| Project Name                  |                                                                          |
|-------------------------------|--------------------------------------------------------------------------|
|                               |                                                                          |
| Production system (if any)    |                                                                          |
| Test system (if any)          |                                                                          |
|                               |                                                                          |
| GitHub repository             | https://github.com/amosproj/amos-ss2021-synthetic-file-system            |
| GitHub kanban board (project) | https://github.com/amosproj/amos-ss2021-synthetic-file-system/projects/1 |
|                               |                                                                          |
| Team T-shirt (white)          | https://www.shirtinator.de/loadBasket/x7rBfP1cIL-                        |
| Team T-shirt (black)          |                                                                          |
|                               |                                                                          |
| Additional materials          |                                                                          |
|                               |                                                                          |
|                               |                                                                          |
|                               |                                                                          |
|                               |                                                                          |
|                               |                                                                          |
|                               |                                                                          |
|                               |                                                                          |

| Last Name  | First Name | GitHub User Name   | Email Address              |
|------------|------------|--------------------|----------------------------|
| Mallick    | Tuhin      | tuhinmallick       | tuhin.mallick@fau.de       |
| Abraham    | Finley     | finleymercyabraham | finley.abraham@fau.de      |
| Weghorn    | Marlon     | marlonweghorn      | marlon.weghorn@fau.de      |
| Bafna      | Vaidehi    | vaidehi-for-coding | vaidehi.bafna@fau.de       |
| Schoepf    | Dominik    | DOMEscho           | dominik.schoepf@fau.de     |
| Schulze    | Matti      | ma-schulze         | matti.schulze@fau.de       |
| Srikhaolan | Charinee   | CharineeSrikhaolan | Charinee.srikhaolan@fau.de |
| Arbo       | Sandra     | sandraaocode       | sandra.arbo@fau.de         |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |
|            |            |                    |                            |

