

# SWC-based Smart Contract Development Guide Research

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**Abstract**— Smart contracts are consensus protocols in which contracts are automatically concluded by code. Despite the growing popularity of smart contracts recently, no guidelines have been presented for developers to refer to when developing smart contracts. Therefore, using SWC, which classifies the weaknesses of smart contracts, guidelines that developers can use in the development process from the perspective of security, maintenance, and reuse are presented based on the weaknesses. The presented indicators can be used to reduce costs incurred later during development.

**Keyword**— Smart Contracts, Software Engineering, Secure Software, Block Chain, Solidity



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