AMOS 2023ws02 - Planning Document Project Data

Project Name	
Online team meeting	https://fau.zoom-x.de/j/67529253146
Production system (if any)	
Test system (if any)	
GitHub repository	https://github.com/amosproj/amos2023ws02-pitest-ide-plugin
GitHub feature board	https://github.com/orgs/amosproj/projects/26/views/2
GitHub impediments backlog	https://github.com/orgs/amosproj/projects/36
Team T-shirt (white)	https://www.shirtinator.de/loadBasket/w2sVI72Xs18
Team T-shirt (black)	https://www.shirtinator.de/loadBasket/w2sVI72Xs18
Additional materials	

AMOS 2023ws02 - Planning Document Project Team

Last Name	First Name	GitHub User Name	Email Address
Erben	Emanuel	emuguy1	emanuel.erben@fau.de
Nützel	Felix	Felix-012	felix.nuetzel@fau.de
Heimbs	Lennart	Iheimbs	lennart.heimbs@fau.de
Böhm	Luca	QW3RAT	luca.boehm@fau.de
Malliaros	Nikolaos	nikomall34	niko.malliaros@gmail.com
Herzig	Tim Niklas	timherzig	tim.herzig@hotmail.com
Fogarty	Liam	lfogarty98	lfogarty9995@gmail.com
Oberson	Brianne	brianneoberson	brianne.oberson@gmail.com
Dargel	Olivia	oliviadargel	olivia.dargel@tu-berlin.de

AMOS 2023ws02 - Planning Document Role Assignments

#	Meeting Day	Product Owner	Software Developer	Release Manager	Scrum Master	Comment
1	2022-10-19	Nützel Felix, Emanuel Erben	Everyone else	N/A	Olivia Dargel	
2	2022-10-26	Nützel Felix, Emanuel Erben	Everyone else	Heimbs Lennart	Olivia Dargel	
-	2022-11-02	-	-	-	-	
3	2022-11-09	Nützel Felix, Emanuel Erben	Everyone else	Malliaros Nikolaos	Olivia Dargel	
4	2022-11-16	Nützel Felix, Emanuel Erben	Everyone else	Böhm Luca	Olivia Dargel	
5	2022-11-23	Nützel Felix, Emanuel Erben	Everyone else	Herzig Tim Niklas	Olivia Dargel	
6	2022-11-30	Nützel Felix, Emanuel Erben	Everyone else	Fogarty Liam	Olivia Dargel	Mid-term due
7	2022-12-07	Nützel Felix, Emanuel Erben	Everyone else	Oberson Brianne	Olivia Dargel	
8	2022-12-14	Nützel Felix, Emanuel Erben	Everyone else	Heimbs Lennart	Olivia Dargel	
9	2023-01-11	Nützel Felix, Emanuel Erben	Everyone else	Böhm Luca	Olivia Dargel	
10	2023-01-18	Nützel Felix, Emanuel Erben	Everyone else	Malliaros Nikolaos	Olivia Dargel	
11	2023-01-25	Nützel Felix, Emanuel Erben	Everyone else	Herzig Tim Niklas	Olivia Dargel	
12	2023-02-01	Nützel Felix, Emanuel Erben	Everyone else	Fogarty Liam	Olivia Dargel	
13	2023-02-08	Nützel Felix, Emanuel Erben	Everyone else	Oberson Brianne	Olivia Dargel	Demo day!
14	2023-02-15	Nützel Felix, Emanuel Erben	Everyone else	Heimbs Lennart	Olivia Dargel	Retrospective

AMOS 2023ws02 - Planning Document Team Contract

Goals	Working Plugin that can be integrated in IntelliJ.
	We create a product that satisfies our industry partners
Meeting norms	We want to be punctual, if not, tell the group // maybe alternative: We start on time. If late, notify the others.
	Absence should be communicated before the meeting
	Focus and concentrate
Working norms	We finish our assigned tickets on time
	We upload our changes at 8 PM the day before our meetings
Coordination norms	We stick to our assigned roles
	Assign each task to a specific person.
Communication norms	No voice messages
	We communicate problems to each other
	Everyone checks the communication channel (Discord) regularly at least once a day.
	If someone is not reachable within 1 & 1/2 week, Prof. Riehle is informed and asked for further instructions
Consideration norms	We discuss disagreement openly
	We vote for final resolution
Cont. improvement norms	Teams progress will be tracked through weekly updates
Rewards	Everyone celebrates via a reaction in the zoom after each sprint
Sanctions	You have to complete unwanted tickets if you violate our norms
Cancuons	Tou have to complete unwanted tickets if you violate our norms
Signatures	
Scrum Master	Olivia Dargel
Product owner	Felix Nützel
Product owner	Emanuel Erben
Software developer	Lennart Heimbs
Software developer	Brianne Oberson
Software developer	Luca Böhm
Software developer	Liam Fogarty
Software developer	Nikolaos Malliaros
Software developer	Tim Niklas Herzig

AMOS 2023ws02 - Planning Document Product Goal

Product Vision	Project Mission
The reason of existence of the envisioned product (beyond this project):	The mission of this particular project (in the context of the product vision):
Software quality hinges on robust testing practices. While code coverage remains a prevalent metric, evaluating the true effectiveness of tests in ensuring expected behavior often gets overlooked. This is where Mutation Testing steps in—a method that generates code variations to evaluate the ability of tests to detect changes.	
PiTest, a leading tool in Mutation Testing, falls short due to its limited integration capabilities. It lacks the functionality to display test run results and configure test scope dynamically, creating a gap in assessing test effectiveness within the environment best known to the developer.	
Our product vision is to introduce an IntelliJ IDE plugin that not only presents PiTest results but also empowers users to seamlessly fine-tune test scopes, even down to specific classes. By integrating these features, we aim to bridge the existing gap, providing enhanced visibility and control within the familiar IntelliJ environment, thereby ensuring higher-quality test outcomes.	