| Goals                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | Implement a successful project by adhering to the project plan and roadmap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                         | Conduct team meetings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                         | Learn and execute the tasks and responsibilities of Agile Methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                         | Get an insight into the project roles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                         | Gather full business requirements of the training app from industry owner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Meeting norms           | g upp and an accordance of the committee |
| <b>-</b>                | Mandatory meetings from Wednesday 12.30, everybody should participate in meetings regularly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                         | One additional weekly meeting like Sunday, everybody should participate in general (at least two people)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                         | Inform other team members if someone will be late and take accountability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Working norms           | miletin edital team membere in comeene mile se late and take accountaging                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                         | If one cannot fulfill the task due to the time constraints or for any other reason, then informing the team well ahead would be expected                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                         | Difficult tasks can be solved as a group, but split the tasks as far as possible to work independently                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                         | Raise project related queries to the product owner and seek regular confirmations and approvals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         | Finish all the assigned tasks meeting the project deadlines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                         | Pull principle: Everyone can take the task that they like to do                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Coordination norms      | i dii principie . Everyone can take the task that they like to do                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Coordination norms      | Team Coordination over WhatsApp and MS Teams                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                         | Project Owner acts as the Leader of the team meetings and ensures the project runs on track.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                         | Allocate assignments: Nobody has to do all the tasks, which he or she does not want to do. However, keep track on the tasks which                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                         | nobody wants to do it, allocate the task to the right person.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                         | Be responsible and respectful to each other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Communication norms     | 20 Tooponoisio ana Toopoottai to odon otrioi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                         | Communicate over MS Teams and WhatsApp (and Zoom in case of connection issues)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                         | Upload the project documentation in the designated project Tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         | A quick response or acknowledgement is expected. However, inform team members well ahead if someone is not available, quick answers to a topic should be possible for everybody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         | Inform team members if possible, the day before if one cannot participate in the meeting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                         | Communicate beforehand your personal issues (e.g., Examination period, excuses afterwards are not accepted)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Consideration norms     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         | Discuss relevant topics during the meetings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                         | Have a vote on agreement / disagreement in case of differences in ideas and opinions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Cont. improvement norms | That's a vote on agreement aloagreement in case of amoretions in lacas and opinions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| on a mprovenion norma   | Track team's progress by conducting status update meetings regularly (protocol)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         | Upload / share lecture slides, documents, and other information in MS Teams                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Rewards                 | opious / chare lecture eliade, accumente, and enter information in the featile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                         | Celebrate special efforts or MVP of every sprint in the HALL OF FAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sanctions               | Colorate operation of the or overy opinit in the Time of Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Canolicity              | We will make a list of the backlogs, and at the end of the project bring chocolates, make their place in the HALL OF SHAME.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                         | with make a list of the backlogs, and at the end of the project billing chocolates, make their place in the HALL OF SHAME.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| #  | Meeting Day | Comment       | Coach | Product Owner | Software Developer | Scrum Master | Release Manager |
|----|-------------|---------------|-------|---------------|--------------------|--------------|-----------------|
| 1  | 2021-04-14  |               | Yes   |               | Everyone else      | N/A          | N/A             |
| 2  | 2021-04-21  |               | Yes   | Tuhin         | Everyone else      | Charinee     | Dominik         |
| 3  | 2021-04-28  |               | Yes   | Finley        | Everyone else      | Sandra       | Matti           |
| 4  | 2021-05-05  |               |       | Tuhin         | Everyone else      | Marlon       | Vaidehi         |
| 5  | 2021-05-12  |               | Yes   | Finley        | Everyone else      | Tuhin        | Sandra          |
| 6  | 2021-05-19  |               |       | Tuhin         | Everyone else      | Matti        | Charinee        |
| 7  | 2021-05-26  | Mid-term due  | Yes   | Finley        | Everyone else      | Dominik      | Marlon          |
| 8  | 2021-06-02  |               |       | Tuhin         | Everyone else      | Charinee     | Dominik         |
| 9  | 2021-06-09  |               |       | Finley        | Everyone else      | Vaidehi      | Matti           |
| 10 | 2021-06-16  |               | Yes   | Tuhin         | Everyone else      | Finley       | Vaidehi         |
| 11 | 2021-06-23  |               |       | Finley        | Everyone else      | Sandra       | Charinee        |
| 12 | 2021-06-30  |               |       | Tuhin         | Everyone else      | Matti        | Sandra          |
| 13 | 2021-07-07  |               | Yes   | Finley        | Everyone else      | Dominik      | Marlon          |
| 14 | 2021-07-14  | Demo day!     |       |               |                    |              |                 |
| 15 | 2021-07-21  | Retrospective |       |               |                    |              |                 |
|    |             |               |       |               |                    |              |                 |
|    |             |               |       |               |                    |              |                 |
|    |             |               |       |               |                    |              |                 |

| Product Vision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Project Mission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The rapidly growing mass of data requires further refinements and new technologies in order to find the right data in this deluge of information. The creation and management of metadata is decisive for representing the content of stored objects and files. This metadata is held in a database for instant retrieval. Lists can be constructed from these databases to find files and objects in general, but they do not yet afford access to the real data. For this reason, a synthetic file system is considerably useful. A synthetic file system enables to access data, chosen by queries in the database of metadata. Retrieval of project-related data is done through a distributed database and a virtual file system that permits a single namespace for all relevant data designated by their metadata. | Due to the current Corona pandemic, as much data as possible is to be analyzed and evaluated with the help of artificial intelligence (AI). This requires a central intelligence to collect and interpret all accessible data distributed over several facilities. The key issue is that the data is organized and saved in different systems according to different storage types, structures, formats and criteria. The task, or rather mission is now to first make the data obtainable or readable via a uniform mechanism within the project time-frame. This would have the benefit of not having to adapt each application to the different memory types. The synthetic file system is a so-called adapter for each type of memory, so that a unified namespace can be formed from it. |

| Term                         | Definition                                                                                                                                                      |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Filesystem                   | Procedure/protocol to store and retreive a computer file                                                                                                        |
| FUSE Filesysten in userspace | An interface through which a developer can communicate with the Kernel Modus without knowing "Kernel' language "                                                |
| Meta data                    | Data about a computer file ex. date of creation, modification or deletion, type of file                                                                         |
| POSIX compliant              | The Portable Operating System Interface is a family of standards specified by the IEEE Computer Society for maintaining compatibility between operating systems |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |
|                              |                                                                                                                                                                 |

