

AMOS-Project 3 – QAchat Planning Documents



Project Name	...
Online team meeting	https://fau.zoom.us/j/68283073150
Production system (if any)	...
Test system (if any)	...
GitHub repository	amosproj/amos2023ss03-gachat (github.com)
GitHub feature board	amos2023ss03-feature-board (github.com)
GitHub impediments backlog	amos2023ss03-impediments-backlog (github.com)
Team T-shirt (white)	...
Team T-shirt (black)	woman design: https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/931c832c-67cc-46ca-bca7-e49019a052f2 man design: https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/d45e26d4-77f0-42cf-a412-f67b2071facf
Additional materials	...
Course information	https://amos.uni1.de
Happiness index tool	https://happy-amos.appspot.com/
Planning Poker	https://planningpokeronline.com/

Last Name	First Name	GitHub User Name	Email Address
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Pucic	Amela	amela16	a.pucic@campus.tu-berlin.de, amela1999@hotmail.de

#	Meeting Day	Product Owner	Software Developer	Release Manager	Scrum Master	Comment
1	2022-10-19	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	
2	2022-10-26	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	
3	2022-11-02	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	
4	2022-11-09	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	
5	2022-11-16	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	
6	2022-11-23	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	
7	2022-11-30	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	Mid-term due
8	2022-12-07	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	
9	2022-12-14	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	
10	2023-01-11	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	
11	2023-01-18	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	
12	2023-01-25	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	
13	2023-02-01	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	
14	2023-02-08	Sara El Brak, Tobias Konheiser	Everyone else	Emanuel Erben	Vukica Stojkovic	Demo day!
15	2023-02-15	Tobias Konheiser, Sara El Brak	Everyone else	Emanuel Erben	Vukica Stojkovic	Retrospective

