Project Name	Software Oscilloscope - SOSCI
Online team meeting	https://fau.zoom.us/j/67295942185
Production system (if any)	...
Test system (if any)	...
	amosproj/amos2022ws03-software-oscilloscope (github.com)
GitHub repository	
GitHub feature board	https://github.com/users/dev3225/projects/1
GitHub impediments backlog	https://github.com/users/rbalink/projects/1
Team T-shirt (white)	https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/ceb4e341-f0a7-43d0-acb6-0797a9c22c46
Team T-shirt (black)	https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/1a23db31-0983-43b3-a0b5-d19819f941d5
Additional materials	...

Last Name	First Name	GitHub User Name	Email Address
Degen	Jan	jandegen	jan.degen@fau.de
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Balink	Robert	rbalink	robert.balink@campus.tu-berlin.de

#	Meeting Day	Product Owner	Software Developer	Release Manager	Scrum Master	Comment
1	2022-10-19	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon		Robert	Decided on name: SOSCI. Logo as homework Filled out Team contract Decision about rotating team meeting moderator postponed due to required input friom Mr. Riehle Team members should proactivly engage in issue assignments. The skill matrix will be used for identifiying issue assignments, but the team agreed that everybody can take up an issue on interest Standup mails will be sent flexibel and individually The team agreed on notifiying the each other in case of issues of any kind Scope of sprint: Team Contract Team Logo GitHub projects (Feature & Impediment) boards Team T-Shirt
2	2022-10-26	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Jens Wächtler	Robert	Sprint 01 deliverables reviewed. Sprint 02 issues discussed and assigned.
3	2022-11-02	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Marcel Schöckel	Robert	
4	2022-11-09	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Jan Degen	Robert	
5	2022-11-16	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Leander Tolksdorf	Robert	
6	2022-11-23	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Leon Jünemann	Robert	
7	2022-11-30	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Leon Jünemann	Robert	Mid-term due
8	2022-12-07	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Philipp Kramer	Dr. Dirk Riehle	
9	2022-12-14	Saber, Dev	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Ingrid	Robert	
10	2023-12-21	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Nicolas Kolbenschlag	COACH student	Optional team meeting
11	2023-01-11	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Nicolas Kolbenschlag	COACH student	
12	2023-01-18	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Marcel Schöckel	Robert	

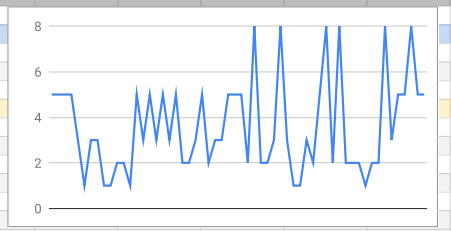
#	Meeting Day	Product Owner	Software Developer	Release Manager	Scrum Master	Comment
13	2023-01-25	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Jan Degen	Robert	
14	2023-02-01	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Nicolas Kolbenschlag	Robert	
	2023-02-07	Dev, Saber	Jan, Leander, Jens, Marcel, Philipp, Nicolas, Ingrid, Leon	Jens Wächtler	Robert	Team meeting before demo day
15	2023-02-08			Jens Wächtler	COACH student	Demo day!
	2023-02-15			Philipp Kramer	COACH student	Retrospective

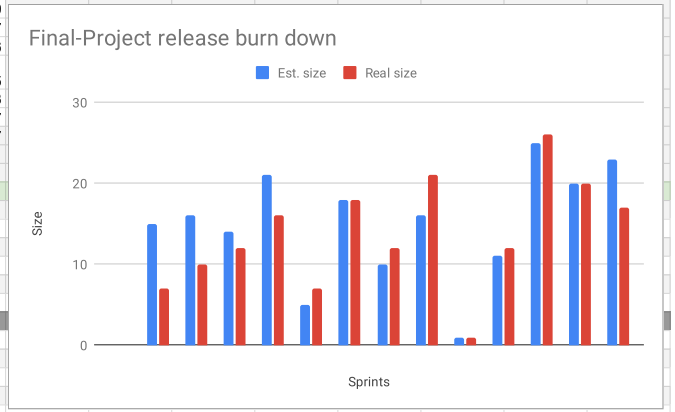
Goals	Satisfy the client Develop a working application Each team member is learning and taking benefit from the project Maintaining a happiness index above 1
Meeting norms	12:30(Wednesday) Zoom; https://fau.zoom.us/j/67295942185
Working norms	- We help each other - Everyone feels responsible for the product - We try to keep happiness high - We always do code reviews - We create a solid CI/CD pipeline - We assign issues according to the skill matrix
Coordination norms	- We use Zoom for wednesday's team meetings, - Discord for internal communication and - GitHub for tasks and issues - We pick issues proactively and agree on assignments in the team
Communication norms	- Whenever there's **any** problem, we communicate it with the team - We interact politely and respectfully with each other - We have rotating moderators and protocol writers for each meeting - We write protocols of all meetings
Consideration norms	- When disagreeing, we use voting for decisions - We consider
Cont. improvement norms	- We do retros
Rewards	- We celebrate
Sanctions	- 1 pushup / minute

