**GDW Studio Term Report Guide**

*The following is a guide to how Studios should structure their Studio Term Report, and what information to include in it. Replace the underlined text with the relevant information.* ***Do not******include italicized text in the report.***

**Name of Person Submitting Report:** Donald Smith, 100362985

**Studio:** Pixel Brother Studios

**Studio Members:** *Individual members' names and ID number for each student in the studio*

Lead Programmer: Donald Smith 100362985

Lead 2D Artist: Eric Chan 100518326

Lead Writer: Rehan Rameez100489357

Producer and Tester Thomas Whiting100517132

Lead Designer: Usman Variava100522053

Contractor – Level Designer & 2D Artist: Aaron Alphonso 100466698

**Workshop:** WORKSHOP IDENTIFIER: 1396

**Game Name:** *Misthaven*

**Feature Completion Report:**

**Essential Math for Game 2 - INFR1030U – Andrey Zarin**

* Donald Smith
* Eric Chan
* Thomas Whiting
* Aaron Alphonso
* Usman Variava

**Graphic Design II – INFR 1320U – Derek Fullerton**

* Donald Smith
* Eric Chan
* Rehan Rameez
* Thomas Whititng
* Aaron Alphonso
* Usman Variava

**Digital Game Design – INFR 1335U – Pejman Mirza-Babaei**

* Donald Smith
* Eric Chan
* Aaron Alphonso
* Rehan Rameez
* Thomas Whiting
* Usman Variava

**Object Oriented Programming – INFR 2140U – Patrick Hung**

* Donald Smith
* Eric Chan
* Aaron Alphonso
* Usman Variava
* Rehan Rameez
* Thomas Whiting

**Class inheritance and OOP:**

We worked hard to make sure the entire game was created with these principles in mind. A simple example of class inheritance is the Object class which inherits from Sprite in order to use said functions to draw the objects through inherited functions.

**Marketing In the Information Technology Sector – BUSI 2210 – Jackie Simkin**

* Donald Smith
* Eric Chan
* Aaron Alphonso
* Usman Variava
* Rehan Rameez
* Thomas Whiting

**Game Development Workshop II – INFR1395U – Ken Finney**

* Donald Smith
* Eric Chan
* Aaron Alphonso
* Usman Variava
* Rehan Rameez
* Thomas Whiting

**Gameplay Triggers:**

Used in a multitude of ways, gameplay triggers are invoked by proximity to NPCs (causing a text bubble to pop up), Level Transition (by walking on the Portal’s centre) and causing the tutorial messages to appear on screen.

**File I/O – save/load settings, load level:**

*…*

*…*

*…*

**Options menu with control code:**

*…*

*…*

*…*

**Game Menu with control:**

Loading up the game leads to the main menu where you can start up a new game or exit by using ‘a’ and ‘d’ keys to navigate. You can also use the ‘w’ or ‘enter’ key to select an option.

**Scoring:**

Dealing damages to the enemies (ghost and not seagulls) will increase the score you gain by one point for each successive hit.

**On-Screen Messages:**

Score increases by 1 for each successive hit. Health decreases by 1 for each successful enemy attack. NPC’s messages pop up when in proximity. Level Transition messages.

**Draw primitives & load/run animations:**

Although we no longer used the draw primitive function, the header file ‘DrawPrimitives’ still holds everything necessary to use them.   
Load and run animations are primarily done through the provided sprite lib with all objects updating to their ‘nextframe ()’ when the objects update every 1/20th of a second. However, I have use a tick to slow this down to minimize the amount of spites needed while maintaining the rest of the game at its current settings.

**Sound Effects:**

Every level has its respective background music, and combat initiates a sound to show feedback that the player is attacking. Level Transition also cause a sound to be invoked.

**All navigation and movement:**

Using the feedback from Gamescon, I decided to fix the sticky key functions by creating the Keylogger class and working with vectors and the sort function. What occurs is seamless control and since I fixed the pop\_back error created by rapidly pressing keys by checking with an ‘if’ statement that the vector was empty or not.

**Level Transition (and control):**

Menu to first level works through ‘New Game’ and there is a transition screen.  
Likewise going over the centre of each level’s exit portal causes the player to load to the next level.

**Error Free Release Build:**

Doesn’t seem to crash and the functions seem to be working as intended.

