# 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* | *2h* |
| *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* | *16h* |
| *Document* | *Sprint analysis* | *Guillermo Diz*  *Carmen María Muñoz*  *Francisco Rodríguez*  *George Laurentiu Bogdan* | *4* | *1h* |
| *Database initial load* | *-* | *Francisco Rodríguez Pérez* | *4* | *2h* |
| *Improvement* | *Improve previous sprint* | *Guillermo Diz*  *Carmen María Muñoz*  *Francisco Rodríguez*  *George Laurentiu Bogdan* | *4* | *8h* |

In general, we have worked well although we have always been a bit behind. In the first sprint we laid the foundations of the project and took care to detail the user stories well. In the second sprint was where we were very late, as we made a single user story apart from the entities. This was due to the fact that we spent time improving the documents from the previous sprint to have a solid base and that some problems arose (we had problems implementing the entity relationships and that delayed us). In the third deliverable we managed to finish everything from the previous sprint and all the user stories from this sprint. The only things we didn't have time for were the user story tests for this sprint 3 and the design document. Finally, in this last sprint we managed to finish everything we had planned: user stories, tests and design document. We have also taken special care to make a good coverage in the tests. We are very satisfied with the result. The user experience is also very important for us, so we have also focused on an attractive and simple frontend. For all these reasons we are very happy with our work.

Finally, the total number of hours worked by each student is shown here:

|  |  |
| --- | --- |
| George Laurentiu Bogdan | 107h |
| Guillermo Diz Gil | 119h 30 min |
| Carmen Mª Muñoz Pérez | 113h 20 min |
| Francisco Rodríguez Pérez | 100 h |