Project Name	Find my hearing aid
Online team meeting	Thema: AMOS: Find My Hearing Aid Uhrzeit: Dies ist ein regelmäßig stattfindendes Meeting Jederzeit treffen Zoom-Meeting beitreten https://fau.zoom.us/j/66825093998?pwd=L2JHeVBmWXpxc1o2cENiMGJ2ZHIvQT09 Meeting-ID: 668 2509 3998 Kenncode: 448171
Online team meeting link	https://fau.zoom.us/j/66825093998?pwd=L2JHeVBmWXpxc1o2cENiMGJ2ZHIvQT09
Production system (if any)	
Test system (if any)	
GitHub repository	https://github.com/amosproj/amos2022ss05-find-my-hearing-aid
GitHub kanban board (project)	https://github.com/amosproj/amos2022ss05-find-my-hearing-aid/projects/1
Team T-shirt (white)	https://www.shirtinator.de/loadBasket/0x0Q0rXJesp
Team T-shirt (black)	https://www.shirtinator.de/loadBasket/Trc2TnlshxN
Additional materials	*none*

Last Name	First Name	GitHub User Name	Email Address	GitHub Email Address
Meister	Luis	Meisterlu	luis.meister@fau.de	l.gantikow@gmx.de
Wandinger	Adrian	Wandinad	adrian.wandinger@fau.de	
Xiangxiang	Chen	cynthiachen28	xiangxiang.chen@fau.de	xiangxiang.chen@fau.de
Stellwag	Nicolas	NicoStellwag	nicolas.stellwag@fau.de	nico.stellwag@gmail.com
Schütz	Jannik	jannikbmc	jannik.schuetz@fau.de	jannik.schuetz@gmx.net
Aldoais	Marib	Interperle	marib.aldoais@fau.de	marib.aldoais@googlemail.com
Pysch	Dominik	domi1504	dominik.pysch@fau.de	domi.pysch@gmail.com
Werner	Elias	codingwithelijah	elias.werner@fau.de	
Köberlein	Leo	Chippelius	leo.koeberlein@fau.de	leo@wolfgang-koeberlein.de

Goals	
	Create stable and reliable software the industry partner is satisfied with
	Pass the course and have a successful project and collaboration with the industry partner
	Interpersonal relationship objectives: increase team building skills
	Learn about Scrum and IT Project work
Meeting norms	
	We come to the meeting on time (5 min grace period), end the meeting on time and switch on our cameras
	If someone is not able to attend the meeting, let everyone else know as soon as possible (give update on own tasks through Discord)
	Get together depending on the workload/tasks, i.e. SD meeting / PO meeting when necessary Do not hesitate to work in small groups, we are a team! (3 meetings at max as a whole team)
Working norms	
	Everyone contributes regularly. If someone has a lot of other work to do in a week, inform the POs and try to balance it out the next week.
	Agree on a coding convention.
	If we have difficulties with the tasks, we speak about it openly. We do not hope that no one will notice.
Coordination norms	
	We always make sure to clearly and unambiguously designate responsibilities.
	When we assign To Dos, we always make sure that the tasks are fairly distributed among the group members.
	Tasks are assigned via GitHub or stated in the meeting protocols.
Communication norms	
	Check the communication channels at least every 24h (small stuff & quick response in WhatsApp)
	Don't interrupt each other
	We have an open and clear communication style. Everyone is able to address his/her concerns at all times. We always stay respectful.
	Luis and Elias as POs will initiate the contact to the industry partner. The whole group will always be added into the CC when communicating with the industry partner.
Consideration norms	
	We love diversity, that's why we value every comment
	Direct, open and constructive feedback Is desired to achieve the best possible results.
Cont. improvement norms	
	Everyone does the Standup E-Mails at least twice per week
	Happiness index is done once a week in the retroperspective of the sprint
	Track the teams process via the Kanban board
Rewards	
	Mid term reward: Bergkirchweih Meet-up
	End of the project reward: Restaurant or Bar Meet-up
Sanctions	
	Group-Pot: Money we will use together on our "reward-meetings" - If you are late: 1€ per minute (over the 5 grace-minutes) [5€ max. per meeting]
	Not attending a meeting without informing the others will be punished with cake for the whole group (think about ways how to distribute it to the homes of the group members yourself)

	Sportive sanction: 5 push ups/situps per minute late (counted after the 5minutes limit)
Signature	
	Jannik Schütz, Luis Meister, Elias Werner, Xiangxiang Chen, Dominik Pysch, Adrian Wandinger, Marib Aldoais, Leo Köberlein, Nicolas Stellwag