**Teamwork Wisdom:**

Donald:

*A personal reflection that I need more horizontal management of the team in case the team lead (myself) is absent so that the team will continue to function.*

Eric:

*What I learn about working as a team is that the individuals in the group are extremely dependent on one another. Should one of the group members have work issues or is working less than from what the group expected from them, it would harm the group’s overall performance.*

Thomas:

*Communication is key. If you can't co-ordinate properly, you will fail in completing even in the simplest tasks. Attending meetings also helps plan events in advance and help meet schedules like passing gates. At the same time it is really good idea to have messages services like Skype.*

Rehan:

*I feel like I learned a lot through this experience like how time management is a very important aspect of game developing and also how much the team is dependent on each other. When one of the people on your team does not do their job it can really affect the rest of the team negatively. I also learned that patience is very important. Without patience, some people on the team can get a little angry when things are not done.*

Aaron:

*As a team I learned that communication is key but initiative and passion is more important. If team members have friction from the beginning, and that they constantly want to program/produce assets for the game without being told, a successful game will be born for sure.*

Usman:

*Working in a group has taught me many things such as how important the skill of time management is and how dependent you are on other members in your group. It has also taught me that you will have to make a lot of sacrifices of your own time for the rest of the group. If you don’t complete something that was required for a group assignment, the entire group will be affected.*

**Production Wisdom:**

Donald:

* *Tutorials seemed more important than the actual lectures they were supposed to back up in Object Oriented Programming. Also, forgo the idea that classes will help you with the course project, be proactive and search for the information on the internet and experiment.  
  Fail quickly; Fail often, Fail hard; Curse and love the Programming Gods.*
* *Always keep prototyping, even if it’s not required now you might be able to use it in a future project. There is no such thing as limits in programming, just keep on experimenting to discover your own personal boundaries. Then expand them with knowledge. Never stop learning and NEVER dismiss other opinions, they might spark something.*

Eric:

* One of the individual lessons that I’ve learned about this is to always prepare for possible situations. To prepare for a possible situation where something goes wrong would allow you to be able to adapt to some of the issues that can occur and would save some time on problems.
* Another individual lesson that I have acquired from GDW is that you should try to help out with your group’s assignments, especially if you do not know about it. This can be a great experience for subjects that you may need for future situations such as classes in UOIT.

Thomas:

* *Programming is tough job. Doing it all by yourself takes a large toll on your mind and body. Bugs and glitches are prone to happen, and sometimes you have no idea how to fix it. The internet is your friend and can help find the answer.*
* *Getting stuff on time is an extremely invaluable skill. It is good to be always ready for inconveniences and sickness. It is never a good idea to leave things to the last minute. It is not a good idea to attempt to finish everything in one night and lose sleep.*

Rehan:

* *While working with the Pixel Brothers, the most important thing I learned is that sacrifice is very important when making a game. If you have something that needs to be done with your family or friends, you probably won’t be able to unless you finish your work for the day. I learned this the hard way and lost some marks for an assignment. I feel bad for the indie developers that need to do this all the time.*
* *Another lesson I learned was playing other game while developing your own is a very bad idea. It’s a bad idea because you start to lose focus on what your game should become and instead bring in ideas from the other game you played into your game. We were given this advice at the beginning of the year and I didn’t think much of it. I understand now that playing and focusing on your own game is very important.*

Aaron:

* *As the artist who produced all the art assets of the game, it’s important to set down a template for the art style from the beginning so if any team members want to contribute they stick to the pixel/size ratio; without which assets are rendered useless.*
* *I also learned there’s a hell of assets to produce in terms of art. Everything you look at is art; menu’s, UIs, dialogues, menus, characters, enemies, levels, everything.*

Usman:

* *I learned that you should always be ready for unexpected events such as an assignment being due 7 hours before you thought it was due. I learned this the hard way in that I was leaving an assignment to do a few hours before the assignment was due but then found out that it was actually due 7 hours before the due date that I had thought it was due on. This caused me to do the assignment in a rush and not as well as I could have done it.*
* *Another lesson that I’ve learned is that you should try and help your other group members on their assignments as well because not only will the assignment affect their mark, but it will also affect your mark.*

**Comments:** *include any other comments on behalf of the studio*