1. PRODUCT BACKLOG ITEMS S1 (PBI)

In this part there are described the functionalities, requirements, improvements and corrections found within the Product Backlog. Concretely it is described the "what" more than the "how" of a customer-centric feature.

We remove some task because we think that it were duplicated or we add more task because we think that we need them.

TASKS	DESCRIPTION	RESPONSABLES	DATE	QUESTIONS (ACCEPTANCE CRITERIA)
1.-Concurrency situation	Developing a multithread application in Java	Aitor	12/03/2019	Is the concurrency problem solve?
1.1.-Find Information	Find information about developing a multithread application and talk about with the expert	Aitor	12/03/2019	• We talk with the expert.? • Is all the information to develop the application clear?
1.2.-See in which part we can apply	See in which part we can apply the concurrency part if it resolves the problem we want to solve.	Aitor & Nahia	12/03/2019	Does the problem solve?
1.3.-Develop the application	Develop the application to solve the concurrency problem and let it work	Aitor & Nahia	12/03/2019	Is the application developed and working?
2.- Create remote server and set up continuous integration bundle	Create the remote server and set up with the continuous integration and bundle	Xabier	12/03/2019	• Is the remote server set up? • Does the all things to the continuous integration working?

2.1.- Install Jenkins and configuration	Install Jenkins in the remote server and do the configuration.	Xabier & Nahia	12/03/2019	• Is Jenkins installed? Is Jenkins working with the configuration?
2.2.- Install Katalon and configuration	Install Katalon in the remote server and do the configuration	Loredi	12/03/2019	• Is Katalon installed? Is Katalon working with the configuration?
2.3.- Create pipeline (Jenkins)	Create the Jenkins pipeline	Xabier	12/03/2019	Does the pipeline implement?
2.4.-Implement Docker	Learn and use dockers	Xabier	12/03/2019	Does the dockers work?
2.5.-Automate sonarqube scan and application deploy with Jenkins	Automate the sonarqube scan with Jenkins	Xabier	12/03/2019	Does Jenkins launch the sonarqube?
3.- Define the test cases (Black,White)	Define the test cases	Xabier	12/03/2019	Does the test done?
4.-Set up automatic build project	Set up the Maiven automatic build project	Aitor	12/03/2019	Is the project set up?
4.1.-Configure servlet plugin	Configure JSTL and API	Aitor	12/03/2019	Are JSTL and API configured and working?
4.2.-Configure JavaDoc and UML	Configure JavaDoc and UML plugin	Aitor	12/03/2019	Are JavaDoc and UML plugins configured and working?

