

## **ABSTRACT**

Some online and digital means of parent-teacher communication has already been implemented in schools. These means of communications have been used in order for parents to be able to monitor their children's day-to-day activities in school from afar. Some of the means of online parent-teacher communication are through cellular phones, SMS, email, Skype, etc. The diversity of the means of parent-teacher online communication means nonconformity from the teachers and parents in choosing the best communication method for monitoring their children's day-to-day activities in school. Binekas Playschool Bandung has already implemented a day-to-day parent-teacher communication method by using a paper-based communication book, meaning that parents cannot get information on their children's activities in school directly from afar.

To solve these problems, the design and implementation of a REST API based online computer mediated communication platform on top of the Lumen framework has been discussed in order to create a specific online communication channel between parents and teachers who are involved in Binekas Playschool's academic activities which can be accessed through internet and mobile means.

In the performance auditing which was conducted with the help of Google Lighthouse, the web fronted which is used for user interface gained a score of 63/100 for performance, 92/100 for accessibility, 93/100 for best practices, 91/100 for SEO, and is already PWA (Progressive Web App) compliant. For qualitative measurements within the UEQ (User Experience Questionnaire) framework, the user interface gained 6.7/7 for attractiveness, 6.7/7 for perpsuity, 6.4/7 for efficiency, 6.5/7 for dependability, 6.8/7 for stimulation, and 6.8/7 for novelty.

**keywords: computer mediated communication, REST API, Lumen, framework, communication book**