Criteria Catalog

General Data/General Information	Comment / Note
Title of the material/educational medium/...	Marlems Hauptstadt Quiz
Link/access method	https://www.marlems-hauptstadtquiz.de/
Brief summary	Capital cities memorization and practice quiz
"Key data" (e.g., price, technical requirements, etc.)	As a web application via the browser and as an app for Android and iOS
Meta data for findability (e.g., in portals/databases)?	
Goal (e.g., collaborative writing)	Memorizing capitals
Target group (e.g., age, suitability for inclusive settings, references to subjects/learning areas)	People with and without disabilities, geography lessons
Relevant legal information (relevant information on copyrights/licenses and data protection)	Markus Lemcke (**web developer, software developer, consultant** and lecturer on accessible computing), no CC license to be found.
Evaluations or accompanying research	

Technology and Design	☺	☺	☹	⚡
1. Usability				
Usability: effective, efficient, satisfactory, intuitive, no distracting elements, ...	X			
Comprehensibility (e.g., navigation & structure, layout, language, focus on the essentials, pictograms ...)	X			
2. Accessible: perceptible to all, operable, understandable, and robust				
Provide easy language & linguistic alternatives (sign language, audio description, alternative texts ...)	X			
Customizability (editable file formats, font size, contrast, digital magnifier, pause function ...)	X			
Legibility (font, line spacing, character spacing, line length...), (background info: For elementary school children as well as screen media sans serif, for... + links)	X			
Motor accessibility (sufficient space to facilitate access and use, independent of mobility, posture, and stamina, alternative controls [e.g., head mouse, eye control])	X			
Tolerance for mistakes (e.g., orthographically "Walt" is recognized as "Wald"→forest in English, allow repetitions)		X		
3. Assistance resources (e.g., help button, help videos, metacognitive prompts, diagrams, examples...)		X		

Didactic Design	🙂	😐	🙁	⚡
Relation to the living world, action and product orientation	X			
Suitability for collaborative learning			X	
Suitable as a shared medium (e.g., everyone can work with the app) and/or enables exchange (e.g., via comments, later in a sitting circle)		X		
Enabling self-discovery learning and autonomy support				X
Democratic values (transparency, participation for teachers and learners, representing diversity ...)	X			
Feedback (self-control, peer feedback, ...) and sense of achievement (clarification of learning progress)		X		
Diagnostic potential				X
Adaptability (degree of difficulty, processing time, ...) and assistance (e.g., hint cards, predefined sentence beginnings and task steps, breaking down into small units/ partial steps)		X		
Suitability for individualized learning (multiple differentiation options, individualization)				X
Tolerance for mistakes (prevent mistakes, use mistakes productively)			X	
Motivation (appealing design, consideration of preferences)	X			

Anmerkungen / Bewertung

As the evaluation with the criteria catalog makes clear, the areas of "usability" and "accessibility" in particular are already largely implemented in the app. In particular, the app is characterized by a high level of user-friendliness. Aspects such as reduced language, sufficient font size, large buttons or screen reader suitability (with screen reader NVDA in the Windows 11 operating system, with screen reader Talkback in Android) make the app accessible to many people.

In terms of didactic design, the criteria catalog still shows some room for improvement. For example, the capital city quiz is not suitable for collaborative learning because it is not possible to fill it out together on the same digital interface. Furthermore, there is no orthographic error tolerance, as "Amstadam" or "Amsterdamm" are not recognized as "Amsterdam". Teachers should keep this in mind when using the application.