# Sprint 4 analysis

## Project analysis

In this third sprint things have been updated and improved from the third sprint.

First, all the tests corresponding to the user stories of sprint 3 were carried out. Improvements were also made with respect to that sprint.

After that, each pair got started on their respective user stories and tests. On this occasion, there was an important change. We had problems with the many to many relationships, so we finally chose to implement them as one to many and many to one relationship. This has meant extra work, as we had to create new repositories, services and controllers for them. We had three such relationships, but we only had to change two of them, as the third one did not give us any problems. We have also changed the security we had developed to the security provided by Spring.

In this fourth and final sprint we worked very hard to achieve the level of quality we wanted. Finally, we have managed to implement all the desired user stories, as well as their corresponding tests. Overall, we are satisfied with our work. Also, regarding the team, we are very happy, as all members have worked very hard and helped each other.

In terms of the grade range we opted for, it would be the last column (<=10). Finally, the minimum requirements to achieve this grade have been met (both the general requirements and some A+ proposals). Below there is a table showing the minimum requirements of the grade we aspire to in comparison to what we have done:

|  |  |  |
| --- | --- | --- |
| **Note band** | **≤10 puntos** | **Our metrics** |
| Entities (Non-actors) | ≥ 8 | 10 |
| Relations | ≥ 7 | 11 |
| Relations N:N | ≥ 2 | 6 |
| Simple Restrictions | ≥ 16 | 45 |
| Business Rules | ≥6 | 7 |
| Total User Stories | ≥ 20 | 21 |
| User stories involving 2 or more entities | ≥ 10 | 13 |
| User stories involving 3 or more entities | ≥ 4 | 6 |
| Actors | ≥3 | 4 |
| Additional requirements | - | 1 |

As can be seen in the table, we have achieved the minimum objectives to try to get the maximum grade.

In this sprint, Carmen Mª and George Laurentiu worked on stories UH-11 and UH-15. George Laurentiu has focused on UH-11 and Carmen Mª has focused on UH-15. On the other hand, Guillermo and Francisco have developed together the user stories UH-20 and UH-21.

In addition, in this sprint we have focused on trying to improve the test coverage as much as possible.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Type*** | ***Element*** | ***Assignment*** | ***Sprint*** | ***Worktime*** |
| *Backend - Test* | *H4, H6, H8, H14* | *Carmen María Muñoz*  *Francisco Rodríguez* | *3* | *6h* |
| *Backend - Test* | *H10, H12, H16* | *Guillermo Diz*  *George Laurentiu Bogdan* | *3* | *5h 30m* |
| *Backend - Test* | *H17* | *Carmen María Muñoz*  *Francisco Rodríguez* | *3* | *50m* |
| *Frontend - View* | *List favourite short films* | *Carmen María Muñoz*  *George Laurentiu Bogdan* | *4* | *20 m* |
| *Backend – User story* | *H15* | *Carmen María Muñoz*  *George Laurentiu Bogdan* | *4* | *13h* |
| *Frontend - View* | *Search short film* | *Carmen María Muñoz*  *George Laurentiu Bogdan* | *4* | *2h* |
| *Backend – User story* | *H11* | *Carmen María Muñoz*  *George Laurentiu Bogdan* | *4* | *5h* |
| *Frontend - View* | *Feed page* | *Guillermo Diz*  *Francisco Rodríguez* | *4* | *1h* |
| *Backend – User story* | *H20* | *Guillermo Diz*  *Francisco Rodríguez* | *4* | *3h* |
| *Backend - Test* | *H15* | *Guillermo Diz*  *Francisco Rodríguez* | *4* | *2h* |
| *Backend - Test* | *H11* | *Guillermo Diz*  *Francisco Rodríguez* | *4* | *2h* |
| *Backend - Test* | *H20* | *Carmen María Muñoz*  *George Laurentiu Bogdan* | *4* | *1h 30m* |
| *Document* | *Rationale II* | *Guillermo Diz*  *Carmen María Muñoz*  *Francisco Rodríguez*  *George Laurentiu Bogdan* | *4* | *15h* |
| *Document* | *Sprint analysis* | *Guillermo Diz*  *Carmen María Muñoz*  *Francisco Rodríguez*  *George Laurentiu Bogdan* | *4* | *1h* |
| *Improvement* | *Improve previous sprint* | *Guillermo Diz*  *Carmen María Muñoz*  *Francisco Rodríguez*  *George Laurentiu Bogdan* | *4* | *8h* |