Project Name	
Online team meeting	https://fau.zoom.us/j/67882200480?pwd=SFZEcmhWbVJFM3VHK2ErVmdzVWdvZz09
Production system (if any)	
Test system (if any)	
GitHub repository	https://github.com/amosproj/amos2022ss01-firmware-downloader
GitHub kanban board (project)	https://github.com/amosproj/amos2022ss01-firmware-downloader/projects/1
Team T-shirt (white)	https://www.shirtinator.de/en/loadBasket/hriPWRy39Qc
Team T-shirt (black)	https://www.shirtinator.de/en/loadBasket/ziDwG0qolz7
Additional materials	https://drive.google.com/drive/folders/1CuSPsDVs2Uylrpx1031sULPWs9QJqpzD?usp=sharing

Last Name	First Name	GitHub User Name	Email Address
Hellmich	Andreas	FendVario1	andreas.hellmich@fau.de
Schels	Florian	FloSchels	florian.schels@fau.de
PALA	TEJESH	TejeshPala	tejesh.pala@fau.de
May	Maximilian	elgustov	
Kothapalli	Uday Varun	udayvarun	uday.varun.kothapalli@fau.de
Magsi	Tariq Hussain	tariqmagsi	tariqmagsi125@gmail.com
Asghar	Ali	AliAsghar01	alan.asgharawan@gmail.com
Arif	Muhammad Fazeel	ariffazeel99	arif.fazeel99@gmail.com
Aziz	Bilal Asghar	bilalasgharaziz	bilalasgharaziz@gmail.com

Goals	Successfully using the scrum framework to create a software that is complete, has no bugs, doesn't break and fulfills all given requirements.	Signature
Jours	no sago, accont steak and familie all given requirements.	Cignataro
Meeting norms	Wednesay meeting is mandatory for everyone, other sperate meetings for the people involved (may vary). Being on time is mandatory. Delays or no-shows (e. g. sickness) have to be announced ASAP, at least before the start of the meeting. Teammeeting should be structured and held according to SCRUM. Actual work has to be done during the sprint and/or in separate meetings.	Florian Schels
Working norms	critisism only on professional level; try to solve issue directly, if not possible contact the SM, if still no solution make it part of the team meeting	Maximilian May
		Andreas Hellmich
Coordination norms	Agree with FS and AM. POs responsible for technical coordination, SM responsible for ideal implementation of SCRUM Framework and team issues. Ideally SM involvement declines over time. If Meeting is requested by SD to solve misunderstandings they should select the Meeting leader	
	Ü ,	
Communication norms	Informal communication via Whatsapp. Technical communication via Slack. Respond within 24h max (and if it's just "i'll look into it at x"); Communicate illness/delays once noticed; If anything is not clear, communicate that immediately.	
Consideration norms	no side conversations during meetings	Tejesh Pala
Cont. improvement norms	team progress is tracked using project board. Impediments backlog is discussed in team meeting.	Uday Varun Kothapalli
Rewards	If sprints are successful, no additional meetings are neccessary;)	Tariq Hussain Magsi
Sanctions	No Sanctions for now - might be added later"	Fazeel Arif
		Ali Asghar
		Bilal Asghar Aziz
https://oss.cs.fau.de/teaching/c	our	

#	Meeting Day	Uni	Comment	Product Owner	Software Developer	Release Manager	Scrum Master
1	2022-04-27			Andreas Hellmich / Florian Schels	Everyone else	N/A	Maximilian May
2	2022-05-04			Andreas Hellmich / Florian Schels	Everyone else	Andreas Hellmich	Maximilian May
3	2022-05-11	Yes		Andreas Hellmich / Florian Schels	Everyone else	Tariq Hussain Magsi	Andreas Hellmich / Florian Schels
4	2022-05-18			Florian Schels	Everyone else	Bilal Asghar Aziz	Maximilian May
5	2022-05-25	Yes		Andreas Hellmich	Everyone else	Ali Asghar	Maximilian May
6	2022-06-01			Florian Schels	Everyone else	Tariq Hussain Magsi	Maximilian May
7	2022-06-08	Yes	Mid-term due	Andreas Hellmich	Everyone else	TEJESH PALA	Maximilian May
8	2022-06-15			Florian Schels	Everyone else	Uday Varun Kothapalli	Maximilian May
9	2022-06-22			Andreas Hellmich	Everyone else	Ali Asghar	Maximilian May
10	2022-06-29	Yes		Florian Schels	Everyone else	Fazeel Arif	Maximilian May
11	2022-07-06			Andreas Hellmich	Everyone else	Uday Varun Kothapalli	Maximilian May
12	2022-07-13			Florian Schels	Everyone else	Bilal Asghar Aziz	Maximilian May
13	2022-07-20	Yes		Andreas Hellmich	Everyone else	TEJESH PALA	Maximilian May
14	2022-07-27		Demo day!	Andreas Hellmich / Florian Schels	Everyone else	Fazeel Arif	Maximilian May
15	2022-08-03		Retrospective	Andreas Hellmich / Florian Schels	Everyone else	TEJESH PALA	Maximilian May

