

ABSTRACT

TK IT Little Moslem requires an interactive learning medium to introduce various types of transportation to early childhood. To address this need, an educational game application named Teka-Teki Transportasi was developed, utilizing a User-Centered Design (UCD) approach to create a child-friendly and intuitive User Interface (UI) and User Experience (UX). The game consists of two main sessions: a learning session that introduces land, air, and sea transportation categories, and a play session that includes mini-games such as "Rearrange" and "Find the Shadow." The development process involved teachers as user representatives to provide feedback on the design and features. After implementing the UI and UX, a usability test was conducted using the System Usability Scale (SUS) method with 10 teachers as respondents. The test results yielded a SUS score of 81, which is categorized as "Good." This score indicates that the application meets the standards of usability and effectiveness for its intended users. With the UCD approach and the positive testing outcome, this educational game is expected to become an engaging and effective interactive learning tool for early childhood education.

Keywords: Educational Game, User Interface, User Experience, User-Centered Design, Usability Testing.