

Sprint retrospective, iteration 3

User Story #	Task #	Task assigned to	Estimated effort per task (in hour)	Actual effort per task (in hour)	Done?	Notes
	16, 30	Justin Jo	2	3	yes	Had issues when applying coupons first and adding pizzas afterwards, so some adjustments were made.
	64	Justin Jo	2	3	yes	There were issues when connecting to other databases, but it worked after merging other branches.
	63	Justin Jo	1	3	yes	Fixed the checkstyle warnings in the basket microservice.
		Petar Koev	2	4	no	I had issues with passing the token from the basket microservice to user microservice when connecting the two
	17, 59	Dorian Erhan	3	2	yes	Implemented the 2nd design pattern - pizza builder. Using the builder implemented endpoints for adding and removing custom pizzas created by the user.
	63	Dorian Erhan	1	3	yes	Clean up the checkstyle warnings as well as the PMD warnings in the whole project.
	55	Dorian Erhan	2	5	yes	Added a plethora of unit and integration tests, mainly in the basket microservice.

	45, 58	Dorian Erhan	2	2	yes	Finished the commons module by including some authentication classes, relating to jwt token logic, that were used everywhere. Also, I further populated the databases and finished up the gateway routing to orders.
	52	Thys Kok	1	2	yes	Reorganized user folder and added config for user repository
	10,13, 19	Thys Kok	2	2	yes	Finished adding tests for orderOverview
	14,23, 29	Thys Kok	4	4	yes/no	Only tests need to be implemented
	56	Kayra Bahadir	1	1	Yes	Created checkout functionality's Basket part by getBasket endpoint to be called by Order MS
		Petar Koev	4	4	Yes	Introduced integration tests to the Basket MS in regards to the functionality of filtering out the pizza menu based on customer allergens
	40	Petar Koev	0.5	0.5	yes	Adding tests and validating credentials if they are too long
	57	Izzy van der Giessen	2	3	yes	Figuring out how to change the tests was difficult.

	56	Izzy van der Giessen	2	2	yes	
	64, 33	Kayra Bahadir	5	4	Yes	Implemented the functionality for the customer to specify the store they wish to order from. Includes multiple inter-microservice communication and validation.
	64	Kayra Bahadir	1	1	Yes	Enable the customer to see all stores

Project: AP

Group: 5a

Main Problems Encountered

- Problem 1
 - Description: We had every microservice working well in isolation, but we ran into problems when connecting these microservices to communicate between each other.
 - Reaction: By communicating, we more easily understood each other's work on different microservices, and in the end, we managed to couple everything nicely, e.g: having the basket microservice query the user microservice for the user's allergies.
- Problem 2
 - Description: We were unsure about how to implement authentication matters in the endpoints, e.g: users having to specify their personal allergies, and having to see the order they placed.

- Reaction: We rejected the idea of having the customer id in the endpoint path because we considered this to be a potential security vulnerability. We decide to include the JWT token in the “Bearer” header in every necessary HTTP request. This way the authentication also became consistent throughout the entire application.