AMOS Proj3 - Planning Documents

Project Data

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	

AMOS Proj3 - Planning Documents Project Team

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

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Team Contract

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	
	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	
	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	
	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	
	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	
	Track team's progress by conducting status update meetings regularly (protocol)
	Upload / share lecture slides, documents, and other information in MS Teams
Rewards	
	Celebrate special efforts or MVP of every sprint in the HALL OF FAME
Sanctions	
	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.

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Team Contract

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Role Assignments

#	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					

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Product Goal

## **Product Vision Project Mission** The rapidly growing mass of data requires further refinements and new technologies 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 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 to collect and interpret all accessible data distributed over several facilities. The key and files. This metadata is held in a database for instant retrieval. Lists can be issue is that the data is organized and saved in different systems according to constructed from these databases to find files and objects in general, but they do not different storage types, structures, formats and criteria. The task, or rather mission is yet afford access to the real data. For this reason, a synthetic file system is now to first make the data obtainable or readable via a uniform mechanism within the considerably useful. A synthetic file system enables to access data, chosen by 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 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 adapter for each type of memory, so that a unified namespace can be formed from it. relevant data designated by their metadata.

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Product Glossary

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

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Mid-Project Release Tracking

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
1	Project	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	<u>'</u>		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	ata Hub	9		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	ited 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		

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Final Project Release Plannning

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
1	Project Organisa	itional 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 Do	ocker			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	Setting up the Fl	JSF	antegration toole for py took for decider and doorles compose		31		18	55
	County up the r	Creating the basic Framework of FUSE			0.		10	
		croating the basic Framework of Fee	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 rianding	3		3		
		riilei iiripiememalion	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 POSE	<u> </u>		3		
4	Moto Doto Llub				10		6	40
4	MetaData Hub	Catting the case FLICE Code consistent			10		0	49
		Getting the new FUSE Code repository	MP and a fiber and a fiber and a state fiber in					
			Migrate the code base to the new metadata hub	5		3		
			Metadata Hub	5		3		
_			Creating a modular interface for supporting multiple backends					
5	Automated Testin	Ÿ			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		
6	Debian System							
		Setting up the debian system			16		8	
			Configure and familiarise with the first Debian System	8		8		
			Set-up automatic testing on the Debian system	8				
7								41

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Final Project Release Planning

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

AMOS Proj3 - Planning Documents Impediments Backlog

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	Resolved	Finley, Charinee	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

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Documentation

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

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Definition of Done

!	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:	Code Coverage:
	40 % - for Features	50 % - for Sprint Release	60 % - for Product Release

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Bill of Materials

1	Context	Name	Version	License	Comment
	OS	Docker		Apache License 2.0	
		ubuntu	20.04	GPL-3.0 License	
3		flake8	3.9.1.	MIT License	
4				MIT License	
5				BSD License (MIT)	
6	OS	Docker-compose	1.27	Apache License 2.0	

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Planning Poker

First Name	Value					
Tuhin	0					
Finley			A 71	#N/A		
Marlon	5		4.7 1	TIV/A		
Vaidehi	5					
Dominik	5		0	No effort		
Matti	5		1	Minimal effort		
Charinee	8		2	Small effort		
Sandra	5		3	Medium effort		
			5	Large effort		
5			8	Very large effort		
			13	Too large effort		
{\/}	{\/}	{\/}	{\/}	{\/}	{\/}	
( > Want a taco?	( > Want a taco?	( > Want a taco?	( > Want a taco?	( > Want a taco?	( > Want a taco?	
	Tuhin Finley Marlon Vaidehi Dominik Matti Charinee Sandra	Tuhin 0 Finley Marlon 5 Vaidehi 5 Dominik 5 Matti 5 Charinee 8 Sandra 5   {\_/} ( • •) ( • •)	Tuhin 0 Finley Marlon 5 Vaidehi 5 Dominik 5 Matti 5 Charinee 8 Sandra 5   { _ /}	Tuhin  Finley  Marlon  Vaidehi  Dominik  5  Charinee  8  2  Sandra  5  8  13	Tuhin         0           Finley         4.71         #N/A           Marlon         5         #N/A           Vaidehi         5         0         No effort           Dominik         5         0         No effort           Matti         5         1         Minimal effort           Charinee         8         2         Small effort           Sandra         5         Large effort           5         Large effort           5         8         Very large effort           13         Too large effort           (/)*         (/)*         (/)*           (/)*         (/)*         (/)*           (/)*         (/)*         (/)*	Tuhin 0