

## Reflection on Iteration #5

Context Project: Bubble Trouble

Group Number: 4

User Story	Task #	Task	Task Leader	Assignee	Relative Estimated Effort	Actual Effort	Done	Notes
1. Essay	1	Reflection on Project development and team progress	Wouter	Damian	4.00	4.00	Yes	
	2	Elaborate Problems encountered and solutions	Wouter	Justin	3.00	3.00	Yes	
	3	Learning points and future adjustments	Wouter	Bram	3.00	3.00	Yes	
2. Special Bubble Implementation	1	Remove factories	Justin	Damian	0.50	0.50	Yes	
	2	Create Bacchelli Bubble	Justin	Justin	3.00	3.00	Yes	
	3	Create Boss fight level	Justin	Damian	1.00	1.00	Yes	
3. Singleton Implementation	1	Make Singleton structure for Settings	Bram	Bram	1.50	1.50	Yes	
	2	Create SingletonFactory (wrapper) to allow for mocking	Bram	Bram	2.00	2.00	Yes	Wrapper was not necessary: Private constructor could be mocked normally.
4. Decorator Implementation	1	Create Decorator structure for Player	Wouter	Wouter	4.00	5.00	Yes	Required creating a GameObject interface.
	2	Refactor ShopItems into decorations	Wouter	Wouter	2.00	1.00	Yes	
	3	Change collisionHandler to correctly apply decorations	Wouter	Wouter	0.50	1.00	Yes	
5. Project Ordering	1	Renaming and ordering packages	Bram	Damian	1.00	1.00	Yes	
6. Code Quality Improvement	1	Refactor Projectile list out of Level and into Weapon only	Wouter	Bram	1.00	1.00	No	Wontfix: The resulting code was arguably messier than the original.
	2	Make Player Observer instead of EventHandler	Wouter	Wouter	1.00	1.00	Yes	Created custom listener/subject interfaces
	3	Refactor Level to use no instanceofs and clean lists	Justin	Justin	1.00	0.50	No	Was not done due to miscommunication.
Total					28.50	28.50		

### Main Problems Encountered

Problem 1	Description	Task 6.3 (user story 6, task 3), was not finished because of a miscommunication in responsibilities between tasks. Task 6.1 is closely related to this task and when it was decided that this task would not be done, the team members responsible for 6.3 were confused and thought that 6.3 was also meant as wontfix.
	Reaction	We will more formally log and document decisions made during the sprint. These will be documented on the (online) scrum board.

### Adjustments for the next iteration

Keep improving on previous adjustments	This sprint there were few problems. However, perfection does not exist and we can always improve. We therefore decided that our previous goals can be extended into this sprint.
	This means that we will test early and planning early ahead, finishing our deadline at the latest on Friday 6pm.
	We already are well on track with these improvements, so we will keep going this way.
Document all changes.	To solve and prevent recurrence of the problem mentioned above, we will clearly and unambiguously document all changes in the planning and any decisions made during the sprint. This documentation will be made available to all collaborators in a central location (Google Drive).