# Framework for inspection-based: checking the effectiveness and efficiency in PHP source code

## ABSTRACT

Code inspection process is one of the software inspection processes that is used to find faults, check, increase, and maintain the quality of the software. Typically, the source code inspection process will be conducted in order to find sources code-related issues such as Logical Errors, and Structured Query Language (SQL) Injections. Currently, source code inspection process is being done manually by the developer which leads to taking a long time to find faults as well as time-delay. Based on the literature reviews that had been done, many researchers have done a lot of work in this domain, but none of them have developed prototype containing Logical Errors and SQL Injections for Hypertext Preprocessor (PHP) structure source code in one prototype. Therefore, this research proposed a framework for identifying Logical Errors and SQL Injections. A prototype is developed to proof the concept of the framework. The proposed framework is evaluated using the prototype in terms of effectiveness and efficiency by comparing the manual code inspection and the prototype-based code inspection. The result shows the prototype-based is more effective and efficient compared to current practice (manual).

**Keyword:** Code inspection; Logical errors; PHP; SQL injections