UXTesting

An attribute that was not fully included was accessibility. This attribute refers to the degree to which a system can be used by people with different physical, sensory and cognitive abilities. We can focus on the assurance that people with disabilities or specific difficulties can interact with the game. In the project the prototype did not contemplate elements that facilitate the use for children with special needs, for example children who do not know how to read or with visual disabilities.

To evaluate the attribute, the success rate metric could be used in carrying out tasks with children with these special needs, necessary time to complete actions compared to other children, derived errors, etc.

A specific test scenario could consist of presenting the game to a child with mild visual disabilities or reading difficulties, and observing whether you can complete a shift without assistance. The tasks would include identifying the button to launch the dice, enter the result in the corresponding field and confirm the movement to advance on the board. The observation would focus on whether it manages to do it without help, how long it does to understand the interface and if it makes errors that are not related to the mathematical content, but with the way in which the information is presented.

The data collected would include the number of errors made, the resolution time of each task, at which time the child required help, and notes on behaviors such as doubt, frustration or interruptions. These data could be analyzed quantitatively (success percentage, average time) and qualitatively (behavior patterns, accessibility barriers).

Measuring accessibility is highly relevant in this project because users are young children in the process of literacy, with natural differences in motor, cognitive and sensory development. Not integrating accessibility from the design, an important part of the child population that would also benefit from the mathematical reinforcement proposed by the game is excluded. Evaluating and improving this attribute in future versions of the prototype would guarantee a more inclusive and aligned experience with the principles of universal design.