AMOS 2023ws02 - Planning Document Product Glossary

Term	Definition

AMOS 2023ws02 - Planning Document Sprint Goals

Sprint #	Sprint goal
1	None
2	None
3	None
4	Create first meaningfull Features
5	Implement first parts of report visualization
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

AMOS 2023ws02 - Planning Document Mid-Project Release plan

Sprint	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Releas						
Releas	e 					
Total			115	115		
iotai			115	110		
Sprints						
_						
1	Research Basics		25	115	19	115
2	Software Architecture		35	90	39	96
3	Create Codebasics		29	55	37	57
4	Create first meaningfull Features		26	26	0	20
5	Implement first parts of report visualization	ation				
Feature	· · · · · · · · · · · · · · · · · · ·					
_	Bearing Beater					
1	Research Basics	December Mutation Testing			5	
		Research Mutation Testing	5			
		Research Plugin IntelliJ IDE	5		5	
		Initialize Readme.md and Wiki	5		2	
		Create team logo	5		5	
•	0.6	Familiarize with Pitest	5		2	
2	Software Architecture	0 4 D 5 0 4 D			•	
		Create a Runtime Components Diagram	8		8	
		Create a Code Components Diagram	8		8	
		Create a Technology Stack Summary	5		3	
		Create a Textual Explanation of Diagrams and Choices	3		3	
		Initialize Software Bill of Material	3		2	
		Research best way to read PIT data	3		5	
		Create Code Skeleton	3		5	
		Create a Coding & Git Guideline	2		5	
3	Create Codebasics					
		Create a Build Guide for our Project	3		1	
		Obtain and Transform the Test Report	5		8	
		TestConfigurator that can interact with PiTest	8		13	
		Create a gradle connector that can interact with the project	5		5	
		Research possible configurations and parameters that can be forwarded to Pitest	3		2	
		Add Visualization for the User	5		8	
4	Create first meaningfull Features					
		Attend IntelliJ Webinar on how to get the Plugin into Marketplace on November 16th	2			
		Implement Context Menu for Class-Specific Run Execution	8			
		Color Bars on one side of the code indicating PiTest status	8			

AMOS 2023ws02 - Planning Document

Mid-Project Release plan

0	21	Fratura Nama	F-4 0!	Est.	DI 0'	Real
Sprint	Goal	Feature Name	EST. SIZE	Remaining	Real Size	Remaining
		Research forward way of running Pitest Develop and Document Basic Testing Framework for Plugins with Example	5			
		Develop and Document Basic Testing Framework for Plugins with Example	3			

AMOS 2023ws02 - Planning Document Mid-Project Release plan

Sprint	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining

AMOS 2023ws02 - Planning Document Final Project Release plan

Sprint	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Releas	е					
Total			0	0		
Sprints	3					
1			0		0	
2			0	0	0	0
				0		0
Feature	es					
_						
1						
2						
3						

AMOS 2023ws02 - Planning Document Definition of Done

#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done

Туре	Link / reference

AMOS 2023ws02 - Planning Document

Bill of Materials

#	Context	Name	Version	License	Comment
software components					
	org.w3c.dom.Element	interface Element	Java Platform SE8	GNU GPL 2.0 with classpath exception	
	org.w3c.dom.Node	interface Node	Java Platform SE8	GNU GPL 2.0 with classpath exception	
	java.io.File	class File	Java Platform SE7	GNU GPL 2.0 with classpath exception	
	javax.xml.parsers.DocumentBuilderFactory	class DocumentBuilderFactory	Java Platform SE8	GNU GPL 2.0 with classpath exception	
	https://pitest.org/	Pitest	1.15.3	Apache License 2.0	
libraries					
	https://plugins.jetbrains.com/docs/intellij/welcome.html	Intellij Plugin SDK	???	Apache License 2.0	
tools					
	https://junit.org/junit5/	Junit 5	5.10.1	Eclipse Public License 2.0.	
	https://www.jetbrains.com/idea/	Intellij IDE Community	2023.2.4	Apache License 2.0	
developement process					
			>=17.0.1 and	Oracle Technology Network License	
build process	https://www.java.com/de/	Java JDK	<21.0.0	Agreement	
	https://github.com/gradle	Gradle	8.6	Apache License 2.0	
publish process					

AMOS 2023ws02 - Planning Document Planning Poker

Last Name	First Name	Value			
Erben	Emanuel	5		~	
Nützel	Felix	5	5.00	OK	
Heimbs	Lennart		0.00	— • • • • • • • • • • • • • • • • • • •	
Böhm	Luca				
Malliaros	Nikolaos		0	No size	
Herzig	Tim Niklas		1	Trivial size	
Fogarty	Liam		2	Small size	
Oberson	Brianne		3	Medium size	
Dargel	Olivia		5	Large size	
-			8	Very large size	
			13	Too large (size)	