University of Plymouth

School of Engineering,

Computing, and Mathematics

COMP3000

Computing Project

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Insert your Project Title

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BSc (Hons) Computing & Game Development

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## Acknowledgements

## Abstract

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## 

## Word Count

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## Code link

## 1 - Introduction

Working title - helping.

Managing and looking after mental health is as important as maintaining good physical health, but people aren’t always taught the best practices and techniques to do so. In some cases, this can lead to people only receiving support once they reach a ‘breaking point’, rather than learning preventative and healthy habits early on.

In recent years, more people than ever are playing video games and feeling the mental health benefits - community, relaxation, and rest time. As the industry has grown, so has the number of games centred around mental health, and the wholesome games movement.

This project aims to combine these two elements. Research has been conducted into how media, particularly games, affect their audiences, and how the fields of medicine and psychology approach mental wellbeing and improving mental health. This informed the creation of a game which aims to support the mental health of players, offering both short term benefits of relaxation during play and long-term benefits of learning and adopting healthy habits outside of play.

## 2 - Background, objectives & deliverables

### 2.1 Project Background

Games for wellbeing and mental health fall into the subcategory of serious games (or applied games). There’s no single definition of a serious game, but the most used is ‘Games which do not have enjoyment, entertainment, or fun as their primary purpose’ (Chen & Michael, 2005).

Serious games have existed since the early days of video games, and multiple titles have reached high levels of popularity and financial success. One of the earliest examples is the Microsoft Flight Simulator franchise, the first edition of which was released in 1982. It is one of the few flight games which focuses on civil aircraft and doesn’t feature combat. The 40th anniversary addition released in 2022 reported over 10 million players and is still receiving updates (Neumann, 2022). In addition to commercial success, studies have suggested that the game has ‘capability to improve novice student performance in an aircraft’ (Callender, et al., 2009), supporting the educational benefits of serious games.

The design of serious games specifically to improve mental health has also proven successful. A meta-analysis of ten studies into serious games for mental health suggested that they can be effective for reducing disorder-related symptoms in patients (Lau, et al., 2017).

### 2.2 Objectives

The primary objective of this project is to create a serious game that provides entertainment and escapism whilst simultaneously teaching the players good mental wellbeing practices.

To better understand this objective and stay on task throughout development, it has been broken down into smaller, measurable objectives as follows.

* Create a research document on mental health practises and therapeutic techniques informed by psychology. Write up at least 3 techniques that could be applied to the project by February so they can be referenced in the writing portion of development.
* Write at least one character dialogue with a full storyline that they player can interact with. Complete this by 13th February so it can be sent out as a standalone text game to at least 5 testers for early feedback.
* Write at least 5 minutes’ worth of dialogue for the player to read by the completion of the project. Measure this by entering the wordcount into wordstotime.com.
* Make a slice of gameplay that can run from start to end without any major errors or bugs (eg, software doesn’t crash, players can move around and access the storyline as expected).

### 2.3 Deliverables

The deliverables for this project include both the working build of the game and the research that informs it.

The working game will be delivered as an executable which can be played on a PC with mouse and keyboard/keyboard only. The game will be a vertical slice of the game, with limited characters and storyline to interact with, with the intention that it can be built upon and expanded at a later point. All art assets featured will be original, and copies of the original PSD files and PNG files will be saved in a folder in the submission folder.

Alongside the game itself, two small scale research documents will be delivered. These will inform the game, and act as an educational resource available for others. One will detail the steps and methods employed in the development of a serious game, whilst the other will provide a quick reference guide to different mental practises and habits encouraged in therapy.

## 3 - Literature review

Serious Games Conceptual Framework

## 4 - Method of approach

### 4.1 Tools

* Asset creation
  + Photoshop
  + Calligraphr
  + Audacity
* Development
  + Unity
  + Visual Studio for Unity
  + YarnSpinner
* Project management
  + Google sheets
  + Github
  + Trello

### 4.2 Technical implementation

* Dialogue system
* New input system
* Algorithm to use and write about

### 4.3 Project Management

* Recap tools
* Sprint process
* Artifacts at end of project eg charts

### 4.4 Data collection procedures

* Identify how many data collection sessions, how they run, how they are used.

## 5 - Legal, social, ethical and professional issues

## 6 - Project management

## 7 - End-project report

## 8 - Project reflections

## 9 - Conclusions

## Reference list and bibliography