Table 0.1: Showing the derived requirements of the Backend for the supervisor role, which are sorted by priority

	1	, , ,	v
ID	Description	Acceptance	Priority
		criteria	
BS1	The supervisor should draft guidelines	- At least one information resp. help	1
	and assistance (e.g., Button with question-mark)	function per functionality	
BS2	The supervisor should be able to see	- The feedback should be visual	1
	which data is missing	- The feedback should be transparent to	
		upper layers of the UI	
BS3	The supervisor should be able to see	- Try without content that is ready	1
	data that is ready for review	for review	
		- Try with content that is ready	
		for review	
BS4	The supervisor should be able to assign	- Try assigning an exhibit to one	1
	exhibits to students	student	
		- Try assigning an exhibit to more	
		than one student	
BS5	The supervisor should be able to trace	- Show visual connection between	1
	content back to specific students	student and content	
BS6	The supervisor should be able to define	- Try defining a topic more than once	1
	topics and exhibits		
BS7	The supervisor should be able to comment	- Try commenting empty content	1
	and discuss the given content of the students	- Try commenting a lot of content	
BS8	The supervisor should be able to mark	- Try marking an error twice	1
	errors in the content		
BS9	The supervisor should get e-mail notifications	- The message should leave the system	1
	about new content handed in by students	in less than 2 minutes in 90% of the time	
BS10	The supervisor should be able to copy topics	- Try copy an empty topic	2
	and categories (e.g., usage of templates	- The copied topic should be easily	
	for different typical cases, duplication, etc.)	changeable to adapt it to the new usage	
BS11	The supervisor should be able to define	- Try with error within the validation	2
	validation-constraints (e.g., character	constraints	
	limitation)		
BSt12	The supervisor is able to see the amount	- Try without any content included	2
	of texts and pictures in a hidden topic	- Try with a lot of content included	
BS13	The supervisor should be able to work offline	- Try disconnecting a running session	3

Table 0.2: Showing the derived requirements of the Backend for the student role, which are sorted by priority

ID	Description	Acceptance	Priority
		criteria	
BSt1	The students are only able to send in specific content (field / topic)	- Try sending content to another topic	1
BSt2	The students should get an e-mail noti- fiation about new content in their topic (e.g., send in via fellow students)	- The e-mail should be received in less than 2 minutes in 90% of the time	1
BSt3	The students should be able to send in metadata	- Try with errors within the meta-data	1
BSt4	The students should be able to overview the possible links within their topic (e.g., GPS-information)	- Try without any links - Try with a lot of links	1
BSt5	The students should be able to send in content	Try sending empty contentTry sending a lot of content	1
BSt6	The students should be able to propose topics and content	- Try proposing an existing topic	1
BSt7	The students should only have access to the backend for a specific time	- Try logging in after the temporary account has been deleted	1
BSt8	The students should have access to all temporary content (i.e., not reviewed content)	- Try accessing currently empty content	1
BSt9	The students should be able to create interdisciplinary groups and communicate within these	 Try creating a group without users Try to send an empty message to the group Try to send a very long message to the group 	1
BSt10	The students should be able to see their content in a preview mode that simulates the frontend	- Try showing an empty topic - Try showing a huge topic	2
BSt11	The students should be able to see content of other groups in a preview mode that simulates the frontend	Try showing an empty topicTry showing a huge topic	2
BSt12	The students should be able to comment and discuss the content of their group or other groups	- Try to send an empty comment - Try to send a huge comment	2
BSt13	The students should be able to hide their unfinished work to the supervisor	- Try hiding without having any content	2

Table 0.3: Showing the derived requirements of the Backend for the master role, which are sorted by priority

ID	Description	Acceptance	Priority
		criteria	
BM1	The master should be able to recover data	- The recovery should not take	1
	by using a back-up system	longer than one hour	
BM2	The master role can be assigned to	- Try to assign the master role to nobody	2
	a couple of users at the same time		
BM3	The master is able to do the final	- Try to accept an empty topic	2
	acceptance	- Try to accept a huge topic	

Table 0.4. Showing th	a darizzad	l roquiroments	of the Backand	which are	corted by priority

