

# Problem Statement

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## 1 Introduction

Small game is a great way for people to seek for entertainment during spare time. 2048 is a video game designed by web developer Gabriele Cirulli. In the initial version, because of the grid size limit and random number/place uncertainty, it is way too difficult for player to reach numbers above 2048. With the intention to re-develop 2048, we aim to insert additional mechanics/features to make it innovative and easier for the general public to play. The game will be implemented on web browsers for convenient access.

## 2 Importance

This game was extremely popular six years ago – it received over four million players in less than a week after the game was released. However, the popularity of this game keeps decreasing as there comes more and more advanced new games, and original version of 2048 does not have many features to sustain attractions. It is too hard to challenge the record: player may lose the game simply from luck factor while achieving numbers above 2048 and get disappointed. Score leaderboard was also an undo feature. Thus, it is important to make some creative changes to this game to improve game experience. By adding tools such as boom or block switch into the game, the players will be much more encouraged to challenge their record and keep playing.

## 3 Context

The main goal of our project is to provide a fun sliding block puzzle game for all ages with less frustrations than the origin game. The main stakeholders of our project are those players/users who want to have fun during their fragmentation time and those who seek challenge(i.e. people who want to get high marks). Other stakeholders include group members, future developers and technical support. The game is planned to be written in JavaScript and designed to be an online game. People do not have to download the game to play it. Thus it has good portability and can run on every platform which have the access to internet and a web browser, which provides a convenient entertainment.