AMOS P1 - Planning Document Project Data

Project Name	
Online team meeting	https://fau.zoom.us/j/63092613958
Production system (if any)	
Test system (if any)	
GitHub repository	https://github.com/amosproj/amos2023ss01-apache-pulsar-ui
GitHub feature board	https://github.com/amosproj/amos2023ss01-apache-pulsar-ui
GitHub impediments backlog	https://github.com/orgs/amosproj/projects/19
Team T-shirt (white)	https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/af483f4b-b0e1-4fd2-9447-08b0e173f5bc
Team T-shirt (black)	https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/f8fc2edd-668e-4223-815c-1014b1b5a8ed
Additional materials	

AMOS P1 - Planning Document Project Team

Last Name	First Name	GitHub User Name	Email Address
Dreesens	Philipp	phildree	philipp.dreesens@gmail.com
Teschner	Niklas	nikkite99	niklas.teschner@web.de
Kafedzhieva	Emilia	emiliakaf	emilia.kafedzhieva@gmail.com
Schwarzmann	Sebastian	MPSebastian	sebi.schwarzmann@gmail.com
Haverkamp	Anna Lucia	ahaverkamp	anna.lucia.haverkamp@gmail.com
Tochman-Szewc	Julian Marcel	JulianTS	julian.tochmanszewc@gmail.com
Arnhold	Jonas	jnsrnld	jonasarnhold@web.de
Nasir	Shahraz	Shahraz98	nasirsharaz@gmail.com
He	Ziqi	iheziqi	heziqi4399@gmail.com

AMOS P1 - Planning Document Role Assignments

#	Meeting Day	Product Owner	Software Developer	Release Manager	Scrum Master	Comment
1	2023-04-19	Sebastian & Philipp	Everyone else	N/A	Emilia	
2	2023-04-26	Sebastian & Philipp	Everyone else	N/A	Emilia	
3	2023-05-03	Sebastian & Philipp	Everyone else	Niklas	Emilia	
4	2023-05-10	Sebastian & Philipp	Everyone else	Anna Lucia	Emilia	
5	2023-05-17	Sebastian & Philipp	Everyone else	Julian Marcel	Emilia	
6	2023-05-24	Sebastian & Philipp	Everyone else	Jonas	Emilia	
7	2023-05-31	Sebastian & Philipp	Everyone else	Shahraz	Emilia	Mid-term due
8	2023-06-07	Sebastian & Philipp	Everyone else	Ziqi	Emilia	
9	2023-06-14	Sebastian & Philipp	Everyone else	Niklas	Emilia	
10	2023-06-21	Sebastian & Philipp	Everyone else	Anna Lucia	Emilia	
11	2023-06-28	Sebastian & Philipp	Everyone else	Julian Marcel	Emilia	
12		Sebastian & Philipp	Everyone else	Jonas	Emilia	
13	2023-07-12	Sebastian & Philipp	Everyone else	Shahraz	Emilia	
14	2023-07-19	Sebastian & Philipp	Everyone else	Ziqi	Emilia	Demo day!
15		Sebastian & Philipp	Everyone else	N/A	Emilia	Retrospective
			· ·			· ·

AMOS P1 - Planning Document Team Contract

Goals	
	Creating a good product; Developing a useful open-source software;
	Create something cool and have fun
	Work as a team
	Provide a product that fulfills as many customer needs as possible
	Gain useful experience with the Scrum framework and Agile methodologies
Meeting norms	
	Answer yes or no question using Zooms built in feature "Reactions/Reaktionen"
	Following the scrum principle (review, retro, planning)
	Be on time or communicate if you are late
	Try to end the meetings on time
	Try not to interrupt people speaking (unless helpfull/necessary)
	Always be nice:)
Working norms	
	understandable code over wizardry => commenting
	Define and follow coding guidelines (including code- and commit-style, git-strategy and so on) (enforce coding style using Git CI/CD?)
	Issues/Goal descriptions shall provide necessary information to fulfill the task in a valuable way
	Good documentations
	Code reviews
	Structured Commits, PRs, Issues
	Inform early on if some task cannot be done/fully completed within the defined Sprint
	Reviews are not personal (be objective)
Coordination norms	
	Be organized, ask help immediately if you are stuck
	Start planning as early as possible
	Continuously keep track of individual progress during the week
Communication norms	
	Everybody can bring on their point
	There are no stupid questions
	If there are team decision, everybody should at least communicate if they are fine with it
	Communicate early on if there is a problem, so that we have time to fix it together
	Be respectful to each other
Consideration norms	
	Everyone has a vote - majority wins? but before hear (+discuss?) arguments of either side
Cont. improvement norms	, , , , , , , , , , , , , , , , , , ,
	Focus on retrospective (constant feedback)
Rewards	
	Good grades as a team
Sanctions	
	Vote on sanction if necessary
	Communicate if there is a problem in e.g. the retro, so that the team can decide together what to do (and also that the person knows that there is a problem)

