Find my hearing aid
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
https://fau.zoom.us/j/66825093998?pwd=L2JHeVBmWXpxc1o2cENiMGJ2ZHIvQT09
https://github.com/amosproj/amos2022ss05-find-my-hearing-aid
https://github.com/amosproj/amos2022ss05-lind-my-hearing-aid/projects/1
https://www.shirtinator.de/loadBasket/0x0Q0rXJesp
https://www.shirtinator.de/loadBasket/Trc2TnlshxN
none

Last Name	First Name	GitHub User Name	Email Address	GitHub Email Address
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Xiangxiang	Chen	cynthiachen28	xiangxiang.chen@fau.de	xiangxiang.chen@fau.de
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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	Leo Köberlein	Xiangxiang Chen
10	2022-01-13	Yes		Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
11	2022-01-20			Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
12	2022-01-27			Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
13	2022-02-03	Yes		Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
14	2022-02-10		Demo day!	Luis and Elias	Everyone else	Leo Köberlein	Xiangxiang Chen
15	2022-02-17		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
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
Manage device feature	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

Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
Organization & Get to	Kick off & project setup and						
know	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		
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		
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		
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		
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		
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		
		#74 Extract signal strength of selected devices	5			5	
		#80 Combine Logic and UI	3		3	3	
		#49 Select one BLE device	3		3	3	
		#104 Take care of customer mail	2		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
	2 Research and Setup	#5, #7, #9, #11, #12, #13	27				
		arted #15, #16, #18, #26, #29, #30	21				
	Backend Architecture & first	UI					
	4 implemented	#35, #39, #60, #14, #64	23	25	5 22	2 25	j
	Basic Frontend and Backend						
	5 Functionalities	#68, #71	7	18	3 7	7 18	i
		#70, #72, #73, #74, #80, #49, #104					
	6 Finalize MVP functionalites		18	(	) 18	3 0	)
		Burndown Chart					
		■ Est.Burndown ■ Real Burndown					
		■ Est.Burndown ■ Real Burndown					
		100					
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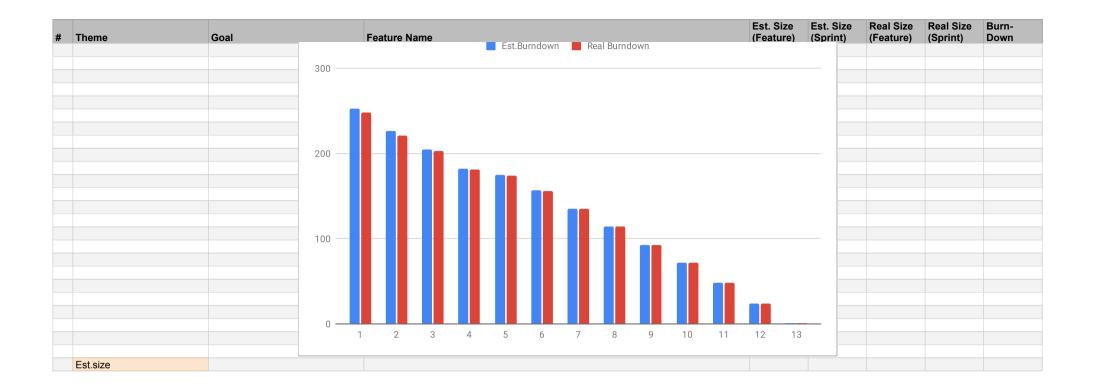
#	Theme	Goal	Feature Name	Est. Size (Feature)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
	Est.size in sprint 5 as no						
	Est.size in sprint 5 as no sizes were given for early tasks						

Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
Organization & Get to 1 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		
Further Setup and Getting 3 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		
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		
Basic Frontend and 5 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		

ŧ	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	i	5		
			#80 Combine Logic and UI	3	3	2		
			#49 Select one BLE device	3	3	3		
			#104 Take care of customer mail	2		3		
		Finish Circuit Chromoth Colution						
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	i			
			#96 Indicate that BLE device is very close to the user	2				
			#117 Indicate BLE device is out of range	3	1			
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	(1 00000)	(0)	(i caiai c)	(0)	20
		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					
	Ensure fluent run of geolocation						
10 MVP Geolocation Solution	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 next 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>					
Test with final product and UI improvements	Ensure solid functionality of scenarios provided by customer			24		24	
or improvements	Scenarios provided by editorner	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,)					
		Teport 20050,					
Last functional	Ensure correct implementation of						
adjustments and UI adjustments	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					
Final Checks for Project	Ensure all mandatory requirements of the customer are met and go hand in hand with our definition of done for the final						
13 Release	release			24		24	
		Testing					
		Final bug checking					

Goal	Feature Name	(Feature)	(Sprint)	(Feature)	Real Size (Sprint)	Burn- Down
	Minor improvements					
	Final presentation preparation					
27.07.2022						
			Est.		Real	
Sprint Theme	User Stories	Est.Size	Burndown		Burndown	
Organization & Get to know	#2. #3, #4	15	253	17	248	
Research and Setup	#5, #7, #9, #11, #12, #13	27	226	27	221	
	#15. #16. #18. #26. #29. #30	21	205	18	203	
Backend Architecture & first UI implemented						
Basic Frontend and Backend Functionalities	#68, #71	7	175	7	174	
	#70, #72, #73, #74, #80, #49, #104					
Finalize MVP functionalites		18	157	18	156	
Adjustment of signal strength		10	107	10	100	
solution and research of	TDD					
	IRD	22	135	21	135	
solution and research of	TRD	24	114	24	111	
	טטו	21	114	21	114	
	TRD	24	03	21	03	
	עסו	21	12	21	12	
	TDD	0.4	40	0.4	40	
	עמו	24	48	24	48	
Last functional adjustments	TRD	24	24	24	24	
	IUU	24	24	24	24	
	TBD	24	0	24	0	
2 3 1 2	Final Project Release  14 27.07.2022  Sprint Theme Organization & Get to know Research and Setup Further Setup and Getting started Backend Architecture & first UI implemented Basic Frontend and Backend Functionalities  Finalize MVP functionalites Adjustment of signal strength solution and research of Geolocation Solution Adjustment of signal strength solution and research of Geolocation Solution Implementation of geolocation	Wording Documentation Deliverables Final presentation preparation  Final Project Release  14 27.07.2022  Sprint Theme Organization & Get to know Research and Setup Further Setup and Getting Started Backend Architecture & first UI Implemented Basic Frontend and Backend Functionalities  Adjustment of signal strength solution and research of Geolocation Solution Adjustment of signal strength solution and research of Geolocation Solution Implementation of geolocation Solution Test with final product and UI Improvements Last functional adjustments and UI adjustments Insul Check for Project  TBD  TBD  TBD  TBD  TBD  TBD  TBD  TB	Wording Documentation Deliverables Final presentation preparation  Final Project Release  14 27.07.2022  Sprint Theme Organization & Get to know Research and Setup Further Setup and Getting started Backend Architecture & first UI Implemented Basic Frontend and Backend Functionalities  Adjustment of signal strength solution and research of Geolocation Solution Adjustment of signal strength solution and research of Geolocation Solution RMVP Geolocation Solution TBD	Wording   Documentation   Deliverables   Final presentation   Deliverables   Final presentation   Deliverables   Final presentation preparation	Wording   Documentation   Deliverables   Documentation   Deliverables   Final presentation preparation   Deliverables   Final presentation preparation   Final presentation   Fina	Mording   Documentation   Deliverables   Final presentation   Deliverables   Final presentation preparation   Final preparation p



#	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

1	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		5.00	UN	
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)	