**Assessment 2 – Description.**

Project Description:

Our team, Code Name Bricks, is planning to create a 2D game in Java. We aim to create a side-scrolling, platformer that is based on a scrap yard wherein the scrap has come to life and must fight for its dominance against the other metallic creatures of the yard. The Player will control one of these said creatures and must collect other pieces of scrap as it moves throughout the levels to fight against its opponents and keep itself alive. The pieces of scrap that it finds will be used as its ammunition, and as the main contribution to its health, meaning that the Player must manage its scrap levels to not only defend itself but also to keep itself alive. We also intend to create a feature that causes the Player to slow down and become an easier target with the more scrap that it has on-hand, so managing scrap levels and never holding too much is the key to survival. This means the Player may never stock-pile ammunition or health, a potential issue with this style of game that may lead to “broken” game mechanics.

The fundamental features of this game are:

* That the player may move and gain or lose health.
* Enemies move and pursue the player to attack them.
* That the levels are in the format of side-scroller/platformer.
* The attack is a projectile.
* Pixelated graphics made by us.

If time permits, we would also like to include a few ancillary features that are not fundamental to the gameplay but would bolster and polish the overall experience. These include:

* The players speed alters as their level of scrap increases/decreases. This creates a sense of needing to manage the characters scrap level to never hoard while also never allowing their health to become too low.
* Altering affects caused by picking up certain pieces of scrap. For example: scrap that makes the Player faster, slower, jump higher, lose health-over-time, or improve the effectiveness of its attacks.
* A soundtrack that will play in the background that hopefully changes as the Player moves through parts of the levels and sounds that respond to player input and actions that are performed in-game.
* A HUD that is always displayed during gameplay that shows the characters scrap level with a dynamic animation, and a pause menu that can be accessed at any point during the game.

But more on these features further in our report.

Though our experience levels writing in Java differ dramatically, some much more advanced than others, it is something that we all have programmed in and feel we can gain something from. Some of us will be responsible for basic programming, possibly focusing on only a few classes, and others have the responsibility of overall game mechanics and planning the class structure of the program. Some of us will even focus on creating parts of the game that are not necessarily associated with the performance of the program itself i.e., graphics sprites, the soundtrack, project planning etc. This means that we all have something to gain from this project and can collectively improve our technical, and IT industry proficiency.