| # | Theme       | Goal                                            | Feature Name                                                   | Est. Size<br>(Feature) | Est. Size<br>(Sprint) | Real Size<br>(Feature) | Real Size<br>(Sprint) | Burn-<br>Down |
|---|-------------|-------------------------------------------------|----------------------------------------------------------------|------------------------|-----------------------|------------------------|-----------------------|---------------|
|   |             | Organisational Features                         |                                                                | ( ,                    | 29                    |                        | 29                    | 92            |
|   | , , , , , , | Provide the organisational features             |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 | Information on prior experience                                | 2                      |                       | 2                      |                       |               |
|   |             |                                                 | Role Assignment                                                | 1                      |                       | 1                      |                       |               |
|   |             |                                                 | T-Shirt Logo                                                   | 8                      |                       | 8                      |                       |               |
|   |             |                                                 | Team Contract                                                  | 13                     |                       | 13                     |                       |               |
|   |             |                                                 | Additional Team Meetings                                       | 2                      |                       | 2                      |                       |               |
|   |             |                                                 | Clone Client Repository                                        | 3                      |                       | 2                      |                       |               |
| 2 | Setting     | up the Docker                                   |                                                                |                        | 10                    |                        | 10                    | 63            |
|   |             | Creating the DOCKER                             |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 | Set up Docker Skeleton (Linux fuse) resembles                  | 3                      |                       | 3                      |                       |               |
|   |             |                                                 | Configure the docker to allow X forwarding                     | 5                      |                       | 5                      |                       |               |
|   |             |                                                 | Setup a Feature branch in GIT                                  | 2                      |                       | 2                      |                       |               |
| 3 | Setting     | up the FUSE                                     |                                                                |                        | 17                    |                        | 8                     | 55            |
|   |             | Creating the basic Framework of FUSE            |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 | Implement basic directory functionalities in the FUSE          | 8                      |                       | 5                      |                       |               |
|   |             |                                                 | Create a FUSE metaHub bridge                                   | 5                      |                       | 3                      |                       |               |
| 4 | MetaDa      | ta Hub                                          | ·                                                              |                        | 10                    |                        | 6                     | 49            |
|   |             | Getting the new FUSE Code repository            |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 | Migrate the code base to the new metadata hub                  | 5                      |                       | 3                      |                       |               |
|   |             |                                                 | Metadata Hub                                                   | 5                      |                       | 3                      |                       |               |
| 5 | Automa      | ted Testing                                     |                                                                |                        | 8                     |                        | 8                     | 41            |
|   |             | Testing should be automated to reduce redudancy |                                                                |                        |                       |                        |                       |               |
|   |             | ·                                               | Create Unit Tests that cover the most important functionality. | 5                      |                       | 5                      |                       |               |
|   |             |                                                 | Project linter and CI setup                                    | 3                      |                       | 3                      |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |
|   |             |                                                 |                                                                |                        |                       |                        |                       |               |