Product Vision	Project Mission
The EMBA environment helps IT-Security professionals to get an easy and uncomplicated overview over vulnerabilities in firmware files. Its analysis process is started by an automated download of firmware files, which then are investigated for vulnerabilites. Users can acces EMBArk, a webbased dashboard, in order to obtain insights into the results. The whole product is based on a modular structure so only a part of the functionalities can be used, as well as the selection of vendors can be limited or easily expanded by adding additional modules.	The mission of this project is to create a fully automated and modularized firmware crawler, that can crawl vendor websites regularly and unsupervised for previously unknown firmware images.  The found images are then added to EMBArk, where the vulnerability analysis is executed, logged and visualized.

Term	Definition
major bug	A bug that results in an unexpected outcome, either visible to the user or persisted within the database.

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
3	Project			28	,	30	. ,	
		Research & Planning						
			Examination of Asus_Harvest	5		5		
			Examination of firmadyne scraper	5		5		
			Examination of Belkin_Harvest	5		5		
			Examination of Sitecom_Harvester	5		5		
			Creation of Database Model	5		5		
			Creation of Architectural Design Documents	3		5		
4	Project	Setup		31				
		Create	e basic software modules					
			Create Firmware Download Executer	5		3		
			Extract Metadata from firmware file	5		5		
			Examination of ABB firmware download area	5		5		
			Create Database	8		8		
			JSON configuration file	3				
			Examination of Schneider Electric firmware download area	5				
5	Downlo	ad Mod	dule					
		Create	e first vertical slice (Download -> DB)	30				
			Examination of GE firmware download area	5				
			Save metadata to database	5				
			Check if firmware is new	5				
			Download Module for ABB	5				
			Download Module for Schneider Electric	5				
			Examination of 'Firmware-Scrapers'	5				
6								

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

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

#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
1	Code is complete	No major bugs	No major bugs
2	Code is uploaded in GitHub	vendor module test	Feature test coverage at/above 50%
3	Fulfills the acceptance criteria in the User Story		User documentation is available
4	Documentation has been updated		Developer documentation is available
5	Functionality has been reviewed		Installation script is available
6	Only MIT-Licensed Libraries are used		
7	Create tests necessary to ensure feature is working		
8	Bill of Materials updated		
9			
10			

Type	Link / reference

S.No	Context	Name	Version	License	Comment
1	DB Management Initial Setup	SQLite3	SQLite 3.7.15	Open Source S/W	Internal Library of Python
	OS Management for locating files on the OS				
2	Directories	OS Library	Available with Python 3	Open Source S/W	Internal Library of Python
_	This is used to log diffecrent messages in the				
	filesystem for baktracing the results	Logging Module	Available with Python 3	Open Source S/W	Internal Library of Python
4	Used for making threads in python	threading	Available with Python 3		
5					
6					
7					
8					
9					
10					
11					
12					

	5 First Name	Value			
Hellmich	Andreas		TUIVI	TUIVI	
Schels	Florian		0!	0!	
PALA	TEJESH		O:	U:	
May	Maximilian				
Kothapalli	Uday Varun		0	No size	
Magsi	Tariq Hussain		1	Trivial size	
Asghar	Ali		2	Small size	
Arif	Muhammad Fazeel		3	Medium size	
Aziz	Bilal Asghar		5	Large size	
			8	Very large size	
			13	Too large (size)	

