

**Optimasi Kinerja Aplikasi *Smart Parking* Melalui Implementasi *Clean Architecture* dengan *Bloc Pattern* (Optimizing Performance of Smart Parking Application Through Implementation of Clean Architecture with Bloc Pattern)**

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***ABSTRACT***

*This study is focused on enhancing the capabilities of the Smart Parking application through aspects such as scalability, organized structure, and ease of maintenance. The principles of Clean Architecture are applied to separate functional layers and ensure that business logic is separated from specific implementations. The application of Clean Architecture in the context of Smart Parking demonstrates a structured approach that is cohesive and independent. Development that is maintainable and expandable is supported using tools such as frozen, Dio, and Bloc Pattern. This study emphasizes the importance of a structured approach to core features and efficient state management with the Bloc Pattern, and illustrates how Clean Architecture can be effectively applied to develop a Smart Parking application with high scalability, good organization, and ease of maintenance. The results of scalability testing conducted by two experienced validators indicate that the project successfully meets high scalability standards and is reliable for further advancement, including facing larger-scale challenges.*

**Keywords** : *Smart parking, Clean Architecture, Scalability, Maintenance, Bloc Pattern*