| # Theme         | Goal                                   | Feature Name                                                                           | Est. Size (Feature) | Est. Size<br>(Sprint) | Real Size<br>(Feature) | Real Size<br>(Sprint) | Burn-<br>Down |
|-----------------|----------------------------------------|----------------------------------------------------------------------------------------|---------------------|-----------------------|------------------------|-----------------------|---------------|
| 1 Project Orga  | nisational Features                    |                                                                                        |                     | 29                    |                        | 29                    | 92            |
|                 | Provide the organisational features    |                                                                                        |                     |                       |                        |                       |               |
|                 |                                        | Information on prior experience                                                        | 2                   |                       | 2                      |                       |               |
|                 |                                        | Role Assignment                                                                        | 1                   |                       | 1                      |                       |               |
|                 |                                        | T-Shirt Logo                                                                           | 8                   |                       | 8                      |                       |               |
|                 |                                        | Team Contract                                                                          | 13                  |                       | 13                     |                       |               |
|                 |                                        | Additional Team Meetings                                                               | 2                   |                       | 2                      |                       |               |
|                 |                                        | Clone Client Repository                                                                | 3                   |                       | 2                      |                       |               |
| 2 Setting up th | e Docker                               |                                                                                        |                     | 28                    |                        | 28                    | 63            |
|                 | Creating the DOCKER                    |                                                                                        |                     |                       |                        |                       |               |
|                 |                                        | Set up Docker Skeleton (Linux fuse) resembles                                          | 3                   |                       | 3                      |                       |               |
|                 |                                        | Configure the docker to allow X forwarding                                             | 5                   |                       | 5                      |                       |               |
|                 |                                        | Setup a Feature branch in GIT                                                          | 2                   |                       | 2                      |                       |               |
|                 | Update DOCKER                          |                                                                                        |                     |                       |                        |                       |               |
|                 |                                        | Update DOCKER file and DOCKER compose running                                          | 5                   |                       | 5                      |                       |               |
|                 |                                        | Integration tests for py-test for docker and docker-compose                            | 13                  |                       | 13                     |                       |               |
| 3 SFS Functio   | nalities                               | integration tools for py toot for about and about or compose                           |                     | 54                    |                        | 18                    | 55            |
| 0.0.0.0.0       | Creating the basic Framework of FUSE   |                                                                                        |                     | 0.                    |                        | .0                    |               |
|                 | ordaming the basis i ramement of i con | Implement basic directory functionalities in the FUSE                                  | 8                   |                       | 5                      |                       |               |
|                 |                                        | Create a FUSE metaHub bridge                                                           | 5                   |                       | 3                      |                       |               |
|                 |                                        | Creating test for FUSE (read access)                                                   | 5                   |                       | 3                      |                       |               |
|                 |                                        | Improve Error handling                                                                 | 5                   |                       | 5                      |                       |               |
|                 | Filter Implementation                  | Improve Error nariding                                                                 | 3                   |                       | 3                      |                       |               |
|                 | The implementation                     | Implementation of filtering dataset prototype                                          | 8                   |                       | 5                      |                       |               |
|                 |                                        | Implement functionalities to open files from/within the FUSE                           | 5                   |                       | 3                      |                       |               |
|                 |                                        | implement functionalities to open files from within the 1 OSE                          |                     |                       | 3                      |                       |               |
|                 | Script                                 |                                                                                        |                     |                       |                        |                       |               |
|                 | Script                                 | Croate an undated start script for the SES                                             | 3                   |                       |                        |                       |               |
|                 |                                        | Create an updated start script for the SFS  Make the building of the file tree modular | 5                   |                       |                        |                       |               |
|                 |                                        | Implement WRITE support for SFS                                                        | 5                   |                       |                        |                       |               |
|                 |                                        |                                                                                        | 5                   |                       |                        |                       |               |
|                 |                                        | Parser from Config toml to Graph-QL/Modular                                            | 5                   |                       |                        |                       |               |
| 4 MataData III  | .i.                                    |                                                                                        |                     | 40                    |                        | 11                    | 40            |
| 4 MetaData H    |                                        |                                                                                        |                     | 18                    |                        | 11                    | 49            |
|                 | Getting the new FUSE Code repository   | Missate the seeds have to the new restadate but                                        | 5                   |                       | 2                      |                       |               |
|                 |                                        | Migrate the code base to the new metadata hub                                          |                     |                       | 3                      |                       |               |
|                 |                                        | Metadata Hub                                                                           | 5                   |                       | 3                      |                       |               |
|                 |                                        | Creating a modular interface for supporting multiple backends                          | 8                   |                       | 5                      |                       |               |
|                 |                                        | Exception handling and Test for MDH query                                              | 3                   |                       |                        |                       |               |
|                 |                                        | Create an xattr command/script                                                         | 5                   |                       |                        |                       |               |
| 5 Automated T   |                                        |                                                                                        |                     | 8                     |                        | 8                     | 41            |
|                 | Testing should be automated to reduce  |                                                                                        |                     |                       |                        |                       |               |
|                 | redudancy                              | Create Unit Tests that cover the most important functionality.                         | 5                   |                       | 5                      |                       |               |
|                 |                                        | ·                                                                                      |                     |                       | 3                      |                       |               |
| 6 Dobies Cost   |                                        | Project linter and CI setup                                                            | 3                   |                       | 3                      |                       |               |
| 6 Debian Syste  |                                        |                                                                                        |                     | 40                    |                        | 0                     |               |
|                 | Setting up the debian system           | Configuration and formillaring with the first Debies Overton                           |                     | 16                    |                        | 8                     |               |
|                 |                                        | Configure and familiarise with the first Debian System                                 | 8                   |                       | 8                      |                       |               |
| -               |                                        | Set-up automatic testing on the Debian system                                          | 8                   |                       |                        |                       |               |
| 7               |                                        |                                                                                        |                     |                       |                        |                       | 41            |
|                 |                                        |                                                                                        |                     |                       |                        |                       |               |

