User experience laws: a literature review and practical examples based on DoorCE project

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Abstract

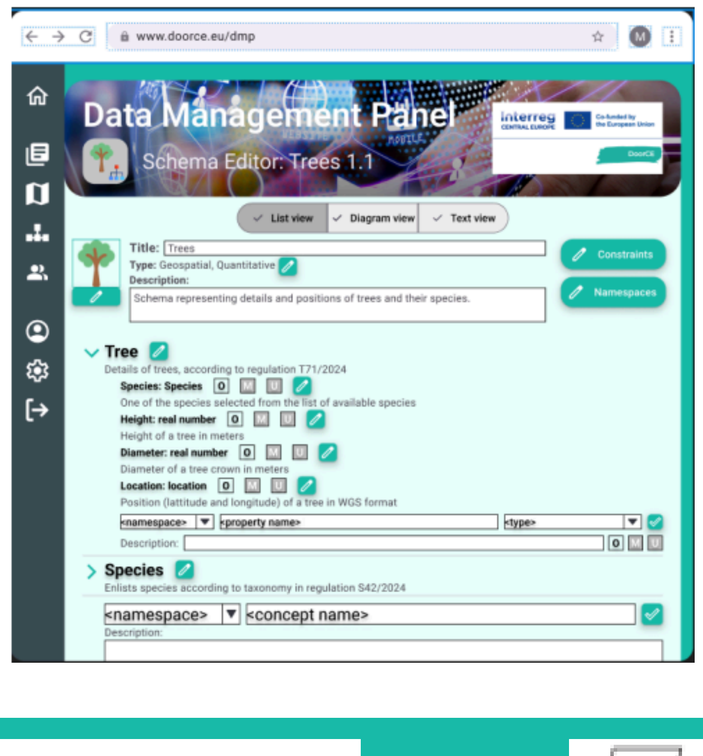
The article presents a detailed literature review on the topic of user experience design principles. The study synthesizes knowledge from research papers and books, focusing on user experience laws that can be applied while designing user interfaces. The review highlights sources about Gestalt psychology in user experience design. The studied literature also emphasizes the importance of Miller's Law and Hick's Law regarding the complexity and Fitt's Law related to efficient layouts. Moreover, sources on methods of increasing user interface accessibility are examined. Lastly, the article summarizes findings about consistency as a crucial element of user experience. Based on the reviewed literature, the author presents practical examples. Examples come from early user interface prototype of the DoorCE project – a joint initiative of many Central European institutions to make public data more accessible. That user interface is evaluated based on described laws and analyzed for good user experience. The result of this research is a set of design principles based on the current state of the art, with its own example from a professional application.

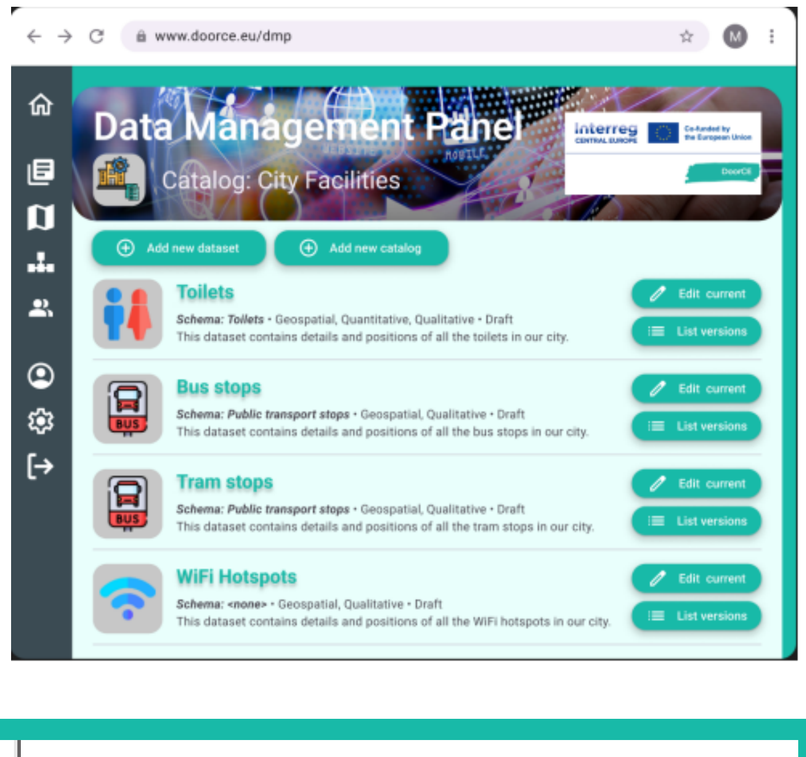
Laws of UX

Principle	Description
proximity	objects close to each other seem related
similarity	similar looking objects seem related
continuity	objects that show continuity seem to be related
closed	the human brain fills in gaps it sees, completing shapes
symmetry	the user always seeks symmetry
Miller's Law	the user can keep 7±2 items in their working memory
Fitts' Law	elements like buttons should be big enough, easy to click, and near the user's cursor
Hick's Law	the number of choices is usually connected to the time needed to make a decision
consistency	consistent UI is predictable and user friendly; can be achieved through reusing of elements, creating standard appearance, and logical navigation
accessibility	should not be ignored; needs of users with disabilities and impairments should be included; zooming in, alternative color schemes, intuitive navigation, clear fonts, various input methods can be used as methods

DoorCE Examples

Article presents some examples of those principles in fragments of DoorCE UI prototype. One thing that couldn't be shown in the UI is accessibility, which is going to be covered as the project is being developed.





SITEE2025

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