Pengujian Performa API Pada Aplikasi *Smart Parking* Dengan Metode *Load Testing* *(Testing API Performance in Smart Parking Applications by Load Testing Method)*

Muhammad Yusril Amin
Study Program Of Informatic Engineering
Majoring in Information Technology
Program Studi Teknik Informatika
Jurusan Teknologi Informasi

ABSTRACT

This research aims to ensure that the Smart Parking application has met the set standards and can function under various conditions to ensure smooth operation for users. Therefore, comprehensive performance testing is necessary to achieve this goal. The focus of this study is on testing the performance of Smart Parking applications using the Load Testing method, with key indicators measured including response time, throughput, and error rate. Tests were conducted using the JMeter tool in several scenarios that included various levels of demand, namely 10, 30, and 50 users. Results show that response time and throughput decrease with increasing user demand load, but applications can still handle all requests well, evidenced by an error rate of 0.0%. Therefore, the performance of the Smart Parking application is considered excellent, as no requests fail to be processed in every scenario tested.

Key words*: testing, API, load testing, smart parking*