AMOS P1 - Planning Document Team Contract

Ziqi He	
Julian Marcel Tochman-Szewc	
Anna Haverkamp	
Philipp Dreesens Emilia Kafedzhieva	
Emilia Kafedzhieva	
Sebastian Schwarzmann	
Jonas Arnhold	
Niklas Teschner	
Shahraz Nasir	

AMOS P1 - Planning Document Product Goal

Product Vision Project Mission The mission of our project is well aligned with our product vision. Because the goal of With increasing amounts of data shared across more and more complex and large ITecosystems, the need for a central coordination and communication platform like our mission is to build a Web-UI that can easily be used by users that have some Apache Pulsar is increasingly important. Due to the large scale, such Apache Pulsar experience with managing and maintaining Apache Pulsar installations to understand installations can become very complicated to overview and to maintain. and work on their infrastructure. Therefore, tools to handle Apache Pulsar installations like the Apache Pulsar Manager exist. Nonetheless, these tools do not provide sufficient support for the We want to achieve this by structuring our UI according to the topology of Apache Pulsar, so that it can be navigated intuitively for targeted exploration of issues. With actual content exploration and manipulation, but instead mainly focus on the management of the topology. our Apache Pulsar UI issues can be located, and potential optimizations can easily be searched for, identified, and implemented. Our Apache Pulsar Web-UI should exactly fill this gap, by providing an intuitive way of navigating through an Apache Pulsar installation and exploring each topology level and its according (meta)data. The vision of our Web-UI is to support organizations that run Apache Pulsar, to increase transparency, maintainability and efficiency amongst their IT-infrastructure.

AMOS P1 - Planning Document Product Glossary

Term	Definition
Stream	A continuous stream of messages, that can be analyzed, transformed and processed in real time
Topic	A logical entity or named channel in Pulsar through which messages are published and consumed. It represents a stream of data.
Partition	A division of a topic into multiple parallel streams of messages. Partitioning enables scalability and parallel processing across different consumers.
Producer	A client application that publishes messages to a topic in Pulsar.
Consumer	A client application that subscribes to a topic in Pulsar and consumes messages published to it.
Broker	A Pulsar component responsible for receiving and routing messages between producers and consumers. It handles the distribution and load balancing of messages across different topics and partitions.
Bookkeeper	A distributed storage system in Pulsar that provides fault tolerance and durability for storing message data.
Namespace	A namespace in Apache Pulsar is a logical grouping of topics. It acts as a container that isolates topics, allowing for better organization, access control, and resource allocation within a Pulsar cluster.
Tenant	A tenant in Pulsar represents a group or entity that has ownership over namespaces and topics. It provides multi-tenancy support, allowing different users or organizations to have their isolated environments within a Pulsar cluster.
Cluster	A Pulsar cluster consists of a group of interconnected brokers and bookkeepers that work together to provide the messaging and streaming capabilities. It forms the infrastructure for storing and processing messages.

AMOS P1 - Planning Document

Mid-Project Release plan

Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Release					T.Cg	71001 0120	110
	Total			89	89		
Sprints							
_							
1	Organiz	zational	and general research	0	89	0	89
2	_		he Pulsar research	15	89	11	89
3			ache Pulsar Backend + Frontend	20	74	17	78
4	Improve	e UI and	create Backend Interfaces	29	54	28	61
5	_		ts and Producers/Consumers	25	25	0	33
6							33
Feature	S						
1	Organiz	zational	and general research				
			le a meeting with the industry partne	-		-	
		Get to k	now Apache Pulsar	-		-	
		Design	team t-shirt	-		-	
		Design	a team logo	-		-	
2	Setup a	nd Apac	he Pulsar research				
		Plan an	d create the Software Architecture F	3		3	
		Project	Setup with React/Angular JS	2		3	
		Project	Setup with Spring	2		2	
		Get to k	now Apache Pulsar	3		2	
		Researc	ch APIs to interact with Apache Puls	3		3	
		Researc	ch and setup CI/CD Pipeline	2		1	
3	Create	basic Ap	ache Pulsar Backend + Frontend				
		Create	a new topic in Apache Pulsar	3		3	
		Send m	essage in given topic	3		3	
		Retrieve	e raw message data from Apache P	3		3	
		Display	all existing topics from Pulsar	2		2	
		Local A	pache Pulsar Environment	3		3	
		Create	pasic topic/message frontend	3		3	
		Apache	Pulsar Manager (APM) research	3		3	