#	Meeting Day	Uni	Comment	Product Owner	Software Developer	Release Manager	Scrum Master
1	2022-04-27			Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
2	2022-05-04			Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
3	2022-05-11	Yes		Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
4	2022-05-18			Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
5	2022-05-25	Yes		Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
6	2022-06-01			Luis and Elias	Everyone else	Marib Aldoais	
7	2022-06-08	Yes	Mid-term due	Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
8	2022-06-15			Luis and Elias	Everyone else	Dominik Pysch	Xiangxiang Chen
9	2022-06-22			Luis and Elias	Everyone else	Adrian Wandinger	Xiangxiang Chen
10	2022-06-29	Yes		Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
11	2022-07-06			Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
12	2022-07-13			Luis and Elias	Everyone else	Nicolas Stellwag	Xiangxiang Chen
13	2022-07-20	Yes		Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
14	2022-07-27		Demo day!	Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
15	2022-08-03		Retrospective	Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen

Product Vision	Project Mission
Loosing important devices that are indispensable in daily life is annoying. The "Find my BLE device" app solves this problem and makes life more convenient by allowing users to locate their devices at any time. Whether a relevant device has been lost or just can't be found when pressed for time, this app makes customers' lives easier and more convenient.	The mission of this project is to create an app for WSA by providing the feature of locating BLE devices. The app should be able to detect BLE devices and assign labels to it. In addition it helps tracking the device and navigating to the exact location of the device no matter if in short or long distance. This ensures an overview of all relevant devices at all times.

Term	Definition
BLE	Bluetooth low energy
Device	BLE device which is searched for
Signal Strength feature	View within app that allows user to track device via signal strength location
Geolocation feature	View within app that allows user to track device via geolocation
Device Detail View	View within app that allows to manage your BLE devices
Saved devices	Devices that are have been selected by the user and are stored in the database
Arduino	Test BLE devices from the customer
RSSI value	Strength of the Bluetooth signal
smartphone	The device I am running the App on
label	Text given by the user for a certain device within the app
Last known location	GPS coordinate of smartphone in the signal of a previously saved device has reached a certain treshold

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
1	Organization & Get to know	Kick off & project setup and structure						
			#3 Team Logo	3		3		
			#3 T Shirt design	2		2		
			#2 Team contract	3		5		
			Meeting with Industry partner	2		2		
			#4 Full understannding of organizational basics	2		2		
			Setup coding environments	2		2		
			Setup communication channels	1		1		
2	Research and Setup	Research underlying software & Implement first Hello World app			27		27	
			#9 Create PDF of software architecture	3		3		
			#12 Research on underlying software	5		5		
			#11 Deployment of Hello World app	3		3		
			#7 Find out how to connect Bluetooth devices with Xamarin	8		8		
			#5 Claryfication of technical setup	1		1		
			#13 Bill of Materials	1		1		
			Research on signal strength solution	3		3		
			Research on geolocation solution	3		3		
3	Further Setup and Getting started	Further Setup and get started coding			21		18	
			#16 Establish Knowledge base	1		1		
			#18 Creation of Story Map	5		3		
			#15 Create Sitemap	5		3		
			#26 Setup structure of database	5		5		
			#29 Ensure writing clean code with the integration of SonarCloud/SonarLint	3		5		
			#30 Setup CI pipeline	2		1		
4	Backend Architecture & first UI implemented	Implementation of first product features			23		22	
			#35 Fine tune product mission and vision	2		2		
			#39 Display surrounding BLE devices	8		8		
			#60 Meeting with Customer	2		2		
			#14 Create draft of standalone UI	8		8		
			#64 Write test for database	3		2		
5	Basic Frontend and Backend Functionalities	Breaktrough regarding functionalities of MVP			7		7	
			#68 Agree on design pattern	2		2		
			#71 Show screen with varying circle radius	5		5		
6	Finalize MVP functionalites	Finalizing functionalities and ensure clean run of the App			18		18	
			#70 List dummy BLE devices in Surrounding	1		1		
			#72 Extract list that contains all devices that are emitting a Bluetooth signal	2		2		

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
			#73 Extract human readable name of each device that are emitting a Bluetooth signal	2		2		
			#74 Extract signal strength of selected devices	5		5		
			#80 Combine Logic and UI	3		3		
			#49 Select one BLE device	3		3		
			#104 Take care of customer mail	2		2		
	Release	**Mid Term**						
	no Sprints	6						
	Due Date	TBD						

	Sprint	Sprint Theme	User Stories	Est.Size	Est.Burndown	Real Size	Real Burndown	
	1	**Organization & Get to know**	#2. #3, #4		96		92	
	2	**Research and Setup**	#5, #7, #9, #11, #12, #13	27	69	27	65	
	3	**Further Setup and Getting started**	#15, #16, #18, #26, #29, #30	21	48	18	47	
	4	**Backend Architecture & first UI implemented**	#35, #39, #60, #14, #64	23	25	22	25	
	5	**Basic Frontend and Backend Functionalities**	#68, #71	7	18	7	18	
	6	**Finalize MVP functionalites**	#70, #72, #73, #74, #80, #49, #104	18	0	18	0	