|   |       |      |              | Est. Size | Est. Size | Real Size | Real Size | Burn- |
|---|-------|------|--------------|-----------|-----------|-----------|-----------|-------|
| # | Theme | Goal | Feature Name | (Feature) | (Sprint)  | (Feature) | (Sprint)  | Down  |
|   |       |      |              |           |           |           |           |       |
|   |       |      |              |           |           |           |           |       |
|   |       |      |              |           |           |           |           |       |
|   |       |      |              |           |           |           |           |       |

| Sprint | Status                 | Source           | Impediment                                                        | Resolution                                                                                                                                                                                                                   |
|--------|------------------------|------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Resolved               | Tuhin, Sandra    | Meetings are not clearly arranged.                                | Arranged fixed meetings: (We already have fixed internal meetings (Wednesdays 12:30 and Sundays 16:00) and two fixed external meetings (Mondays at 10:00 and Wednesdays at 15:00)                                            |
| 1      | Resolved               | Dominik, Vaihedi | Set ups/Requirements for the synthetic file system are not clear. | Refer to the project description, PowerPoint Slides (GRAU Data) and uploaded Protocols (when reading them all together probably it is going to be more clear) and on 26.04 there will be a clarification on the requirements |
| 1      | 1 Resolved Finley, Cha |                  | No written protocol for meetings are set up.                      | Sandra has written a protocol for every meeting, and uploaded it into Teams and Google Drive folder                                                                                                                          |
| 3      | Resolved               | Finley           | Sunday meetings at 16:00 are not possible for him                 | Tried a doodle survey but due to the very different time schedules it wasn't possible to find a better time and day.                                                                                                         |
| 4      | Resolved               | Charinee         | Specific task to be assigned and later be helped out              | The task was allocated and later on, if any impedimeent is created, later on helped on                                                                                                                                       |
| 5      | Resolved               | Tuhin            | Change timing of meetings                                         |                                                                                                                                                                                                                              |
| 5      | Resolved               | Sandra           | Not clear definition of all the issues                            |                                                                                                                                                                                                                              |
| 6      | Resolved               | Finley           | POs need one more meeting for themselve in a sprint               | One meeting on Thursday afternoon(15:00) to have a quick update on developed features/funtionalities of the program and to prepare for the next meeting with Ulrich                                                          |
|        |                        |                  |                                                                   |                                                                                                                                                                                                                              |
|        |                        |                  |                                                                   |                                                                                                                                                                                                                              |
|        |                        |                  |                                                                   |                                                                                                                                                                                                                              |
|        |                        |                  |                                                                   |                                                                                                                                                                                                                              |
|        |                        |                  |                                                                   |                                                                                                                                                                                                                              |
|        |                        |                  |                                                                   |                                                                                                                                                                                                                              |

| Link / reference                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                             |
| https://github.com/amosproj/amos-ss2021-synthetic-file-system/wiki/Synthetic-File-System-Build-and-Deployment-Documentation |
| https://github.com/amosproj/amos-ss2021-synthetic-file-system/wiki/Synthetic-File-System-User-Documentation                 |
| https://github.com/amosproj/amos-ss2021-synthetic-file-system/wiki/Synthetic-File-System-Technical-Documentation            |
| https://github.com/amosproj/amos-ss2021-synthetic-file-system/wiki/Software-Architecture-Description                        |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |
|                                                                                                                             |

