Sprint Retrospective, Iteration #0

User Story #	Task #	Task Assigned To	Estimated Effort per Task (in hours)	Actual Effort per Task (in hours)	Done (yes / no)	Notes
The game starts with an empty board with a start button	Make a new start Panel	Jurrien	0.2	1	yes	Lots of button design
	Add a start button	Jurrien	0.4	1	yes	
	Launch the game when start buttons pressed	Jurrien	0.4	3	yes	Had to refactor the entire code to add multiple scenes
If at least two adjacent balls with the same color as the ball the player shot, the balls will disappear (including the shot ball) and the player receives a point for every disappeared ball	Collision between shot ball and ball within hexagon	Timo	5	7	yes	
	Check whether the at least 2 adjacent balls have the same color as the shot ball. If true, then remove those balls, if false, then the ball will attach to where it hit	Yifei	4	6	yes	
	Remove balls that are not connected anymore	Yifei	2	5	yes	Had to restructure the some classes in model, it cause a lot merge conflicts
	Add to the scores the number of point that the player got	Henk	2	2	yes	
The whole hexagon of balls will rotate around the middle ball every time the shot ball hits the hexagon	Calculate speed at which the hexagon has to rotate after hit	Henk	3	0	no	Speed turned out not to be necessary. It can rotate using same speed
	Make the hexagon rotate	Yifei, Kabilan	3	3	yes	
	Slow down the rotation speed over time	Timo, Yifei, Kabilan	3	0	no	Not needed if there is no speed used in the game
If any ball of the hexagon touches the wall the game is lost	Check for every ball if it exceeded the coordinates of the walls. If true, end game.	Henk	1	2	yes	
	Make an end game screen with restart option	Jurrien	0	5	yes	It was not intended first in the sprint, restart option means that the objects should be reset and used again, some object doesn't change certain properties.

If the player does not score a point after 5 shots a random number of additional balls will be added to the hexagon	Implement this option in game	Timo	0	4	yes	We wanted to implement this feature in week3. However, this is a requirement to advance the game.

Main Problems Encountered：

Problem 1
Description: The interactions between the GUI and the model was very dynamic which caused quite some bugs with the game.
Reaction: Timers and threads are added in order to make this smoother.

Problem 2
Description: Every group member works on their own feature, it sometimes cause merge conflicts and unexpected bugs in the game.
Reaction: Many meetings were scheduled to fix the bugs. These meetings also helps the team members to understand other's code

Problem 3
Description: Couldn't delete balls that are not connected to the center Hexagon, because it has to loop through every ball to check if there is connection.
Reaction: added a list of adjacent cells in centerpiece class and cell class. This enables the program to find all connected balls to the centerpiece using breadth first search. Which also means that the program can easily find the balls that are not connected to the centerpiece.

Adjustments for the next Sprint Plan：

- The Planning was too optimistic, more time was spent than the expected time.
- Divide the testing task more clear in the next sprint (some of us wrote test, some didn’t)
- Everyone should adjust their codes to the CheckStyle rules.

Note:

Some codes were already written last week, which means that certain features are not recorded in this week’s sprint. This also explains the reduced effort this week. The estimate effort of next week will reach 10-15 hours each week.