# Contributions Report:

**Atif**: For this project, I contributed to several classes in the back-end side of things. The classes that I contributed to were Gameboard where I did the majority of the class alongside Joshua. In this class I did several difficult logic methods such as getMoveDirections which gets all the valid movement coordinates that the player can move in, validMove was also a complementary method for getMoveDirections that I did. I also contributed to the initial FileReader that we used to read in the text files and initialise things. I contributed to the FloorTile class, Player class and SilkBag class. In front-end I did most of the styling of the game with David and George using FXML and CSS. I made tests to ensure methods inside of the gameboard worked as planned. Nearly all the classes were JavaDoc'd and formatted by me and Joshua. I did the weekly minutes after every meeting and submissions with Joshua as well as organising the meetings and tasks for everyone. Also, a list of 10 extra features was made by me and Joshua. Debugging and testing of methods were done by me, George and Joshua.

**George:** I lead the FrontEnd team, always making sure that they had a task and was available to give advice to support them. I also would be around to answer questions about the code and giving advice on the best ways to create methods and classes. My main task was getting the game screen working, which involved creating all the control systems and user interactions in the when playing though the game. I updated the FileReader class to make it more suitable for the example inputs. I also ended up creating the gameLogic Class which controlled the flow of the game keeping track of the current state of the game, and acting as an API between the game and the UI. I would work in one-on-one sessions with members of my team to teach them how to work with different parts of javaFX. I touched many parts of the code, fixing bugs and tidying code that other people had written. I created the assets the game used and created a lot of the FXML and CSS styling of the final game. I created some tests. I would also find and fix bugs in the game, correcting them in ways such as:

- Updating the leaderboard for every game board.
- Fixing the players that could be set on fire.
- Shifting of frozen tiles.
- Correcting the leaderboard to show all boards.
- Moving of the players at the start of a game.
- Updating profile win/loss.
- No longer needing to leave in order for a setting to update.

**James:** For the last four weeks I worked alongside Joshua, Atif and Brandon in BackEnd and contributed to the initial versions of the Silk Bag class and the tile class. I also worked on the initial Message of the day class before it was finalised by George. As an extra feature I also implemented a playlist that continues to play music as the game is being played and whilst it is in the menus. I also added a file for potential additional features alongside Zhan.

**Joshua:** I worked on the FileReader with Atif at the beginning of the project, before moving on to the Gameboard class, completing more difficult logic-based methods with him inside of that class, the main one that I worked on being the playFloorTile, which deals with the playing of a new floor tile and moving of all others, and the moving of a player. I created the ActionTile, FloorTile and Coordinate

classes with him, and well as collaborating with 3 others for the Tile class. I, alongside Atif, created JavaDoc for the majority of the classes in BackEnd, alongside enforcing proper coding standards were used. I assisted in the reformatting of the JavaDoc in several classes inside FrontEnd, as well as assisting Zhan with some logic issues inside of Profiles, and PickPlayer. I corrected some issues with HowToPlayController and ActionTileController alongside Atif. I completely implemented all in-game sound effects, for each button pressed. I took the contribution breakdown and submitted it as required every week, as well as assisting George with the first week's minutes, and Atif with the second to fourth week's minutes, and assisted with the organisation of meeting times, as well as assigning tasks during the earlier stages of the project. I also created the Contributions Report.

**Brandon:** In the last four weeks I, alongside Joshua, Atif and James, worked on the back-end side of the project. I created the Player and Profile classes, setting them up for implementation. Besides these, I aided in testing, and hence bug reporting/debugging. In total, I implemented two extra features: a button which gives the players an option to play another game after finishing one; a statistic under the profiles that shows a player's win streak, i.e., how many successive games they have won.

**David:** At the start of the project, I was assigned to the FrontEnd team along with George, Zhan, and Daniel. I began by creating a main menu using scene builder and a controller class. Once this was tied in with the other menu screens that were created by the other front end team members, I began working on game saving and game loading as I could not continue with the front end until more of the back end was completed. After the back end was more completed I went through and improved the GUI by adding confirmation to any important decisions (eg. quitting without saving). When I could launch the game, I went through and fixed any issues with the saving and loading, and fixed any issues which arose as the back end was changed. I then used scene builder and CSS to improve the layout and look of the GUI.

**Zhan:** I worked in FrontEnd with George, David and Daniel. I am the main editor of the ProfilesController.java, Profiles.fxml, PickPlayerController.java and PickPlayer.fxml. These are the classes about showing and editing the player profiles. I spent a lot of time learning and trying different code to try to make these classes and scenes clean, regular and workable. I also worked on other classes to make profiles working well like storage and link to backend. As a not proficient English speaker, I join all the group meeting in zoom or discord and try to communicate with other to make sure I understand the work I need to do or help. I also communicate with group mate for bug fixing and scene style discuss.

**Daniel:** For this project, George, Zhan, and David, and I worked on the front-end section of the project. I created the leaderboard class, which pulled player information and showed it into a corresponding leaderboard for each board. I spent the most time on this class as I found it the hardest of all. I was able to create a pathway for the Leaderboard and link a leaderboard to each board, however I had some difficulty grabbing player information and showing it on the leaderboard, I was able to finish the leaderboard section of the project with help from George by pair programming the code together.I also created a start screen which is used as the initial screen for the project. I wanted an action to occur when a key is pressed, I had a lot of issues understanding how to open a new window on the same scene, but I was able to understand the code and get it to work. There was also a bug in Start screen, but I was able to fix it.I worked on a theme for the project. I made sprite art for the Straight tile, Corner tile, Goal Tile, and Ice Tile. I also worked on an extra feature which was made to show players how to play the game. Inthis section I explained the basic rules to the game, I showed and explained each tile, I explained player turns and how they work, and explained player movement

## Problems/Successes:

- We didn't encounter any unexpected problems during this assignment.

- We didn't generally encounter any unexpected successes; however, we did have expected success, i.e., we started our project early, and finished tasks that we were assigned to do, and got the project completed before the deadline.

## Differences from A1 Design Document:

We did partially stray from the A1 Design Document, in main ways:

- We changed the file format to make the file reading more effective.
- We changed the board tiles from being stored as a 2D array to being stored as an ArrayList as it made it is easier to compute the moving of tiles.