Signature	- Jens Wächtler - Leon Jünemann - Leander Tolksdorf - Nicolas Kolbenschlag - Marcel Schöckel - Jan Degen - Philipp Kramer - Ingrid Münch - Dev Darshan Kasthuri Umashankar - Saber Jelodari - Robert Balink

Product Vision	Project Mission
The objective of SOSCI is to enable users of oscilloscope a way to gain access to all the features and possibilities through a software that can be done through a hardware oscilloscope and beyond. Our vision is to create a method that would better everyday life of engineers.	To organize features of an oscilloscope and processing of information and make it possible for the user to access it through a webpage. To continuously raise the level of experience of the customer with use of current technologies and maximize the output of our customer. Using SOSCI application for displaying sensor data on the frontend.

Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Release							
	Total			195	195	179	
Sprints							
1	**Project kick-off**	Get to know eachother and documentation		0	195	0	179
2	**Project Basic setup**	Basic UI and architecture setup		15	195	7	179
3	**Data connection**	Connect frontend and backend		16	180	10	172
4	**Basic visualization**	Data visualization and docker simplification		14	164	12	162
5	**User Interface & necessary functionalities**	Adding important functionalities		21	150	16	150
6	**Mid-project release**	To have a working product with basic functionalities		5	129	7	134
7	**Add functionalities**	Improve functionalities and its implementations		18	124	18	127
8	**Design**	Improve UI design		10	106	12	109
9	**Improve core functionality**			16	96	21	97
10	**Improvements (optional sprint)**			1	80	1	76
11	**Advanced functionalities**	Help users in a way the analogous oscilloscope cannot		11	79	12	75
12	**Refinement of UI and functionalities**	Front end refinement and bug fixes		25	68	26	63
13	**Preparation for demo day**	Demo slides, videos and posters; Bug fixes		20	43	20	37
14	**Final Project Release**	Deliverable product without major bugs		23	23	17	17
Features							
1	**Project kick-off**	Get to know eachother and documentation	Create GitHub projects for tracking issues				
			Team contracts				
			Create team logo				
			Role assignment				
2	**Project Basic setup**	Basic UI and architecture setup	Create Hello world generator	5		3	
			Create a helloworld page for front-end	5		2	
			Docker setup	5		2	
3	**Data connection**	Connect frontend and backend	Receive signal	5		5	
			Display cartesian plot	3		5	
			Home page - Basic	1		0	
			Display cartesian plot	3			
			Create UI - Zoom feature	3			
			Create UI - Scroll inside plot				
			Create On/off button	1			
4	**Basic visualization**	Data visualization and docker simplification	Documentation - Definition of Done				
			Signal - step function	1		1	
			Signal - cosine wave	2		1	
			Signal - sine wave	2		2	
			Simplifying Docker Configuration	1		1	
			Data signal visualization from the node server	5		5	
			Create layout draft for UI	3		2	
5	**User Interface & necessary functionalities**	Adding important functionalities	Vertical adjustment - Amplitude				
			Horizontal adjustment - Time sweep speed	5		3	
			Build process video	3		2	
			Scale factor - Horizontal and vertical				
			Amplitude indicator - for each channel	5		5	
			Vertical positioning - with change in position of zero	3		3	
			Create UI - Start and Stop button				
			Setting up CI/CD	5		3	
6	**Mid-project release**	To have a working product with basic functionalities	Setup front-end linter	2		3	
			Refactoring - Generator	2		1	
			Refactoring - Frontend	3		3	