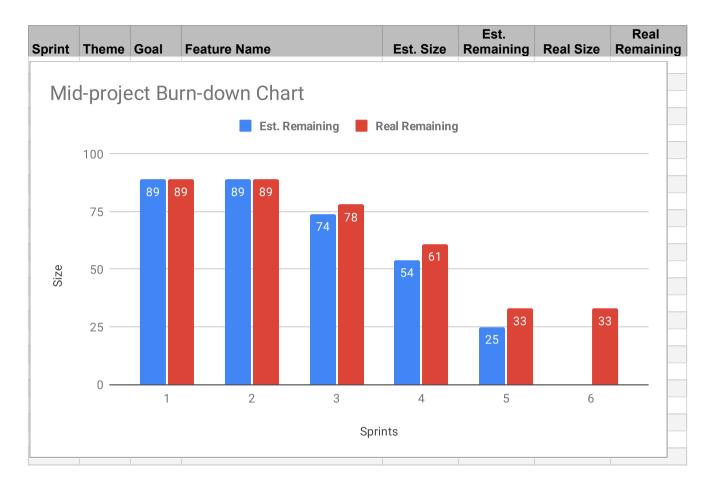
AMOS P1 - Planning Document

Mid-Project Release plan

					Est.		Real
Sprint	Theme	Goal	Feature Name	Est. Size	Remaining	Real Size	Remaining
4	Improve	a III and	create Backend Interfaces				
4	iiipiov		UI Design	2		2	
				2		3	
		Create Landingpage of Apache-Pulsar-UI Create base UI component Create Cluster View		5		3	
				3		5	
			Namespace View	5		5	
			le Informaion Interface	3		3	
		_	pace Information Interface	3		3	
			Information Interface	3		3	
			formation Interface	3		3	
5	Integrat	te Tenan	ts and Producers/Consumers				
			"Build Process Video	-			
		Create	Consumer Information Popup	3			
		Create	Producer Information Popup	3			
		Create	Message View	5			
		Create	Topic View	3			
		Create	Tenant View	2			
		Add Ter	nants to Navbar	1			
		Tenant	Information Interface	3			
		Refacto	ring Backend	5			

AMOS P1 - Planning Document

Mid-Project Release plan



AMOS P1 - Planning Document Final Project Release plan

					Est.		Real
Sprint	Theme	Goal	Feature Name	Est. Size	Remaining	Real Size	Remaining
Release							
	Total			0	0		
Sprints							
_				_	_	_	_
1				0	0	0	0
2				0	0	0	0
3				0	0	0	0
					0		0
Fa atuus	_						
Feature	5						
1							
1							
2							
_							
3							

AMOS P1 - Planning Document Definition of Done

#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
	Feature is done when the acceptance criteria are fullfiled	Release is done when all test pass	Project is done when code builds and runs on all target plattforms
	Feature is done when there are test where it is necessary and they pass	Release is done when there are no more necessary fixes	Project is done when the documentation provides good guidances to user on how to use the tool
	Feature is done when the linter passes	Release is done when all team members are happy the current state	Project is done when the tool does what it is supposed to do and the major requirements are fullfiled (customer is sastisfied)
	Feature is done when it is merged onto our main branch (after the code has been reviewed by at least one other person)		
	Feature is done when the code has been documentend or commented properly		

AMOS P1 - Planning Document Documentation

Type	Link / reference

AMOS P1 - Planning Document

Bill of Materials

ckend dependencies				
. Comban francisco				
va Spring framework	Spring Boot	2.7.11	Apache License Version 2.0	
va testing framework	JUnit	5.8.2	Common Public License	
va library	lombok	1.18.26	MIT License	
lsar Java library	Pulsar Client	2.11.1	Apache License Version 2.0	
tabase	PostgreSQL	42.3.8	The PostgreSQL Licence	
egration Testing	Testcontainers	1.18.0	MIT License	
cumentation	Springdoc-Openapi	1.7.0	Apache License Version 2.0	
ching	Caffeine	2.9.3	Apache License Version 2.0	
ontend dependencies				
er Interface	React	18.2.0	MIT License	
act UI tools	Material UI	5.12.2	MIT License	
act state management	Redux Toolkit	1.9.5	MIT License	
ta fetching	Axios	1.4.0	MIT License	
de formatter	Prettier	2.8.8	MIT License	
ter	ESLint	8.39.0	MIT License	
sting Framework	Jest	27.4.3	MIT License	
ls ta e c c c c c c c c c c c c c c c a a a ta	sar Java library sabase gration Testing sumentation shing ntend dependencies or Interface set UI tools set state management a fetching le formatter er	Pulsar Client PostgreSQL gration Testing Testcontainers Furmentation PostgreSQL Testcontainers Springdoc-Openapi Caffeine Intend dependencies Fur Interface Fuct UI tools Fuct state management Further feet Further formatter Further furthe	grar Java library Pulsar Client 2.11.1 gration Testing Testcontainers 1.18.0 gration Testing Springdoc-Openapi 1.7.0 ching Caffeine 2.9.3 contend dependencies From Interface 18.2.0 cut UI tools Material UI 5.12.2 cut state management Redux Toolkit 1.9.5 a fetching Axios 1.4.0 de formatter Prettier 2.8.8 er ESLint 8.39.0	Pulsar Client 2.11.1 Apache License Version 2.0

AMOS P1 - Planning Document Planning Poker

Last Name	First Name	Value			
			#DIV/	#DIV/	
			0!	0!	
Teschner	Niklas				
Haverkamp	Anna Lucia		0	No size	
Tochman-Szewc	Julian Marcel		1	Trivial size	
Arnhold	Jonas		2	Small size	
Nasir	Shahraz		3	Medium size	
He	Ziqi		5	Large size	
			8	Very large size	
			13	Too large (size)	