Bubble Shooter
Group 15

User story	Task	Task assigned to	Estimated effort (scale 1-5)	Actual effort (scale 1-5)	Priority (scale 1-5)	Done	Notes
As a user, if I play game , I'm able to lose/win and I return to the main menu.	Implement dead below line	Nando	3	3	4	Yes	
	Complete winning/losing (multiplayer)	Nando, Skip	2	2	3	Yes	
	Complete winning/losing screen	Nando	2	2	3	Yes	
	Clean up BSMode and EndingCondition code.	Skip	2	1	2	No	Task dropped because the priority of other tasks.
	Test EndingConditions	Skip	3	-	2	No	
As a user I want to join, any existing game that I choose to select, which is hosted by another player over an internet connection, by clicking a game menu button.	Implement better network efficiency	Gerlof/Adam	3	3	3	Yes	
	Observer / observable pattern for networking	Gerlof/Adam	3	3	4	Yes	
	Improve JUnit coverage for multiplayer mode	Gerlof/Adam	3	3	3	Yes	
As a user, if I play a game, I want actions logged to a file.	Log winning / losing conditions to the file (score + time)	Nando, Owen	2	2	5	Yes	
	Log adding bubbles to the board	Nando, Owen	2	2	5	Yes	
	Log cannon movement start / end	Nando, Owen	2	2	5	Yes	
As a user, if I play a game, I want to feel a certain "atmosphere".	Add BGM during game play	Owen	1	1	1	Yes	
	Add more background(s)	Skip, Nando	1	-	1	No	Low priority task, should have only been done if there was some spare time left.
	Add attributes(bubbles, cannon, labels, etc.)	Owen, Nando	2	-	1	No	Low priority task, should have only been done if there was some spare time left.
As an instructor, I want to see at least three design patterns in the game.	Further elaborate Observer pattern in StatsObserver	Skip	1	1	3	Yes	
	Implement Observer pattern in networking	Gerlof/Adam	3	3	3	Yes	
	Apply Decorator Pattern to EndingCondition	Skip	2	-	2	No	
	Further elaborate and improve strategy pattern for EndingCondition	Skip	3	2	3	Yes	
	Test the classes using design patterns	All	3	-	2	No	
As a user, if I play a game, when I clear all the bubbles, I win the game and I will be returned to the main menu	Improve JUnit coverage for singleplayer mode	Nando	2	-	2	No	

Priority

In the table above the priorities of the various tasks are listed from a scale to 1 to 5, with 1 being a low priority and 5 the highest. The tasks that have a priority below 3 are the tasks that were not essential for this sprint. For example improving graphics can always be postponed to the next sprint. Some things that had a high priority were: dead below line (vital for gameplay), logging (must have), and adding design patterns.

Main problems encountered

Problem 1:	Communciation problems during the final day.
Description	Telegram was down, which is our main communication medium.
Reaction	Migrate to Skype.
Problem 2:	Logger implementation.
Description	Because of the use of libgdx, certain tests would give a false-positive, therefore libgdx methods could not have been used in implementing the logger.
Reaction	In order to be able to still make use of the libgdx logging, the observer pattern was applied.
Adjustments for next sprint plan	Next time Telegram goes down, the whole group should use Skype as a temporary communication medium.
	Plan ahead, deliver at least a day before the deadline.