

Issue	Assignee(s)	Estimated time	Actual time	Completion status	Notes
#17: Captions	Calin Georgescu, Paul Stan	25h	20h - Calin 10h - Paul	Done	<ul style="list-style-type: none"> - This was by far the hardest feature to implement in the project - This works mostly by assuming that all figures follow a specific structure
#19: Testing	Radu Vasile, Calin Georgescu	10h	3h - Radu 17h - Calin	Done	<ul style="list-style-type: none"> - Overall, testing took way longer than expected, due to having many methods that worked with files. - Some of the functions were too overloaded, so a refactoring was also needed to properly test the functionality.
#31 + #50: Security	Paul Stan, Calin Georgescu	15h	4h - Calin 28h - Paul	Done	<ul style="list-style-type: none"> - This took way longer than expected because of problems with the JPA repositories and - There were also problems with dependencies in Gradle - Extended the chain of responsibility to also add a prerequisite check for requests
#34: Dashboard Reorganisation and Functionality	Rebecca Andrei	20h	25h	Done	<ul style="list-style-type: none"> - Reorganized the entire dashboard front end - Added an add new submission form - Added the functionality for the dashboard - sorting the documents table by group name, student name, recently edited, or completion status - Modified the way we store the date in the database
#35: Search	Stefan Bud	1h	1h	Done	Finished what I started during the last sprint
#36: Lock documents	Stefan Bud	10h	8h	Done	Implemented locks for the files. Finished faster than expected due to our decision of making a simplified version of the locks, as having time-based expiring locks would have been too much to handle for our

					database
#38: Support page	Rebecca Andrei	20h	20h	Done	Created a support page with 3 options: <ul style="list-style-type: none"> - Contact form - Faq - Feedback form
#41: Admin functionality	Radu Vasile	8h	5h	Done	The process went faster than expected due to having written the methods in previous sprints. Only integration and testing were left now.
#42: Selenium testing	Calin Georgescu	5h	10h	Done	Took a lot more than expected because I could not find a way to also run the tests on the gitlab pipeline, as it has no graphic drivers and is unable to simulate a web browser to complete the tests. In the end, they are excluded from the run, but can be executed locally
#43: Services testing	Paul Stan	3h	8h	Done	Pretty straightforward, had a few problems because of autowiring not working for a couple of classes
#44: Error handling + bugfixing	Radu Vasile	10h	8h - through multiple MR's	Done	Some merge requests broke previous features, and people responsible for them did not consider those cases. Moreover, reworked some error handling to pass errors from the backend to the frontend.
#45: Account settings	Stefan Bud	5h	5h	Done	During the development of this, I encountered a problem with our database which we had to fix. That is issue #53.
#46: Prev/Next	Radu Vasile	4h	6h	Done	Took longer than expected due to the way we keep track of files in the frontend.
#47: Support page functionality	-	4h	0h	Not done	We focused on having essential functionality completed, and very little time was left for this issue. Therefore, we decided to leave it unfinished.
#48: ReadMe + API doc	Radu Vasile	5h api, 3h readme	10.5h api, 2h readme	Done	Initially attempted to generate the API file with springdoc, however, I could not access the page due to security. Therefore, I had to write the API specification file manually, which took longer than expected.

#49: Rework alerts	Rebecca Andrei	15h	12h	Done	<p>The process was faster because I used SweetAlerts2. Created 3 types of alerts with the purpose of making the user interface more interactive:</p> <ul style="list-style-type: none"> - A save alert for when the users upload / download documents - An error alert for when users attempt to do forbidden tasks - An are you sure? Popup for when users want to make irrevocable changes, i.e.: delete their account, delete all files, etc
#51: UI bugs	Rebecca Andrei	8h	8h	Done	Went through the whole app and fixed every UI bug I could find, e.g: add screenshots for info and admin settings pages, center the support page content for all display sizes, fix student page layout, etc
#52: Submitting files	Paul Stan	6h	8h	Done	This was previously started in the sprint before, but not finished. Didn't see any issues, besides users being able to access editing because PDFs were not in read only format.
#53: Sorting	Radu Vasile, Rebecca Andrei	4h	4h - Both	Done	Changed the sorting logic from the backend, to the frontend, to make it way faster. Also integrated it with searching: last order is kept while sorting
#54: DB Fixes	Radu Vasile, Stefan Bud	15h	20h - Worked together	Done	Previously, our database only had one professor assigned to each submission, yet we needed submissions to have multiple professors. We changed the architecture to a many-to-many relationship between Users and Submissions. Took so long because we had to change most controller and backend logic too.
#55: Changing js to new security	Paul Stan	6h	12h	Done	Because of the changes in security, we also needed to

- What worked well:
 - We were able to achieve a lot of functionality this week, and greatly increase our code coverage.
 - We were able to finish all features on time, and integrate everything for the final presentation.
 - Last sprint, we received feedback that our task distribution was not equal. However, in this sprint, we have incorporated that feedback, and assigned more tasks to people with less hours, such that we can all be roughly equal.
- What difficulties we encountered:
 - Testing was really hard to do, due to many methods that take files as parameters, and are linked to other classes such as EmailService. Due to the way we designed those classes, it is also pretty hard to test them.
 - Captions was an issue that we thought was nearly impossible to solve. However, we decided to do an extra effort and look into it once more, and were able to find a solution.
 - The database was not able to support multi-coordinator associations for submissions, which we realised a little too late. However, we were able to identify this mistake on time, and solve it.