**COMP2160 Practical 7 Data Management Plan Template   
(Adapted from National Archives of Australia)**

# Overview

## Purpose

The purpose of this document is to investigate and analyse the data collected within the COMP2160 Week 7 Arcade Game. Specifically focusing on the game's difficulty in terms of player survival and defeating enemies. We aim to answer the following questions:

* How hard is the game in terms of avoiding death?
* How hard is the game in terms of defeating enemies?
* How does the player's score advance throughout the game, and are any sections (between checkpoints) easier or harder than others?

## Data to be measured

We will collect the following data to address these questions:

How hard is the game in terms of avoiding death?

* DATA: Time since the start of the game to when the player dies.

What is the main cause of player death, and when and where does this happen?

* DATA: The cause of death when the player dies.
* DATA: (X, Y) position of the player's ship at the time of death

How hard is the game in terms of defeating enemies?

* DATA: Number of missiles, radar, and power cells destroyed at each checkpoint.
* DATA: Number of missiles, radar, and power cells destroyed at the end of the game.

How does the player's score advance throughout the game, and are any sections (between checkpoints) easier or harder than others?

* DATA: Checkpoint name
* DATA: Time at which each checkpoint is reached.
* DATA: Score at each checkpoint

## Data owners and stakeholders

|  |  |  |
| --- | --- | --- |
| **Position** | **Name** | **Email** |
| **Data owner**  *Has the authority to make decisions about the data* | Dylan Neilson | dylan.neilson@students.mq.edu.au |
| **Data custodian**  *Responsible for the data’s technical environment* | Dylan Neilson | dylan.neilson@students.mq.edu.au |
| **Data/information/records manager**  *Generate, access and update the data in daily activities* | Dylan Neilson | dylan.neilson@students.mq.edu.au |

## Related policies and regulations

This DMP adheres to the General Data Protection Regulation (GDPR) and the Privacy Act 1988, ensuring the protection of user data and privacy.

1. **Data collection**
   1. **Data description and collection methods**

* Types of data collected: Gameplay logs, player actions, checkpoint data.
* List of datasets: One dataset for each game session
* Data collection method: Data will be collected through code within the game, using Debug.Log() statements to output relevant information.
* Data format: Data will be stored as structured logs in text format.

# Data storage and disposal

## Data storage and location

* Data will be stored on a secure internal server.
* Access to data will be restricted to authorized team members.

## Data disposal (keep, destroy, or transfer data)

The data will be retained for analysis purposes and will be destroyed in a secure manner when it is no longer needed for analysis or after a specified retention period.

## Privacy

* The collected data does not contain private or sensitive information.
* The data is not identifiable, and an individual's identity cannot be reasonably collected.

## Ethics

This data collection and analysis adhere to the ACS Code of Ethics. We will ensure that player privacy and confidentiality are maintained throughout the process.

# Using Data

## Data Analysis

The data will be analysed to assess the game's difficulty. Analysis will involve statistical techniques to identify trends and patterns in the player’s behaviour.

## Data Implementation

Insights from the collected data will be used to make informed decisions about game design and code improvements. Adjustments may be made to the game's difficulty levels based on the analysis.

## Data publication

The data will not be published in public blogs or social media. However, it may be showcased at internal meetings or discussions to help generate improvements related to the development of the game.

## Data sharing

The data will not be shared with external parties, as it contains sensitive game-related information that should remain confidential within the development team.

Please note that this DMP is subject to updates and revisions as the data collection and analysis further progress.