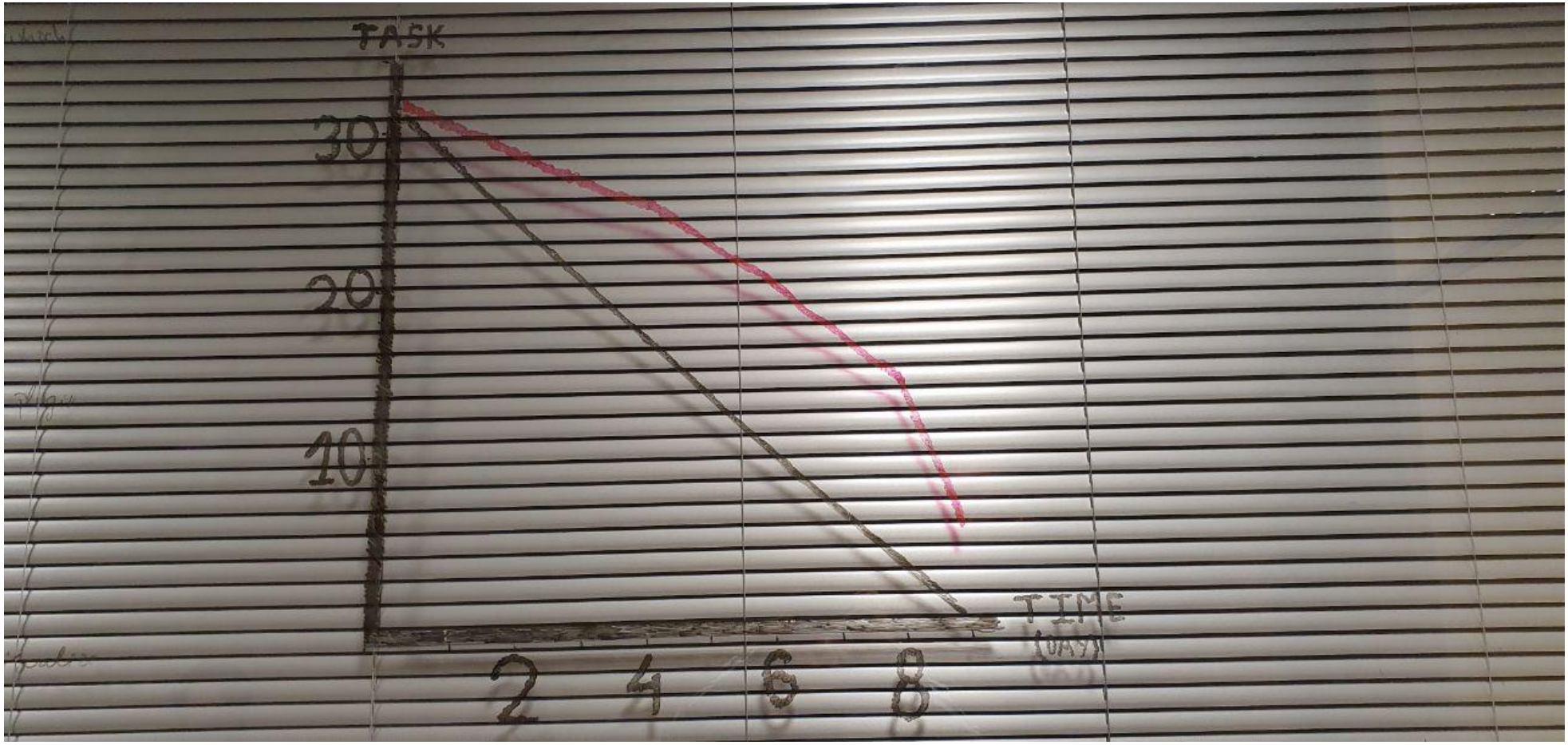
7.-Create the database	Create the database	Ander	12/03/2019	Is the database created?
7.1.-Design entity relationship diagram	Design the entity relationship diagram	Ander	12/03/2019	Is the entity of the relationship diagram design it correctly?
7.1.1.-Entity-Relationship Diagram	Create the entity-relationship diagram	Ander	12/03/2019	Is the entity-relationship diagram created correctly?
7.1.2.-Relational Model	Create the relational model	Ander	12/03/2019	Is the relational model created correctly?
7.1.3.-Create Database	With the design and the diagram and the relational model create the database	Ander	12/03/2019	Is the database created?
7.2.- Design different queries	With the design and the diagram and the relational model create the database	Ander	12/03/2019	Are design the different queries?
8.- Design the interface (Flow diagram, interface design)	Do the design of the interface (Flow Diagram, Interface Design)	Ane	12/03/2019	Are design the interface flow diagram and the design of the interface?
8.1.-Design for analytic, information visualization	Design for analytics information visualization which graph we are going to use	Ane	12/03/2019	Are the graph design?
8.1.1.-Flow diagram	Develop the flow diagram	Aitor	12/03/2019	Is develop the flow diagram?
8.1.2.-Interface design	Do the interface design	Ane & Aitor	12/03/2019	Are the interface design done?
8.1.3.-Interface interaction	Do the interface interaction	Ane	12/03/2019	Are the interface interaction done?

8.1.4.-Define information visualization	Define the information visualization	Ane	12/03/2019	Are the information visualization done?
8.1.5.-Define information visualization	Define graphics	Ane	12/03/2019	Are the information visualization graphics defined?
8.2.- Design user test plan	Design user test plan, the interface evaluation and the user experience (UX)	Ane	12/03/2019	• Is the user plan design? • Is the user experience correctly?
8.3.- Implement new improvements according to the UX results	Considering the user experience results implements new improvements	Ane	12/03/2019	Are implementing the user experience results?
9.- Design software functionalities	Do the design of the software functionalities	Loredi	12/03/2019	Are design the software functionalities?
9.1.-Design True/False functionalities	Do the design of the True/False functionalities	Loredi	12/03/2019	Are design the True/False functionalities?
9.2.-Design question answer functionalities	Do the design of the question and answer functionalities	Loredi	12/03/2019	Are design the question and answer functionalities?
9.3.-Design lobby functionalities	Do the design of the lobby functionalities	Loredi	12/03/2019	Are design the lobby functionalities?
9.4.-Design login and register functionalities	Do the design of the login and register functionalities	Loredi	12/03/2019	Are design the login and register functionalities?

