ABSTRACT

The demand for automation in web interface development continues to grow in line with the advancement of digital design tools. Plugins like Dualite in Figma enable direct conversion from design to code; however, further evaluation is needed to assess the generated results, both in terms of visual output and technical code quality. This study employs an experimental method by comparing two design conditions: one with treatment (utilizing Auto Layout, frame naming, element tagging, and image conversion) and one without treatment. The evaluation focuses on layout accuracy, structural consistency, and the functionality of interactive elements displayed in the browser. The results indicate that the treated condition (Condition A) produced layouts and button functions that closely matched the initial design, while the untreated condition (Condition B) showed disorganized layouts and non-functional buttons. Technically, Condition A produced 21 bugs and 58 code smells from 3,128 lines of code, whereas Condition B produced 24 bugs and 68 code smells from 23,814 lines of code, with most issues categorized as Major Severity. This study provides an objective overview of how design configurations affect the quality and visual performance of code generated by the Dualite plugin.

Keywords **:** F*igma, Dualite Plugin, Code Generation, SonarQube*