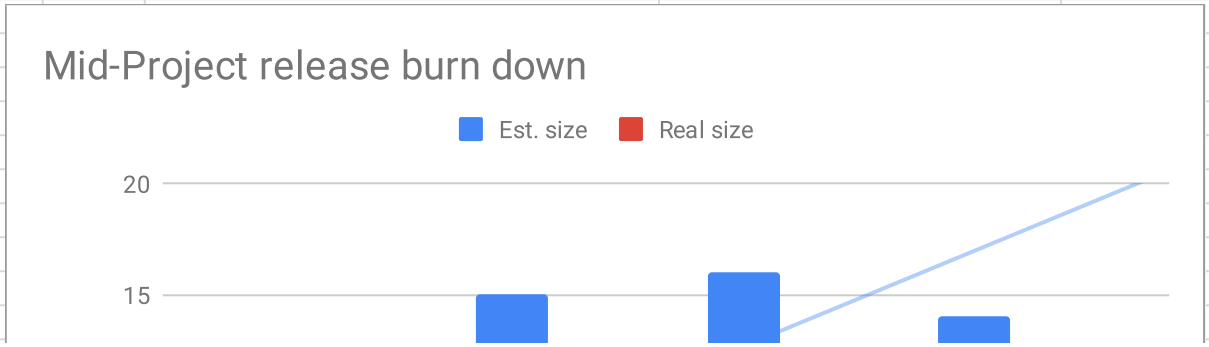
Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
7	**Add functionalities**	Improve functionalities and its implementations	Cursors	5		3	
			Bug - Automated deployment does not work	2		2	
			Signal line thickness	3		3	
			Bug - Scale indicators are not linked to waves	3		5	
			Signal head	5		5	
8	**Design**	Improve UI design	Markers on zero points	5			
			Test evaluation - WebGL Testing	5			
			Replace Start/Stop button with toggle buttons	2		2	
			Refactoring - WebGL	8		8	
			Voltage scale indicator	2		2	
9	**Improve core functionality**		Common Slider - Time sweep speed	2		2	
			GND Button	3		3	
			Rescale window	8		13	
			Refactoring - front end sliders	3		3	
			Sweep speed min value is too low				
10	**Improvements (optional sprint)**		Control panel - Full screen				
			Time sweep speed - indicator	1		1	
11	**Advanced functionalities**	Help users in a way the analogous oscilloscope cannot	CICD deployment refers to base	1		0	
			Distribute button for channels	3		5	
			Preset access - Dropdown list	2		2	
			Preset Save - 'Save preset' button and Text box	5		5	
12	**Refinement of UI and functionalities**	Front end refinement and bug fixes	Signal lines not contiguous	8		13	
			Tooltips for buttons	2		2	
			Remove bouncing balls for signal position indicators	8		5	
			Channels for visualization	2		2	
			Responsive web design	2		2	
			Rework UI - Preset save	2		1	
			Channel naming	1		1	
13	**Preparation for demo day**	Demo slides, videos and posters; Bug fixes	Demo day slide	2		2	
			Icons with description for each control column	2		2	
			Front end tests	8		8	
			Generator tests	3		3	
			Speed of values being displayed may be not realistic?	5		5	
14	**Final Project Release**	Deliverable product without major bugs	User documentation - Final release				
			Design documentation - Final release				
			Build documentation - Final release				
			Refactoring - Line thickness	5		5	
			Performance drop - Time sweep manipulation(current)	8		2	
			Backend Tests	5		5	
			Signal head - WebGL	5		5	

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

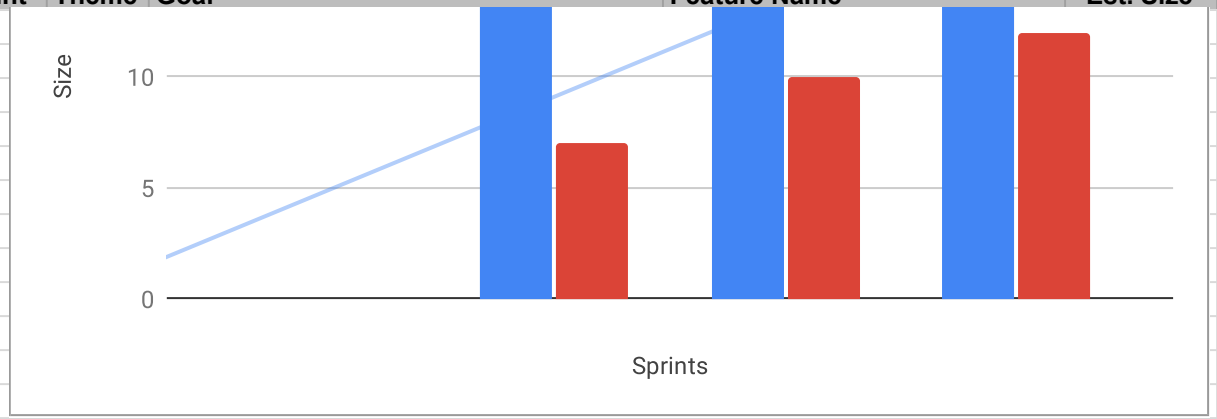
Term	Definition
SOSCI	Project name, Software Oscilloscope
Frontend	The svelte frontend of SOSCI
Sample	A number representing a voltage
Package	A UDP package of 10 samples
Plot	A continuous line that gets drawn from a stream of samples
Amplitude	A number that scales the plot of a sample
Offset	A number that offsets the plot of a channel vertically
Time sweep	A number that defines what time a plot needs to cross a certain horizontal division

Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
Release							
	Total			66	66	29	
Sprints							
1		Get to know eachother and documentation		0	66	0	66
2		Basic UI and architecture setup		15	66	7	66
3		Connect frontend and backend		16	51	10	59
4		Data visualization and docker simplification		14	35	12	49
5		UI functionalities		21	21	0	0
Features							
1			Create GitHub projects for tracking issues				
			Team contracts				
			Create team logo				
			Role assignment				
2			Create Hello world generator	5		3	
			Create a helloworld page for front-end	5		2	
			Docker setup	5		2	
3			Receive signal	5		5	
			Display cartesian plot	3		5	
			Home page - Basic	1		0	
			Display cartesian plot	3			
			Create UI - Zoom feature	3			
			Create UI - Scroll inside plot				
			Create On/off button	1			

Sprint	Theme	Goal	Feature Name	Est. Size	Est. Remaining	Real Size	Real Remaining
4			Documentation - Definition of Done				
			Signal - step function	1		1	
			Signal - cosine wave	2		1	
			Signal - sine wave	2		2	
			Simplifying Docker Configuration	1		1	
			Data signal visualization from the node server	5		5	
			Create layout draft for UI	3		2	
5			Vertical adjustment - Amplitude				
			Horizontal adjustment - Time sweep speed	5		0	
			Build process video	3		0	
			Scale factor - Horizontal and vertical				
			Amplitude indicator - for each channel	5		0	
			Vertical positioning - with change in position of zero	3		0	
			Create UI - Start and Stop button				
			Setting up CI/CD	5		0	



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



#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
	Feature/Bug/Change has been implemented	Sprint Review completed	All required features are implemented
	Application compiles successfully	Sprint Retrospective completed	User manual is ready
	Code is documented	Pull request into Main branch merged	Technical manual is ready
	Feature/Bug/Change is tested by at least one unit or e2e test	Release candidate has been tagged	No critical bugs
	Tests have been passed without warnings (except "deprecated" warnings)	Every user story fullfills the feature DoD	Demo approved by team
	Changes have been reviewed	All issues are either closed or moved back to the Product Backlog	
	PR has been merged to dev branch	All completed issues have a real size tag	
	New dependencies have been added to bill of materials	Backlog is up to date	
	Software archticture diagram has been updated		
	All acceptance criteria are fullfilled		
	Screenshot is attached to issue		

Type	Link / reference
SOSCI Home	https://github.com/amosproj/amos2022ws03-software-oscilloscope/wiki
User Documentation	https://github.com/amosproj/amos2022ws03-software-oscilloscope/wiki/User-Documentation
Design Documentation	https://github.com/amosproj/amos2022ws03-software-oscilloscope/wiki/Design-Documentation
Build & Deployment documentation	https://github.com/amosproj/amos2022ws03-software-oscilloscope/wiki/Build-&-Deployment-Documentation

#	Context	Name	Version	License	Comment
1	generator: used for achieving precise PPS	tokio	1.21.2	MIT License	asynchronous runtime lib for writing network apps in Rust
2	OS	Docker	20.1	Apache 2.0	Container development and product deployment
3	Testing	Cypress	11.0.1	GPLv2	
4	Compiler - Framework	Svelte	3.52.0	GPLv3	
5	Visualization/Plotting	webgl	2	Free License	Rendering 2D plots
6	SAST	Sonarqube	9.2.4 (build 50792)	LGPL v3	Performing code analysis
7	Toggle Switch	svelte-toggle	3.1.0	MIT License	Custom Toggle Switch
8	Axios	axios	1.2.1	MIT License	Used for rest calls to backend
9	Node Express for OpenApi	express-openapi	3.2.0	MIT License	User for converting OA3 spec to express rest api
10	Websocket	ws	8.11.0	MIT License	Socket connection between frontend & backend
11	Tooltip	sveltestrap	5.10.0	MIT License	Tooltips for Icon Buttons
12	Backend Testing	sinon	15.0.1	BSD License	
13	Backend Testing	chai	4.3.7	MIT License	
14	Backend Testing	connect	3.2	MIT License	
15	Backend Testing	Jest	29.4.1	MIT License	

	First Name	Value				
Degen	**Jan**	5		**4.71**	**OK**	
Tolksdorf	**Leander**	5				
Schöckel	**Marcel**	5				
Kramer	**Philipp**	5				
Kolbenschlag	**Nicolas**	3		0	No size	
Münch	**Ingrid**	5		1	Trivial size	
Jünemann	**Leon**			2	Small size	
Wächtler	**Jens**	5		3	Medium size	
				5	Large size	
				8	Very large size	
				13	Too large (size)	