9.5.-Spring framework	Do the spring frameworks (MVC, boot, ORM, tiles)	Loredi	12/03/2019	Are all frameworks done?
9.5.1-MVC	Do the MVC framework	Loredi	12/03/2019	Is MVC framework done?
9.5.2-Boot	Do the boot framework	Loredi	12/03/2019	Is boot framework done?
9.5.3-ORM	Do the ORM framework	Loredi	12/03/2019	Is ORM framework done?
9.5.4-Tiles	Do the tiles framework	Loredi	12/03/2019	Is tiles framework done?
9.5.1-MVC	Do the MVC framework	Loredi	12/03/2019	Is MVC framework done?
11.- Documentation	Do the documentation	All	12/03/2019	Is the documentation correctly done?
11.1.- Documentation milestone 1	Do the documentation for the milestone 1	All	12/03/2019	Is all the documentation for the milestone 1 correctly done?
12.- Presentation	Do the presentation	All	12/03/2019	Is the presentation correctly done?
12.1.- Presentation for milestone 1	Do the presentation for the milestone 1	All	12/03/2019	Is the presentation for the milestone 1 correctly done?

1.1. SPRINT 1 BURNDOWN CHART

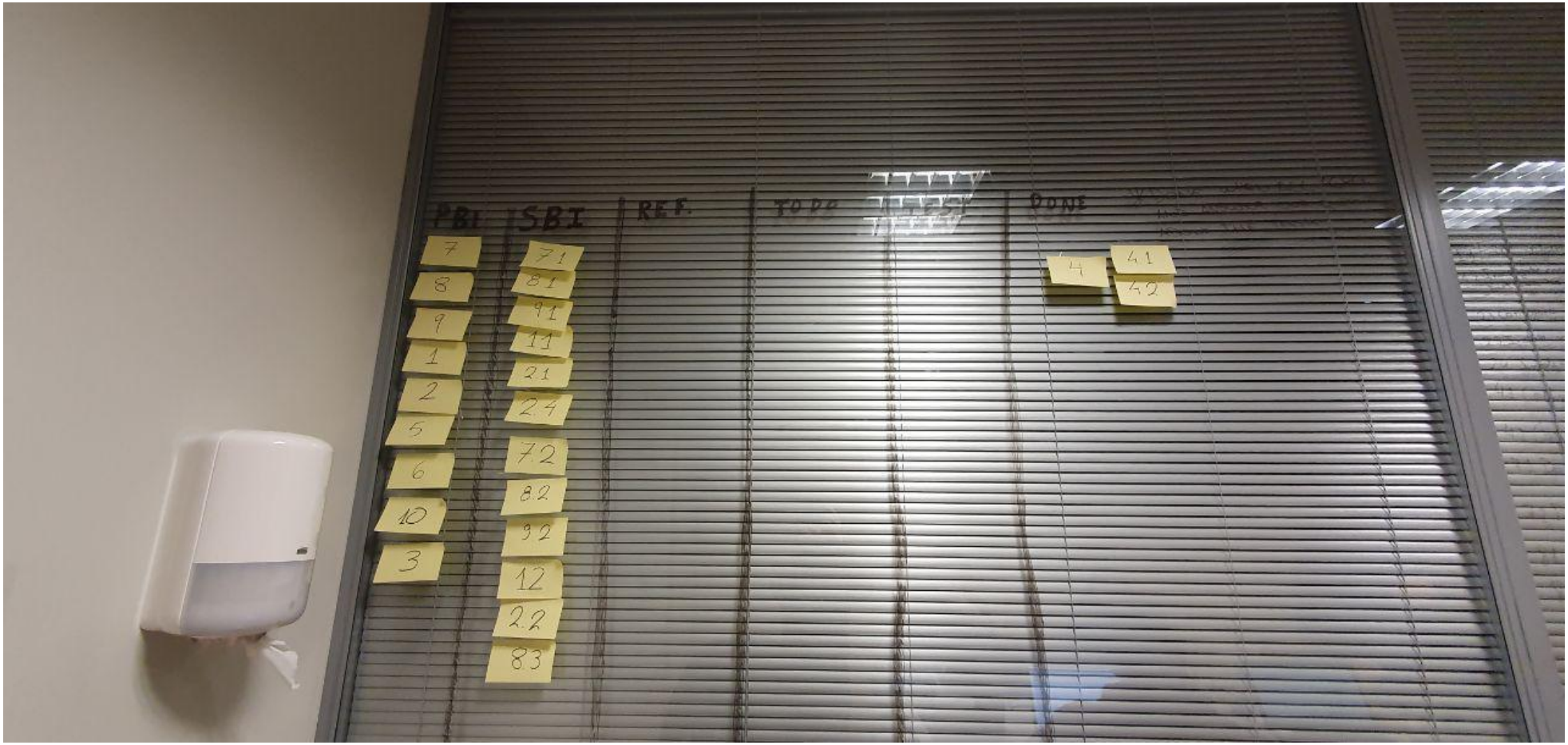
In this part there is the burndown chart that measures the status of the development of the project. It shows a graphical representation of work left to do versus time. The outstanding work (or backlog) is often on the vertical axis, with time along the horizontal.



