

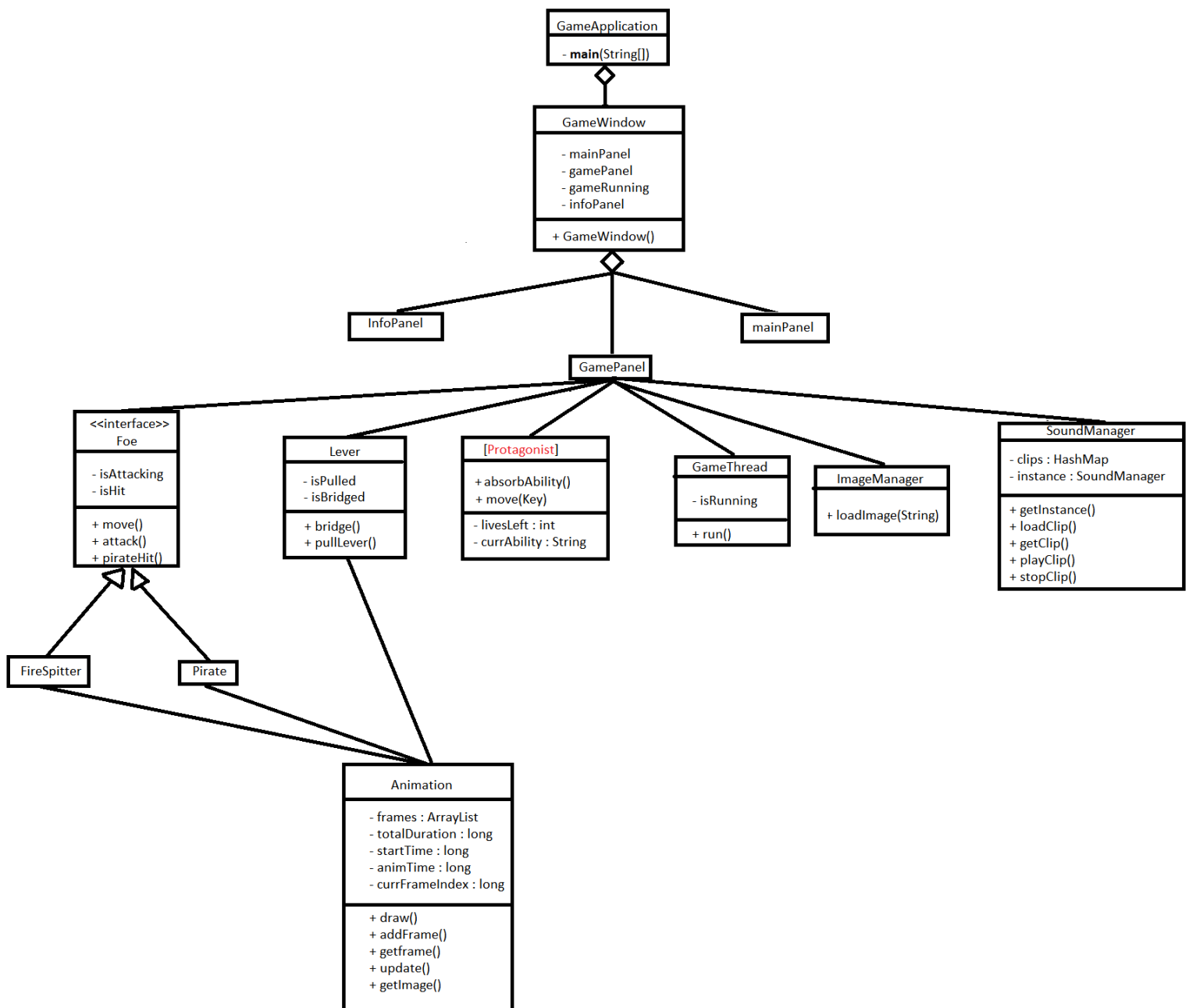
Student ID: 816022996

Student Name: Jonathan Gray

Initial Design Document - Assignment 3

COMP3609 - Game Programming

Initial Class Diagram



Game Concept

From a blow to the head from an unknown source, [protagonist] is suffering from amnesia and has no idea who he is or where he comes from. Upon waking up from the concussion, he finds out that he is lost in the land of [location]. Undenounced to him, he now has powers of absorption, in which he can absorb and use abilities of foes in his path, he is soon to realize this as he attempts to escape for the sake of his freedom.

Note: No name has been chosen for the finished game, game protagonist, and other variables such as location.

Game Category – A side-scrolling video game or side scroller, is a game in which the action is viewed from a side-view camera angle, and the screen follows the player as they move left or right.

Game Theme – the [protagonist] must trail through the [location], rummage the land and absorb the abilities of his foes to successfully get to the next level.

Entities

The following are the expected entities in which the protagonist, other sprites and other entities will interact.

- Pirate's sword – once a pirate is killed by [protagonist], he can pick up the pirate's sword.
- Lever – a pullable device in which the [protagonist] uses to bridge land areas and perform other actions.

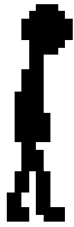
Note: Other sprites will be added as development takes place.



Sprites –

- The [protagonist] is a stick man figure (subject to change) that absorbs abilities of foes.
- Fire Spitter – a foe that spits fire.
- Pirate – a foe with a sword that charges [protagonist].

Note: Other sprites will be added.



Expected Gameplay

- Using the arrow keys or WAD keys to move, [protagonist] must jump, run and avoid the pressures of his foes vying for his demise. On defeating his enemies, he has the option to absorb or pickup their abilities (by pressing E) and use those abilities (by pressing Q) to complete his mission and ascend to the next level.

Note: the keys written in this document are subject to change.

Game Controls (Expected)

These controls are subject to change, addition to or deletion.

W, Space Key or Up Arrow Key – Jump

A or Left Arrow Key – Move left

D or Right Arrow Key – Move right

E or Z – Acquire Nearby Ability

Q or X – Use ability

Tools and Libraries

The game will be developed using the *Java programming language* along with its abstract window toolkit library (awt) for its range of window tools for application development, javax.swing library for its GUI components such as JFrame, JPanel and JTextField. There may be other classes imported into the project to utilize needed methods already implemented by those classes, eliminating the need for developing and testing of similar methods which save time.

It is reasonable to assume that other libraries and tools may be necessary to produce the finished game.