE THE RUNNER STAND OUT MORE AGAINST MANY DIFFERENT BACKGROUNDS.



THE HANDLER, AS IT APPEARS IN THE GAME. UNLIKE THE RUNNER, THE HANDLER ASSUMES AN IDLE STANCE WITH ONLY HIS HAIR MOVING AGAINST THE WIND.

**Warped Props Pack 1**

This [asset pack](#) is another one from ansimuz. The capsule sprite that represents the teleportation box in the game comes from this pack. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

*You may use these assets in personal or commercial projects. You may modify these assets to suit your needs.*  
*Credit is not required but appreciated it.*



THE CAPSULE SPRITE, WHICH REPRESENTS THE TELEPORTATION BOX IN THE GAME.

**Pixel Art Sci-Fi Cyberpunk Police**

This [asset pack](#) is from the creator Evgeniy Luch. The drone, the human guard, and the boss all come from this pack. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

**License:** This asset pack can be used in both free and commercial projects, but You may not redistribute it or resell it.



THE DRONE, AS IT APPEARS IN THE GAME.



THE BOSS, WHICH IS A MODIFIED VERSION OF THE ASSET.



THE HUMAN GUARD, AS IT APPEARS IN THE GAME. THE LICENSE DOES NOT REALLY SPECIFY IF I AM ALLOWED TO MODIFY THE SPRITE OR NOT, BUT AS THIS IS A PERSONAL/SCHOOL PROJECT AND NOT FOR-PROFIT, I HAVE TAKEN CERTAIN LIBERTIES AND CHANGED THE COLOUR SCHEME OF THE GUARD TO BE MORE VISIBLE AGAINST THE MANY BACKGROUNDS IT WILL BE PLACED IN.

## ASSETS - SOUND EFFECTS

### **Sci-Fi Sound Effects Asset Pack**

This [asset pack](#) is from the creator mattflat. The sound effects for shoot, jump, teleport, obtaining a disc, landing a hit on a human guard, explosion of a drone, and collecting an extra life come from this pack. This work is protected under [Attribution-NoDerivs 3.0 Unported \(CC BY-ND 3.0\)](#) license, which allows sharing and distribution of the material as long as the following conditions are fulfilled:

- I must give credit to the creator, provide a link to the license, and note any changes.
  - Through the Acknowledgements section and in my source code, I have given credit to the creator. In this Assets - Sound Effects section, I have shared the link of the license page, and as for any changes, no modifications were made.
- That any derivative works on the material cannot be distributed.

### **AI, Cyberdemon, & Alien Sound Effects**

This [asset pack](#) is from the creator BTL games. The sound effect for player death comes from this pack. This work appears to not have a Creative Commons license attached to its page, however, the creator has explicitly stated the following on the asset's page:

As always my work is free of copyright and here to promote creativity and productivity. But if you make anything with these please let me know, I want to support what comes from this!