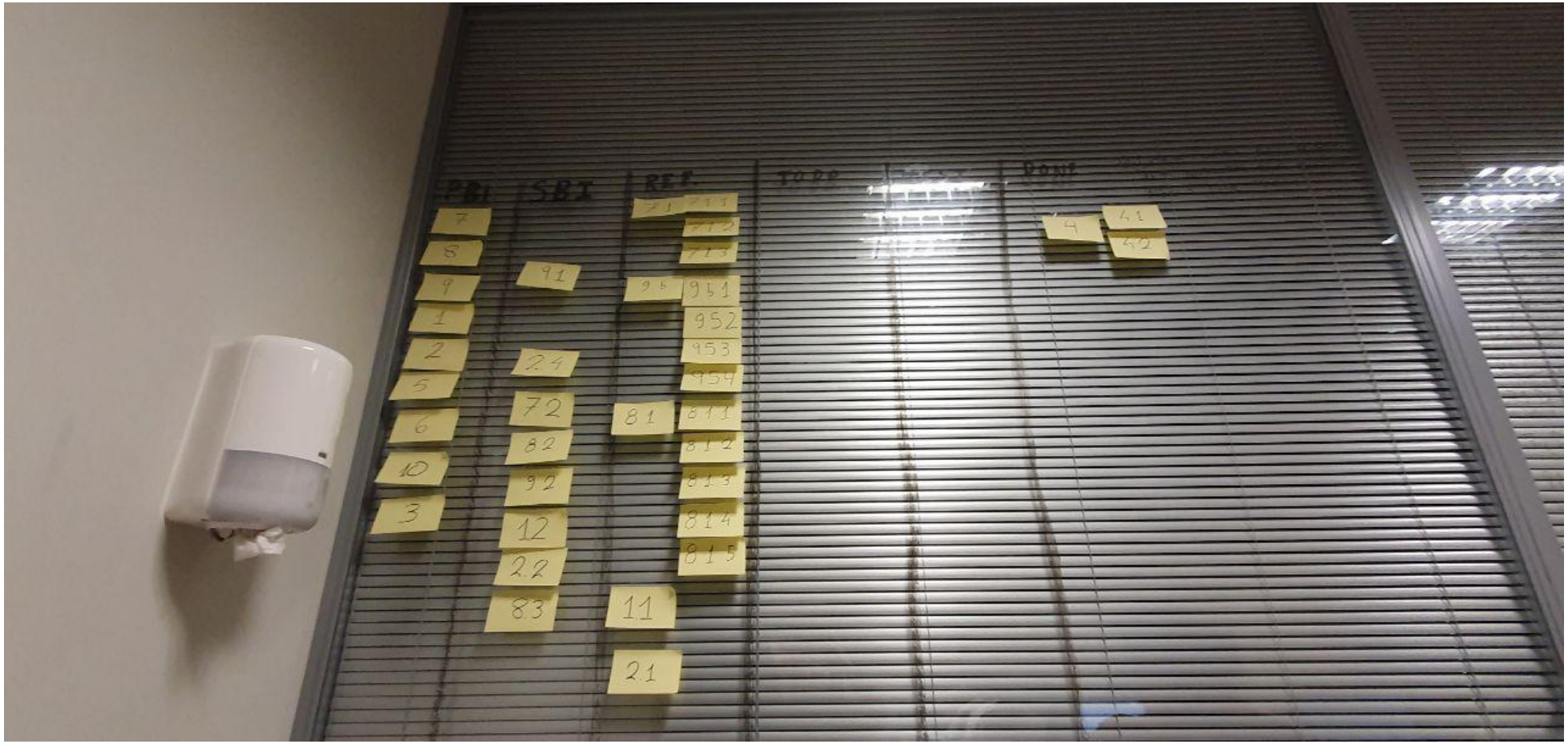
Burndown chart

1.2. BOARD IMAGES

In this part, there are different images, about the pre-product backlog, as we can see below.