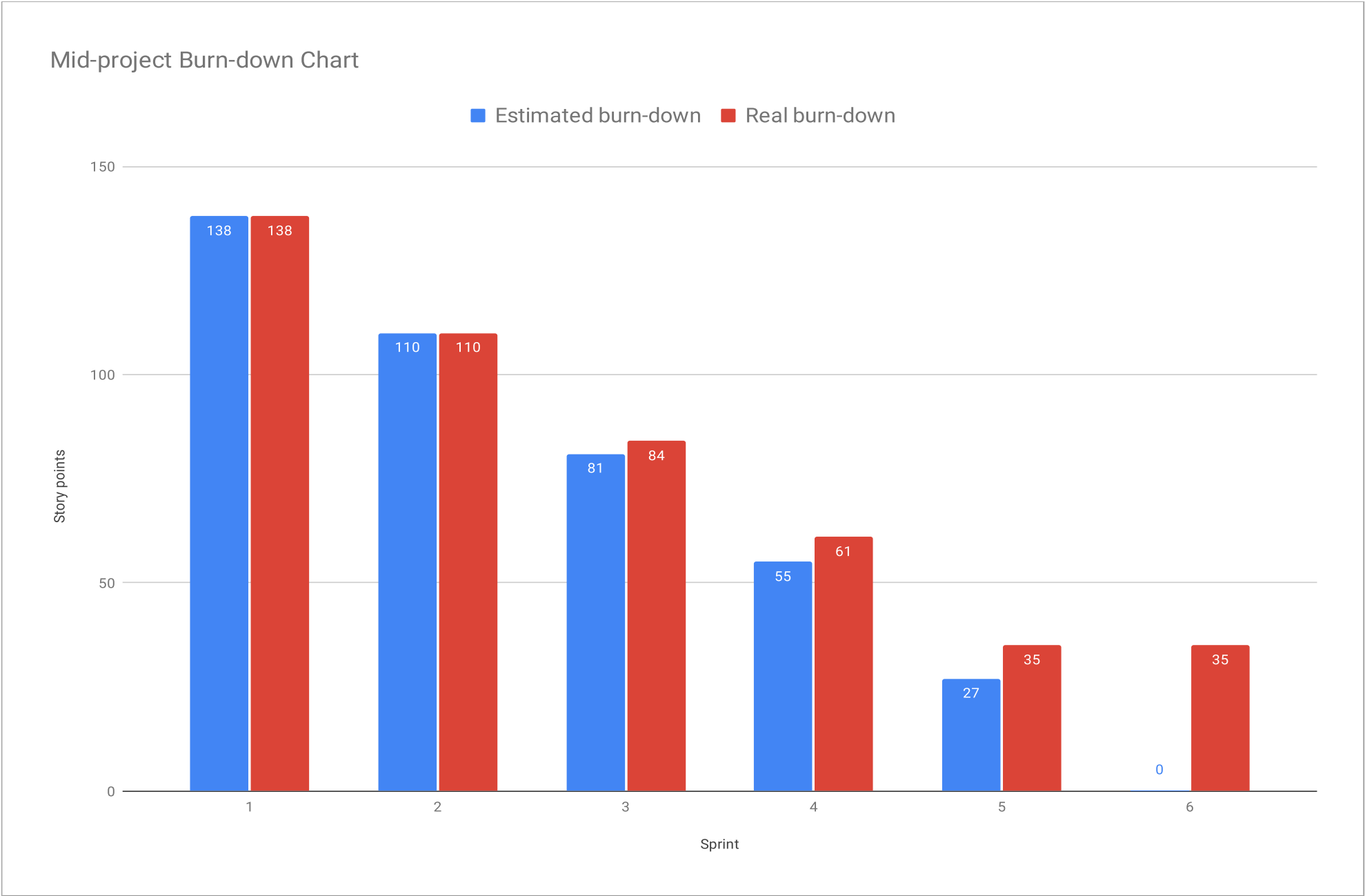
Goals	Develop a good quality and working Chatbot based on defined requirements
	Achieve the technical target in good atmosphere and clear communication
Meeting norms	Meeting topics are inserted in the agenda before the meeting starts
	Everybody aims to be on time, but being late is communicated beforehand and handled in an agile way
	Meeting topics need to be sharp and precise
	Meeting time must not be exceeded more than 30 min, otherwise schedule a new meeting
Working norms	We value quality over quantity
	Everyone contributes regularly and communicates openly
Coordination norms	Everyone sticks to their roles and in case of problems communicates
Communication norms	We check our communication channels at least once a day
	Important messages are sent in our WhatsApp group
Consideration norms	We discuss disagreement openly
	We vote for a final resolution
	We help in case someone needs it
Cont. improvement norms	Happiness index and stand up emails are reviewed in team meeting
	If problems are recognized escalate them to the team
Rewards	Online team event
	Everyone celebrates via a reaction in the zoom chat after each sprint
Sanctions	Assign unwanted jobs to person (rework a file, ...)
Signatures	Tobias Konheiser
	Hafidz Arifin
	Amela Pucic
	Emanuel Erben
	Sara El Brak
	Jesse Palarus
	Felix Nützel
	Abdelkader Alkadour
	Vukica Stojkovic

Product Vision	Project Mission
QAchat envisions an environment in which access to knowledge is just a message away. We aim to leverage the rapid advancement in language model technologies to create a seamless interface that enables employees to get their questions answered accurately, quickly, efficiently, and with ease - by a general language model that is trained on specific knowledge. Our goal is to provide a simple and convenient point of contact, with an easy-to-use interface that is integrated into widely used communication tools, and to make knowledge accessible to everyone - irrespective of their geographical location, language or technical ability.	QAchat evaluates newly developed LLMs to create a chatbot that provides users with accurate, reliable and context-specific answers to their questions - with a focus on accessibility and ease of use. The best suited network is trained on provided data that is collected from existing communication and documentation sources. The model is made available to users through a Slackbot integration, where questions can be asked and answers are provided.

[illegible]

Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Release							
	Total			138	138		
Sprints							
1	Large Language Model methods			28	138	28	138
2	Software architecture			29	110	26	110
3	Large Language Model prototypes			26	81	23	84
4	Code frameworks			28	55	26	61
5	Setup & Documentation			27	27	0	35
6	Sprint 6				0		35
Features							
1	Large Language Model methods						
		Identify the existing capabilities of LLM methods and their underlying algorithms					
			Research Slack bot requirement	5		5	
			Research LLM models	5		5	
			Research LLM method 1 (search API) properties	5		5	
			Research LLM method 2 (semantic search) properties	5		5	
			Research LLM method 3 (fine tuning) properties	5		5	
			Team logo design	3		3	
2	Software architecture						
		Determine the software architecture and the used components					
			Define diagram of runtime components	5		5	
			Define diagram of code components	8		8	
			A summary of the underlying technology stack	5		3	
			Textual explanation of the diagrams and choices	5		5	
			Initialize code repository	3		3	
			Initialize the software bill of materials	3		2	
3	Large Language Model prototypes						
		Further evaluate the functionality of each LLM method					
			Research semantic search vector storage	5		3	
			Research Slack web server hosting	5		3	
			Implement Alpaca/LLaMA LLM prototype	3		5	
			Implement BERT LLM prototype	5		3	
			Implement T5 LLM prototype	3		3	
			Create the LLM-server code framework	3		5	
			Create coding guidelines	2		1	
4	Code frameworks						
		Provide a structured foundation for building the chatbot					
			Research LLM server hosting	5		5	
			Determine the communication protocols used	3		3	
			Create Slack bot code framework	5		3	
			Create the semantic search code framework	3		3	
			Create the data processing code framework	3		5	
			Update product vision and product mission	3		2	
			Test Slack	3		2	

Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
5	Setup & Documentation	Prepare the necessary setups and extend the documentation	Test DeepL API	3		3	
			Create a build process video	5			
			Create a secure and private file exchange channel	3			
			Create testing setup	5			
			Set up vector database	2			
			Set up LLM for embedding generation	2			
			Move existing documentation to GitHub Wiki	5			
			Document Slackbot setup process	2			
			Set up LLM for chat message generation	3			
6	Sprint 6						



Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Release							
	Total			0	0		
Sprints							
1				0	0	0	0
2				0	0	0	0
3				0	0	0	0
...					0		0
Features							
1							
2							
3							

#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
10	Acceptance criteria are met.		
11	Work products are uploaded to the Github repository.		
12	A pull request is created for each related branch.		
13	The work products in the pull requests are reviewed.		
14	The corresponding branches are merged and closed.		
15	The bill of materials section of the planning documents is updated.		
16	All defined conventions are complied with.		
21		A release candidate with a working and meaningful increment to the previous sprint is tagged.	
22		Previously established features and security mechanisms must continue to work.	
23			
31			The project can be successfully built and deployed.
32			All created tests are passed.
34			The implemented features pass a simple user test.
35			Developer documentation is created.
36			User documentation is created and updated
37			The release has been approved by all team members

Type	Link / reference
Team Meeting Agenda	Team Meeting Agenda
Checklists	https://docs.google.com/spreadsheets/d/1K46lmoocSKWYXWQgVVGndU6QzNazhF-i7bsbbovnpMk/edit?usp=sharing

#	Context	Name	Version	License	Comment
1		python	3.8	Python License 2.0.1	
2	supabase	supabase	1.0.3	MIT License	
3	llama-cpp-python	llama	0.1.39	MIT License	
4	langchain	langchain	0.0.154	MIT License	
5	slack_sdk	Slack API	3.21.3	MIT License	
6	openai	OpenAi	0.27.5	MIT License	
7	atlassian-python-api	atlassian-python-api	3.36.0	Apache License 2.0	
8	selenium	selenium	4.9.0	Apache License 2.0	
9	numpy	numpy	1.24.3	BSD License (BSD-3-Clause)	
10	pandas	pandas	2.0.1	BSD License (BSD-3-Clause)	
11	aleph-alpha-client	Aleph-Alpha	3.1.0	MIT License	
12	sentence_transformers				
13	InstructorEmbedding				
14	slack-bolt	Slack Bolt	1.18.0	MIT License	
15	slack-sdk	Slack SDK	3.21.3	MIT License	
16	deepl	DeepL API	1.14.0	MIT License	

Last Name	First Name	Value					
Alkadour	Abdelkader	0		0.00	OK		
Arifin	Hafidz	0					
El Brak	Sara						
Erben	Emanuel	0					
Konheiser	Tobias			0	No size		
Stojkovic	Vukica			1	Trivial size		
Nützel	Felix	0		2	Small size		
Palarus	Jesse	0		3	Medium size		
Pucic	Amela	0		5	Large size		
				8	Very large size		
				13	Too large (size)		

Additional Documentation

Team Meeting Agenda "AMOS QAchat"