| # | Feature Definition of Done                                   | Sprint Release Definition of Done                              | Project Release Definition of Done                                   |
|---|--------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------------|
| 1 | Feature Code review from peers has been completed and passed | Code review from peers has been completed and passed           | Code review from peers has been completed and passed                 |
|   | a. Code is fully implemented and commented                   | a. Code is fully implemented and commented                     | a. Code is fully implemented and commented                           |
|   | b. Adheres to coding guidelines                              | b. Adheres to coding guidelines                                | b. Adheres to coding guidelines                                      |
|   | c. Commits are not squashed                                  | c. Commits are not squashed                                    | c. Commits are not squashed                                          |
|   | d. Code is checked into the repository                       | d. Code is checked into the repository                         | d. Code is checked into the repository                               |
| 2 | Unit tests for feature have been written and are passing     | Unit tests/ Integration test have been written and are passing | Unit tests/ Integration test have been written and are passing       |
| 3 | Cleanliness of the Code (Readability)                        | Cleanliness of the Code (Readability)                          | Cleanliness of the Code (Readability)                                |
| 4 | No critical bugs are open                                    | No critical bugs are open                                      | No critical bugs are open                                            |
| 5 | Feature branch has been tagged and merged                    | Database consistency checks in test environment succeeded      | Software documentation passes external review                        |
| 6 | Feature Code has been included into the release (candidate)  | Code has been included into the release (candidate)            | User manual passes external review                                   |
| 7 | Code Coverage:                                               | Code Coverage:                                                 | The code and readme on Github is well documented and easily readible |
|   | 40 % - for Features                                          | 50 % - for Sprint Release                                      | Code Coverage:                                                       |
|   |                                                              |                                                                | 60 % - for Product Release                                           |
|   |                                                              |                                                                |                                                                      |
|   |                                                              |                                                                |                                                                      |
|   |                                                              |                                                                |                                                                      |
|   |                                                              |                                                                |                                                                      |
|   |                                                              |                                                                |                                                                      |

| \ | Context | Name           | Version | License            | Comment |
|---|---------|----------------|---------|--------------------|---------|
| 1 | os      | Docker         | 20.1    | Apache License 2.0 |         |
| 2 | OS      | ubuntu         | 20.04   | GPL-3.0 License    |         |
|   |         | flake8         |         | MIT License        |         |
| 4 |         |                |         | MIT License        |         |
|   |         |                |         | BSD License (MIT)  |         |
| 6 | OS      | Docker-compose | 1.27    | Apache License 2.0 |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |
|   |         |                |         |                    |         |

| Last Name        | First Name       | Value            |                  |                  |                   |                  |  |
|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|--|
| Mallick          | Tuhin            |                  |                  |                  |                   |                  |  |
| Abraham          | Finley           |                  |                  | 5.00             | OK                |                  |  |
| Weghorn          | Marlon           | 5                |                  | 5.00             | UN                |                  |  |
| Bafna            | Vaidehi          | 5                |                  |                  |                   |                  |  |
| Schoepf          | Dominik          | 5                |                  | 0                | No effort         |                  |  |
| Schulze          | Matti            | 5                |                  | 1                | Minimal effort    |                  |  |
| Srikhaolan       | Charinee         | 5                |                  | 2                | Small effort      |                  |  |
| Arbo             | Sandra           | 5                |                  | 3                | Medium effort     |                  |  |
|                  |                  |                  |                  | 5                | Large effort      |                  |  |
|                  |                  |                  |                  | 8                | Very large effort |                  |  |
|                  |                  |                  |                  | 13               | Too large effort  |                  |  |
|                  |                  |                  |                  |                  |                   |                  |  |
| {\/}             | {\/}             | {\/}             | {\/}             | {\/}             | {\/}              | {/}              |  |
| (• •)            | (● ●)            | (● ●)            | (● ●)            | (● ●)            | (● ●)             | (● ●)            |  |
| ( > Want a taco?  | ( > Want a taco? |  |
|                  |                  |                  |                  |                  |                   |                  |  |
|                  |                  |                  |                  |                  |                   |                  |  |
|                  |                  |                  |                  |                  |                   |                  |  |
|                  |                  |                  |                  |                  |                   |                  |  |