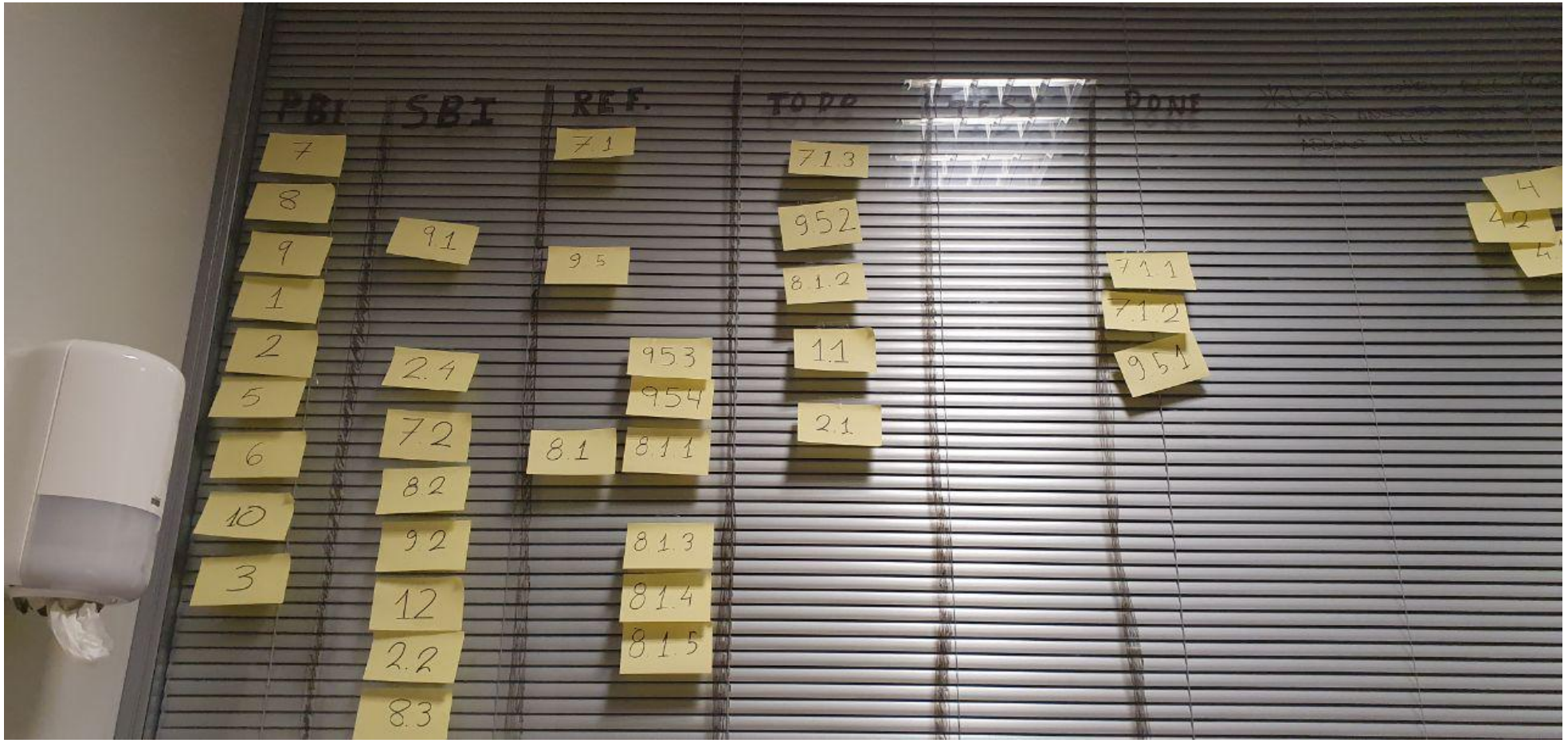


Scrum Board Day 1



Scrum Board Day 2