Burndown Chart
Est.Burndown   Real Burndown

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
	Est.size in sprint 5 as no sizes were given for early tasks							

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
1	Organization & Get to know	Kick off & project setup and structure			15		17	
			#3 Team Logo	3		3		
			#3 T Shirt design	2		2		
			#2 Team contract	3		5		
			Meeting with Industry partner	2		2		
			#4 Full understannding of organizational basics	2		2		
			Setup coding environments	2		2		
			Setup communication channels	1		1		
2	Research and Setup	Research underlying software & Implement first Hello World app			27		27	
			#9 Create PDF of software architecture	3		3		
			#12 Research on underlying software	5		5		
			#11 Deployment of Hello World app	3		3		
			#7 Find out how to connect Bluetooth devices with Xamarin	8		8		
			#5 Claryfication of technical setup	1		1		
			#13 Bill of Materials	1		1		
			Research on signal strength solution	3		3		
			Research on geolocation solution	3		3		
3	Further Setup and Getting started				21		18	
			#16 Establish Knowledge base	1		1		
			#18 Creation of Story Map	5		3		
			#15 Create Sitemap	5		3		
			#26 Setup structure of database	5		5		
			#29 Ensure writing clean code with the integration of SonarCloud/SonarLint	3		5		
			#30 Setup CI pipeline	2		1		
4	Backend Architecture & first UI implemented	Implementation of first product features			23		22	
			#35 Fine tune product mission and vision	2		2		
			#39 Display surrounding BLE devices	8		8		
			#60 Meeting with Customer	2		2		
			#14 Create draft of standalone UI	8		8		
			#64 Write test for database	3		2		
5	Basic Frontend and Backend Functionalities	Breaktrough regarding functionalities of MVP			7		7	
			#68 Agree on design pattern	2		2		
			#71 Show screen with varying circle radius	5		5		

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
6	Finalize MVP functionalites	*Finalizing functionalities and ensure clean run of the App*			18		18	
			#70 List dummy BLE devices in Surrounding	1		2		
			#72 Extract list that contains all devices that are emitting a Bluetooth signal	2		2		
			#73 Extract human readable name of each device that are emitting a Bluetooth signal	2		1		
			#74 Extract signal strength of selected devices	5		5		
			#80 Combine Logic and UI	3		2		
			#49 Select one BLE device	3		3		
			#104 Take care of customer mail	2		3		
7	Completion of the Signal Strength Functionality	*Finish Signal Strength Solution and Ensure Code Coverage >70%*			22		21	
			#129 remove unneccesary code components	2				
			#128 Lay foundations for UI test	5				
			#93 Implement discussed software hierarchy	5				
			#120 Ensure>75% test code coverage	5				
			#96 Indicate that BLE device is very close to the user	2				
			#117 Indicate BLE device is out of range	3				
8	Adjustment of signal strength solution and research of Geolocation Solution	*Further develop signal strength feature, enhance usability, get started wtih geolocation feature*			21		21	
			Correct handling of different entry points (different views)					
			Mapping of RSSI-value to meters (with note that without obstacles, ...)					
			Ensure nice welcome screen					
			Allow user to directly jump to signal strength solution if he is already connected to a bluetooth device					
			Write UI-tests to make sure we reach the 75 % code coverage threshold					
			ensure that devices that were previosly used/labeled & saved within the app are recognized when user enters the app at a later point of time again					
			Delete "Scan"-button on the top right corner within detection view					
			Include two new pictograms within detection view					
			Jannick provides update on previous research regarding geolocation solution to the rest of the team					
			Display GPS signal of a device as a number					
9	Implementation of geolocation solution	*Show map with GPS coordinate of a selected device and lay foundation for distance calculation*			21		21	
			Visually encode within saved devices those devices that are currently emmiting a bluetooth signal					