WHAT WENT WELL	WHAT DIDN'T GO SO WELL	YOUR QUESTIONS	IDEAS AND ACTION
Communication between POs + SMs	Communication overall; sprint backlog has not been done	Where there any issues understanding the tasks that should have been done?	Assignment of tasks to each member every week and deadline should be strict
	No progress in feature board	Is everbody understanding the scrum framework?	Software developers should about task if they have no assigned task because evelopers week there should be task each member
	No communication about	WHAT TASK SHOULD BE	each member
	problems between SDs and POs/SM	DONE. WHAT TASK IS ASSIGNED?	
	No Communication about the sprint delivery/planning by PO's - Sprint 1 start there is no	Is everybody sure where to find	
	communication	what information	Regular SD Meeting
			use the Happiness Index to regular updates
			Proper communication as s starts

	Questions for additional Teammeeting	
1	How to install Embark if someone don't have Kali Linux?	Use Kali Linux inside a VM; if necessary Andreas can provide help with setting up a Hyper-V VM  You might get it to run in other Linux-Distributions, but a Kali VM is the way to go
2	If someone stucks in programming of this software who will guide us?	Normally all coding related tasks are responsibility of the SDs. Please discuss problems with the other SDs first. However if the problem persists, we can of course also discuss them in the teammeeting or in a separate meeting and find a solution or workaround all together.
3	Who will check the code after implementation?	Release manager checks quality of the code before the teammeeting and has to ensure that everything is running as expected. POs confirm the features in the Sprint Review.
4	Do we also build a UI	No, EMBARK is the UI
E	How do we maintain the MySQL based DB for our Project?, Is it in a Server or a memory location in a file system?  Can this be maintained in an Excel output or JSON or yaml or a db	As per Industry Partner, the database will be made available offline so a sqlite library will be used based on intial setup  The database uses a local .db extension file which will be used by SQLite and an internal library of
5	access file in local file system?	Python
6		
7		

No.	Sprint	Impediment	Explanation	Solution	Source	Status
1	2	Uneffective Teammeeting	Poor participation in the discussions	Turning cameras on. Improve Team spirit.	Max	improved
2	2	Lack of communication during sprint		Finally everybody joined slack. Explanations and motivational email hopefully helped.	Max	improved
3	2	No tasks have been done		Clearly worded email by SM to point out issues and motivate everybody.	Max	solved and archived
4	2	Lack of understanding duties and SCRUM Framework	Way too many questions, which should have been clear for a long time	An additional, not mandatory meeting was held where SM and POs offered to answer remaining questions. Nobody showed up, but previously handed in questions have been answered. I expect fully working processes and teammeetings from now on.	Max	improved
5	2	Unorganized and uninformed teammembers	Too many questions regarding links, documents etc.	Please organize yourselves. Set up folders and bookmarks for all the information and documents we need in this project.	Andreas	improved
6	3	Unprepared Release Manager	This Impedimence illustrates the lack of understanding of the SCRUM Framework as well as the planning (and all other) documents by SDs.	See Impedimence 4 and 5. Issue has been discussed in team meeting and feedback email. I expect that this will not happen again.	Max	solved
7	3	Very late commits; unsigned commits	If you commit your work 30 minutes before teammeeting there is no time for the release manager to prepare a working demo. If you dont sign your commits, the teaching team does not know who did the work.	Issue has been discussed in team meeting and feedback email. Solution should be obvious, please organize your tasks and duties together as SDs.	POs	approached
8	3	Meeting takes too long	Little tasks requested by SM/POs during meetings (f.e. in Retro) take too long.     Sprint review takes too long.	1) We still need better participation in the teammeeting.  2) Please try to quickly present your key results and be ready to share your screen.	Max	approached
9	4	Problems are indicated too late	Please check for problems/missunderstandings/questions as early as possible. If POs are contacted on monday evening (or not at all), the timeframe for solutions is too short.	POs opened a new slack channel specifically for questions regarding them and the features. Please use it as often as necessary.	POs	approached
10	4	Lack of teamwork between SDs	Lack of teamwork and communication between SDs during the sprint.	Please connect at least in teams of two and talk about your concept before the actual implementation of the features. Check each others code afterwards before the sprint review. With this approach we can really get the best ideas and solutions out of our team.	Max	approached