## SFWR ENG 3XA3 Problem Statement - Group 3

Jason Li, Yousaf Shaheen, Scott Williams 25. September 2017 Given the barebones nature of the Hextris.io program built in Javascript, Software Engineering 3XA3's Group 3 has been tasked with developing a new version of the game from the ground up using the Unity game engine and C#. In addition to building a new version from the ground up, the team has been tasked with formulating new additions to the game with the purpose of differentiating our own version with previous editions. This is to provide a more feature-filled version of Hextris with the hopes of providing a source of entertainment to various end users who wish to have a great casual gaming experience.

In essence, the stakeholders can be split up as the project group members, the TAs and professor, as well as the end users which will be some members of the 3XA3 classroom. The user activities consist of desiring to play a specific mode of Hextris through their personal choice, as well as being able to search for more information surrounding their play session, including high scores relative to other users. The problem affects the users of Hextris because the entertainment factor is largely determined by the end users themselves and their expectations as to what they envision Hextris being in the long-term. With this in mind, our development group must take into consideration what needs to be changed and kept the same while keeping the general playing audience in mind. In addition, our software development group is a stakeholder since the entire process of creating this project is handled by our group members. The TAs and professor who mark our assignment are stakeholders by being an advisor through giving their personal input, which will further help with the direction of where the project goes beyond simple recreation of the Hextris game. The problem affects this group of people because they are the ones who conclude if the direction that the project is going makes sense, but also determine whether the Hextris recreation is too derivative of past versions. The entertainment value of the product is dependent on what new features are formulated, and the TAs have to keep this into consideration when deciding how the project is progressing before creating a final build that will be shown off to members of the Software Engineering 3XA3 class.

The software environment for this project is mainly within the Desktop environment, as the Unity game engine is mainly designed for desktop use. In terms of when the program should be used, Hextris would fulfill the criteria of being played within a house environment while also being able to be played along a commute. Additionally, the game is ideal for 10-15 minute intervals consisting of multiple games during this time, and both day and night time playing is completely feasible for Hextris. This is because it is designed as an accessible casual puzzle game, and it is possible to get a servicable experience of the game within a short time frame. Of course, it is up to the users of Hextris to determine how long they wish to play the game.