ID	Description	Acceptance	Priority
		criteria	
BMi1	The data of the system is stored on IMT-	- The data should be easily transferable	1
	Server		
BMi2	The system can be updated and		1
	maintained in the future		
	(e.g., project-groups, SHK, etc.)		
BMi3	The content should not be limited to		1
	specific layouts, views (e.g., languages)		
	and templates		
BMi4	The system should be expandable		1
	(e.g., new content, filters, etc.)		
BMi5	The system should be safe with respect	-The system should be safe with	1
	to hackers resp. data manipulation	respect to the economic view/	
		definition of safety	
BMi6	The system offers features to manage	- Try managing a group with an empty name	2
	groups		

Table 0.5: Showing the derived requirements of the Frontend, which are sorted by priority

ID	Description	Acceptance criteria	Priority
F1	The user should be able to navigate	- The navigation should response fast	1
	to the different locations shown in the	- Try navigating to the current position	
	HiP-application	•	
F1.A	The user should be able to navigate	See F1	1
	to the different locations and discover		
	these locations on his own		
F1.B	The user should be able to navigate	See F1	1
	to the different locations and use		
	round tour information of the application		
F1.B	The user should be able to navigate	See F1	1
	to the different locations while using		
	filters (e.g., epochs)		
F2	The user should be able to create thematic	- Try creating a route without assigning	1
	routes	a theme	
F3	The user should get a list of locations/exhibits	- Try opening an empty list	1
	in Paderborn		
F4	The user should see linkings within an exhibit	- Try opening a topic without links	1
	different exhibits (e.g., Liborischrein -> Hle ->	- Try opening a topic with a lot of links	
	Scriptorium)		
F5	The user should be able to deselect specific	- Try deselect only one	1
	categories	- Try deselect many	
F6	The user should be able to filter exhibits on	- Try using multiple filters	1
	the map (e.g., locations, historical figures,		
	etc.)		
F7	The user is able to overlay the current map	- Try overlay one map with a hist. one	1
	of the city with historical maps	- Try overlay a couple of maps	
F8	The user is able to see himself and historical	- Try in an area without hist. places	1
	places on the map	- Try in an area with a lot of hist. places	
F9	The user should not exceed his storage	- Clear cache should be possible	1
	on the smartphone		
F10	The user should not exceed his data-volume	- Pictures and videos have to be	1
	on the smartphone	small	
F11	The user should be able to use the	- Interface should not include too many	1
	application easily (good usability)	functions per view	

Table 0.6: Showing the derived requirements of the Frontend, which are sorted by priority

ID	Description	Acceptance	Priority
		criteria	v
F12	The user should be able to switch between different contents (e.g., Video, 3D, etc.)	- At most two clicks/touches between the different contents	1
	fast		
F13	The user should be able to see <i>invisible</i>	- Try with more than one invisible	1
	objects within the details-tab (e.g., something	object at the same time	
	placed inside an altar)		
F14	The user should be able to use tablets and	- The UI should adapt to the screen size	1
	smartphones	resp. resolution	
F15	The user should only get details about an	- Try to get details beforehand	1
	exhibit while he is next to it or afterwards		
F16	The user should be able to get texts, graphics/	- Try without any texts, etc.	1
	pictures and links about an exhibit	- Try with a lot of texts, etc.	
F17	The user should be able to get audio, video	- Try without any videos, etc.	2
	and 3D-views/models about an exhibit	- Try with a lot of videos, etc.	
F18	The user can create and join treasure hunts	- Try join an treasure hunt without a name	2
	respectively geo-caching features		
F19	The user should get informed about exhibits	- The information should be send immediately	2
	and locations that are next to him	as the user arrives at the position	
F20	The user should be able to get navigated	See F1	2
	with AR-rabbits		
F21	The user should be able to get navigated	- The navigation should be accurate	2
	inside of a building		
F22	The user should be able to choose between		2
	different starting possibilities (i.e., tour,		
	discovery and historical topics)		
F23	The user should be able to hear the content	- The audio files should be small	2
	via an audio-guide	(see, F9, F10)	
F24	The user should be able to get exhibits as	- Try opening more than one exhibit as	2
	comparison by using AR	comparison	
F25	The user should be able to create own	- Try creating an empty note/comment	2
	notes and comments	- Try creating a huge note/comment	
F26	The user should be able to share content	- Sharing should not need more than two clicks	2
	via social media		
F27	The user should be able to export content	- The export should not take longer than	2
	as PDF and create book-marks	30 sec in 90% of the time	
F28	The user should be able to get the content	- Adding new languages should be easy	2
	in different languages (i.e., english, french,		
	turkish)		
F29	The user should be able to choose between	- Try selecting one criterion	2
	different criteria with respect to the audience	- Try selecting more than one criterion	
	(e.g., different ages of people)		