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
			Check if device is currently emitting a GPS signal, if yes, update the GPS signal displayed in the app					
			Integrate map in the geolocation feature with the option to display certain GPS coordinate and adapt design to our CI					
			Make sure to display current position of the user on the map					
			Make sure to display distance from current position of user to searched device					
			Start with UI improvement suggestions within Figma					
10	MVP Geolocation Solution	Ensure fluent run of geolocation feature without major bugs			21		21	
			Allow user to switch for navigation to selected device to apple maps or google maps					
			Show required time it takes user to navigate to selected device by car, by foot, ... within the app					
			Customer meeting: Die sollen in der nächsten Week (sprint 11) schauen, was sie noch wollen, damit wir das in Sprint 12 und 13 noch umsetzen können ...					
			buffer for: bug elimination and testing					
			Usability: Allow user to switch screen by swiping left from displayed devices -->					
11	Test with final product and UI improvements	Ensure solid functionality of scenarios provided by customer			24		24	
			implement suggestion made by POs regarding UI of the app (FIGMA)					
			create "guided tour" for first usage of the app with layer on top					
			POs: Based on user scenarios with test cases and "expected behaviors", SDs make sure that expected behavior is implemented (POs write test cases and SDs test and report Bugs, ...)					
12	Last functional adjustments and UI adjustments	Ensure correct implementation of adjustments that were provided by the customer in former sprint			24		24	
			Implement final feedback from customer provided in the mail by the end of last week					
13	Final Checks for Project Release	Ensure all mandatory requirements of the customer are met and go hand in hand with our definition of done for the final release			24		24	
			Testing					
			Final bug checking					

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
			Minor improvements					
			Wording					
			Documentation					
			Deliverables					
			Final presentation preparation					
14	Presentation Final Project							
	Release	Final Project Release						
	no Sprints	14						
	Due Date	27.07.2022						

	Sprint	Sprint Theme	User Stories	Est.Size	Est. Burndown	Real Size	Real Burndown	
	1	Organization & Get to know	#2. #3, #4	15	253	17	113	
	2	Research and Setup	#5, #7, #9, #11, #12, #13	27	226	27	86	
	3	Further Setup and Getting started	#15, #16, #18, #26, #29, #30	21	205	18	68	
	4	Backend Architecture & first UI implemented	#35, #39, #60, #14, #64	23	182	22	46	
	5	Basic Frontend and Backend Functionalities	#68, #71	7	175	7	39	
	6	Finalize MVP functionalites	#70, #72, #73, #74, #80, #49, #104	18	157	18	21	
	7	Adjustment of signal strength solution and research of Geolocation Solution	TBD	22	135	21	0	
	8	Adjustment of signal strength solution and research of Geolocation Solution	TBD	21	114		0	
	9	Implementation of geolocation solution	TBD	21	93		0	
	10	MVP Geolocation Solution	TBD	21	72		0	
	11	Test with final product and UI improvements	TBD	24	48		0	
	12	Last functional adjustments and UI adjustments	TBD	24	24		0	
	13	Final Checks for Project Release	TBD	24	0		0	

Est Burndown   Real Burndown

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

| | Est.size | | | | | | | |

#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
1	It builds without errors	DoD of each single User story, included in the Sprint are met	Functional requirements are met
2	code has been reviewed	Code coverage >75%	
3	Build has been made and deployed on a testing environment	All unit tests passing	scenarios are implemented
4	Code coverage >75%	Product backlog updated	Check that no unintegrated work in progress has been left in any development or staging environment.
5	All acceptance criteria were met	Project deployed on the test environment identical to production platform	
6	Documentation updated whenever needed within planning documents (Tabs: Bill of materials, Documentations)	Tests on devices/browsers listed in documentation passed	
7	Branch/feature was merged into dev and then main	The performance tests passed	
8		POs approve release candidate	
9			

Type	Link / reference

\	Context	Name	Version	License	Comment
1	.NET	netstandard	2.0	MIT License	
2	Xamarin	Forms	5.0.0.2012	MIT License	
3	Xamarin	Essentials	1.6.1	MIT License	
4	-	sqlite-net-pcl	1.8.116	MIT License	mobile database
5	Microsoft.NET.Test	Sdk	17.2.0	MIT License	
6	-	Moq	4.18.0	BSD 3-Clause License	C# mocking lib, copyright notice must be included in source code
7	MSTest	TestAdapter	2.2.10	MIT License	
8	MSTest	TestFramework	2.2.10	MIT License	
9	Xamarin.Forms	Mocks	4.7.0.1	MIT License	used to mock xamarin components
10	coverlet	collector	3.1.2	MIT License	collects test coverage information
11		ReportGenerator	5.1.7	Apache License 2.0	creates html view from coverage information
12	Xamarin	Plugin.BLE	2.1.3	Apache License 2.0	Bluetooth module for the app

Last Name	First Name	Value					
Meister	Luis	5					
Wandinger	Adrian	5		**5.00**	**OK**		
Xiangxiang	Chen						
Stellwag	Nicolas						
Schütz	Jannik			0	No size		
Aldoais	Marib			1	Trivial size		
Pysch	Dominik			2	Small size		
Werner	Elias			3	Medium size		
Köberlein	Leo			5	Large size		
				8	Very large size		
				13	Too large (size)		