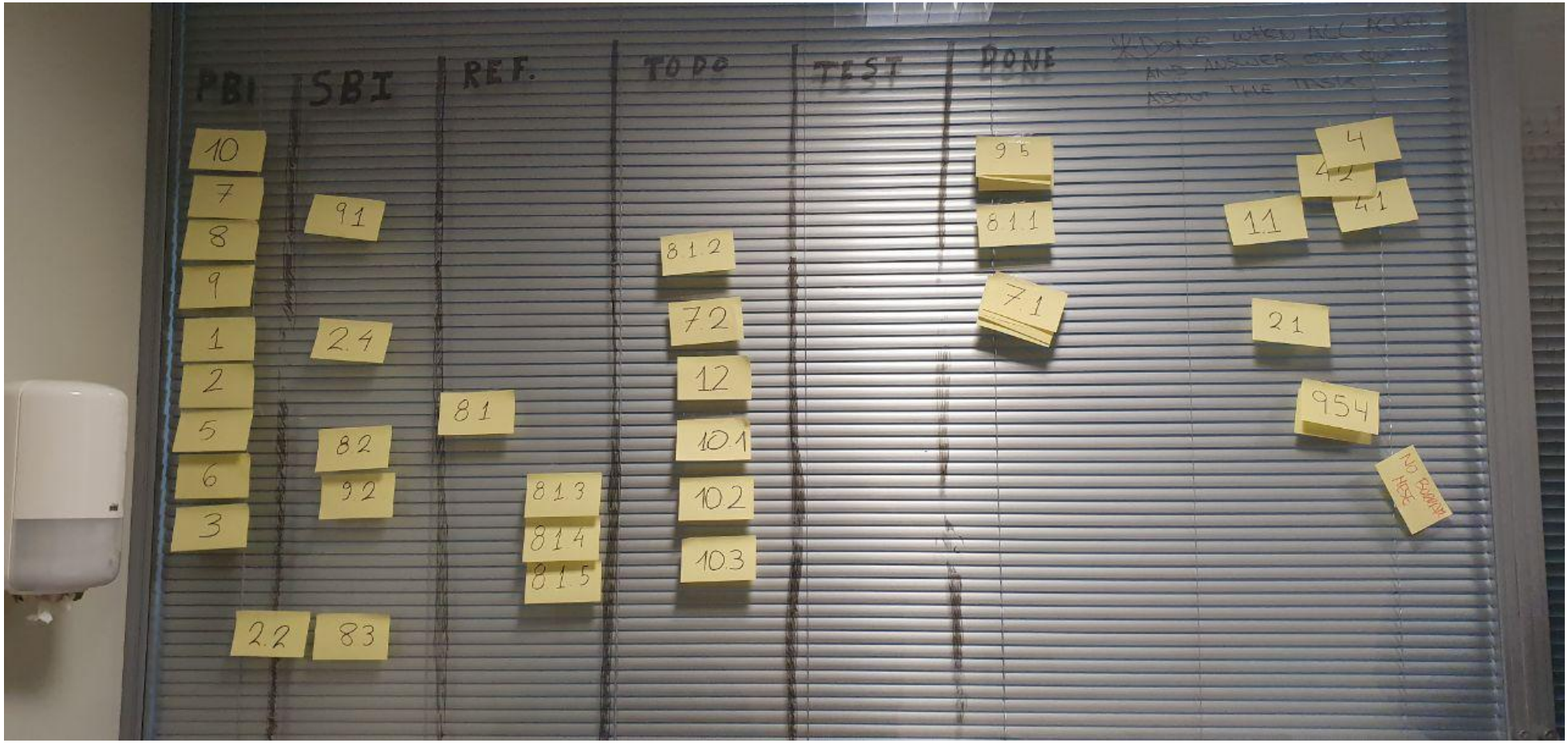
Scrum Board Day 3



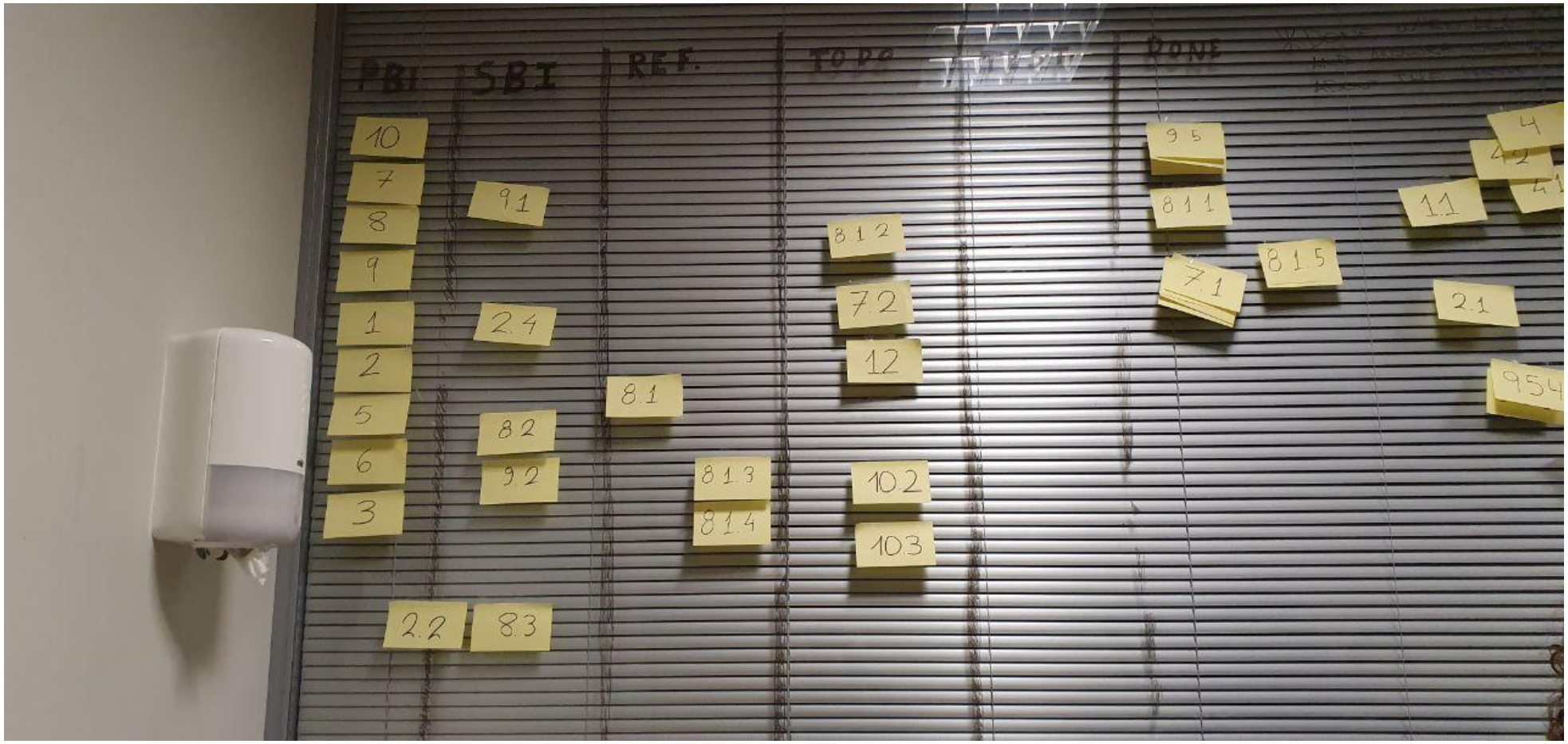