Date: 2023_05_24

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Sprint Review	30	PO	- Release Manager creates release candidate build - PO walks through "awaiting review" tickets, probing SDs			
2	Sprint Release	5	PO	- PO decides release - Release Manager creates release			
3	Sprint Retrospective	15	SM	- SM reviews the impediments - SM performs roll calls - Everyone answers happiness index - Review of Happiness index and standup emails			
4	Sprint Planning	30	PO	- PO works through product backlog - SD perform planning poker			
5							
6							
7							
8							
9							
10	Open Points	5	Everybody				
		85					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_05_22

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	demonstration of current state	10					
2	questions from Sebastian	10		TBD			
3	questions to Sebastian	10	Tobi	<div>- About the NDA: Shoud we plan for real data or create dummy data? - Which datatypes should be supported (PDF, Docx, HTML, Confluence, Slack)? - Who will be allowed to add data to the database? - Which interface (CLI, GUI) should be created for data ingestion?</div>	<div>- NDA for real data - focus on Confluence, Slack General channel would be gread - automatic database update with blacklist</div>		
4	questions to Sebastian	20	Team	<div>- should there be a IAM or sth like this for the data when the user ask a question - in which language should the ChatBot answer (always german???)</div>	<div>- language change would be nice to have</div>		
5							
6							
7							
8							
9							
10							
		50					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_05_17

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Sprint Review	30	PO	- Release Manager creates release candidate build - PO walks through "awaiting review" tickets, probing SDs			
2	Sprint Release	5	PO	- PO decides release - Release Manager creates release			
3	Sprint Retrospective	15	SM	- SM reviews the impediments - SM performs roll calls - Everyone answers happiness index - Review of Happiness index and standup emails			
4	Sprint Planning	30	PO	- PO works through product backlog - SD perform planning poker			
5	Definition of Done	5	Tobi + Sara	agree on project specific DoD			
6							
7							
8							
9							
10	Open Points	5	Everybody				
		90					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_05_10

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Sprint Review	30	PO	- Release Manager creates release candidate build - PO walks through "awaiting review" tickets, probing SDs			
2	Sprint Release	5	PO	- PO decides release - Release Manager creates release			
3	Sprint Retrospective	15	SM	- SM reviews the impediments - SM performs roll calls - Everyone answers happiness index - Review of Happiness index and standup emails			
4	Sprint Planning	30	PO	- PO works through product backlog - SD perform planning poker			
5	Definition of Done	3	Tobi + Sara	agree on project specific DoD			
6	Sprint Goal	2	Tobi + Sara	agree on sprint goal			
7							
8							
9							
10	Open Points	5	Everybody				
		90					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_05_03

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Sprint Review	30	PO	- Release Manager creates release candidate build - PO walks through "awaiting review" tickets, probing SDs			
2	Sprint Release	5	PO	- PO decides release - Release Manager creates release			
3	Sprint Retrospective	15	SM	- SM reviews the impediments - SM performs roll calls - Everyone answers happiness index - Review of Happiness index and standup emails			
4	Sprint Planning	30	PO	- PO works through product backlog - SD perform planning poker			
5	Stand up Emails	2	Tobi + Sara	please write your standup emails regularly		first standup email is sent by sunday evening	
6							
7							
8							
9							
10	Open Points	10	Everybody				
		92					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_04_26

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Sprint Review	30	PO	- Release Manager creates release candidate build - PO walks through "awaiting review" tickets, probing SDs		Method 2: semantic search a Google Open Source model	
2	Sprint Release	5	PO	- PO decides release - Release Manager creates release		released	
3	Sprint Retrospective	15	SM	- SM reviews the impediments - SM performs roll calls - Everyone answers happiness index - Review of Happiness index and standup emails		see imp board	
4	Sprint Planning	30	PO	- PO works through product backlog - SD perform planning poker			
5	Get to know each other	5	Vukica				
6	Project Setup	5	Tobi	- programming language and coding guidelines - tools - branching and merging		issue is in progress	
7							
8							
9							
10	Open Points	5	Everybody				
		95					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_04_24

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	getting to know each other	5		introduce new team members			
2	organization	20		- access to Slack - access to Confluence - access to GDrive / Google Cloud	NDA is a problem, work in progress		
3	project topics	20		talk about new advances in LLMs and project requirements	- documents mostly in german - chatbot has no specific language requirement		
4							
5							
6							
7							
8							
9							
10							
		45					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_04_19

