**SWEN30006 Report – Project 1 Tetris Madness**

Part 1: Analysis of the current design

Firstly, the current design has considerable duplicated codes. In each block class, they have fifteen same methods, which can be encapsulated to a parent class. When creating random TetrisBlocks, the current design uses a series of switch statement, making it hard to add new types of TetrisBlock for further difficulty levels. The same problem also occurred in moving blocks. When moving blocks, it uses combination of switch and if-else statement for each kind of TetrisBlock, which is redundant. The rotating method should be extracted from the moveBlock method, as rotating is disabled in madness level. In the Medium and Madness difficulty levels, they both required new settings for speed. However, the current design set the speed to a integer each time.