Scrum Board Day 4

Scrum Board Day 5

Scrum Board Day 6

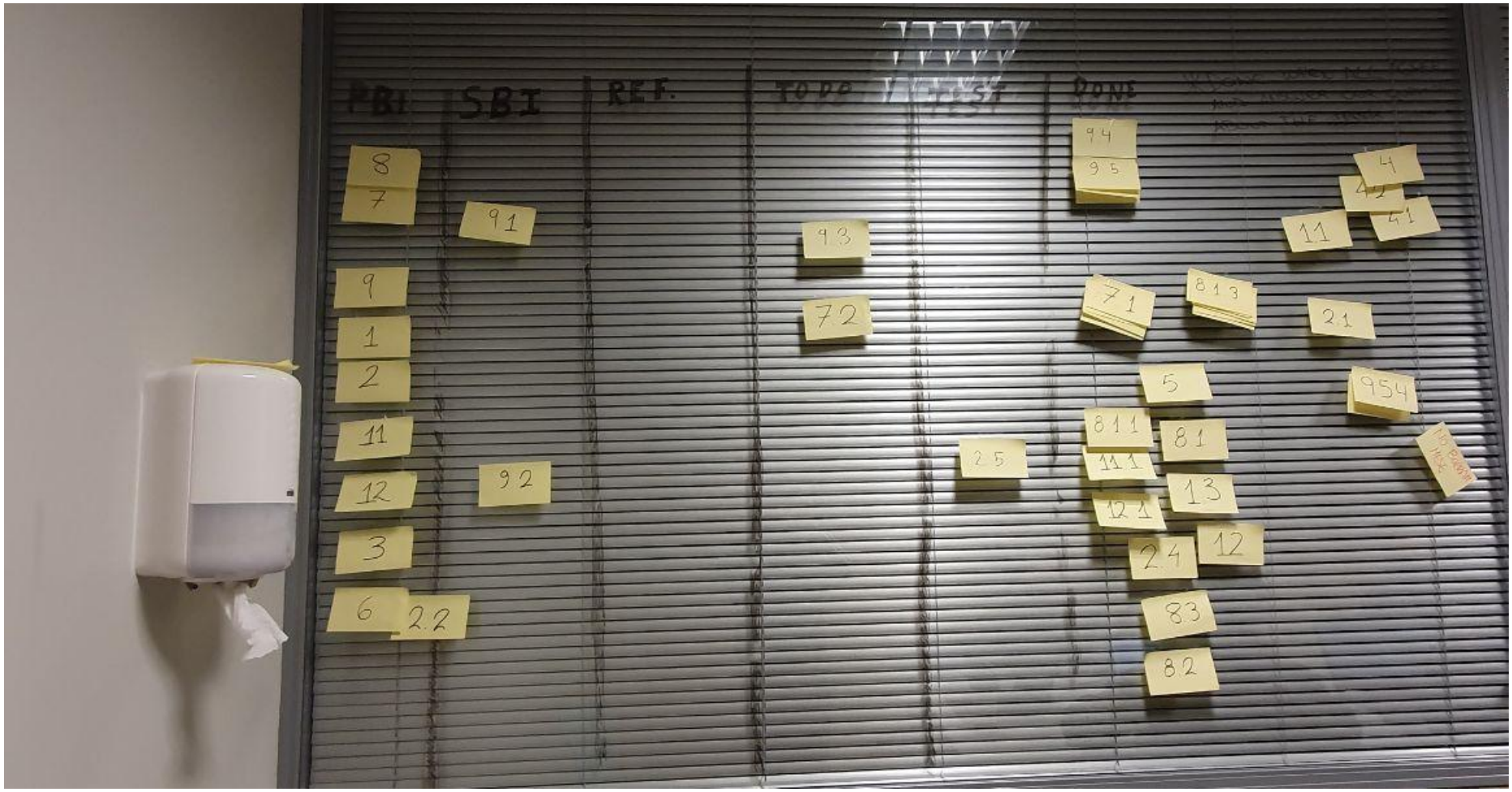


Scrum Board Day 7



Scrum Board Day 8

Scrum Board Day 9



Scrum Board Day 10