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Ensure that everybody has access	5	Deliverables	- shared folder with planning documents - Github Repo - Happiness index tool			
2	initialize planning documents	10	Deliverables	insert base data, agree on role assignments			
3	Agree on team contract	10	Deliverables	submit as part of planning documents			
4	Discussion about first project impressions	10	Tobi	What are your first impressions from yesterday? (good, bad, suggestions, concerns, ...) What documents / workspaces do we have (from Sebastian and Prof. Riehle)?			
5	Getting to know each other	10	Tobi	What experiences do you have (regarding topics that might be needed in this project) ? How do you work (Timeslot, Tools, ...) ?			
6	Slack	10	Tobi	Do we want to create our own Slack channel?			
7	Homework	30	Tobi	Go through Homework 1 tasks			
8	Fill in happiness index	5	Deliverables	counts as sprint 0, closes at midnight			
9							
10							
		90					

Team Meeting Agenda "AMOS QAchat"

Date: 2023_04_18

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	getting to know each other	10		short introduction of each person			
2	project introduction	40		- go through project definition from Sebastian - look at methods Sebastian already collected	Sebastian provides us the presented sildes		
3	organization	20		- discuss access to Slack, Confluence, GDrive and processing resources	in progress, discuss results in next meeting, Sebastian will invite us to the Google Cloud		
4							
5							
6							
7							
8							
9							
10							
		70					

Team Meeting Agenda "AMOS QAchat"

Date: tbd

ID	Topic	Time	Author	Description	Result	Decision	Responsible
1	Sprint Review	30	PO	- Release Manager creates release candidate build - PO walks through "awaiting review" tickets, probing SDs			
2	Sprint Release	5	PO	- PO decides release - Release Manager creates release			
3	Sprint Retrospective	15	SM	- SM reviews the impediments - SM performs roll calls - Everyone answers happiness index - Review of Happiness index and standup emails			
4	Sprint Planning	30	PO	- PO works through product backlog - SD perform planning poker			
5							
6							
7							
8							
9							
10	Open Points	10	Everybody				
		90					

Role	Tasks
Everyone	participate in lecture participate in team meeting write 2 stand up emails
PO	update feature board update planning documents
SD	work on issues update bill of materials
SM	update impediments backlog
Release Manager	ensure that sprint release candidate is tagged

Role	Tasks
PO	create feature board screenshot create planning document PDF
SD	push current work update assigned issues
SM	create impediments backlog screenshot
Release Manager	tag sprint release candidate

Meeting Preparation	<p>ensure product backlog is ready</p> <p>coordinate with Release Manager</p>	
Sprint Review	<p>ask Release Manager to build release candidate</p> <p>walk through "Awaiting review" issues</p> <ul style="list-style-type: none"> - ask SD to demo item under review - check fulfillment of acceptance and DoD criteria - move item to feature archive (add label "Real Size = Y") or move issue to product backlog 	Product Owner 1
Sprint Release	<p>decide whether release candidate should be released</p> <p>coordinate with Release Manager</p>	
Sprint Retrospective	<p>SM TODOs</p> <p>answer Happiness Index</p>	Scrum Master
Sprint Planning	<p>reprioritize product backlog items</p> <p>start by most important backlog item and ask SDs to estimate the story points, do until SDs have enough work</p> <p>story points = {0, 1, 2, 3, 5, 8, 13}</p>	Product Owner 2

Meeting After-work

- update planning documents
- update feature board

Steps to create a Github Issue:

1. Go here: [Issues · amosproj/amos2023ss03-qachat \(github.com\)](https://github.com/amosproj/amos2023ss03-qachat/issues)
2. click "New issue"
3. select correct template
4. write a title and description that follow the INVEST criteria Independent, Negotiable, Valuable, Estimatable, Small, Testable
5. select the correct project "amos2023ss03-feature-board"
6. select the correct milestone (optional) "sprint-{XY}"
7. add correct labels "Est. size = X" and issue type
8. add Assignees (optional)
9. click "Submit new issue"
10. go here: [amos2023ss03-feature-board \(github.com\)](https://github.com/amos2023ss03-feature-board)
11. move issue to Product Backlog
12. open issue and set corresponding priority