

SKILL ✱REPORT

CORE RUST MEMORY MANAGEMENT:

1	VIRTUAL MEMORY ARCHITECTURE:	Understanding of static memory, heap, and stack in modern execution environments
2	MEMORY ERROR PREVENTION:	Knowledge of data races, use-after-free, and buffer overflow conditions
3	UNSAFE RUST ANALYSIS:	Observing memory errors when safety guarantees are bypassed
4	OWNERSHIP & BORROWING SYSTEMS:	Understanding rules that statically prevent memory errors in safe code
5	LIFETIME EVOLUTION:	Tracing from Lexical Lifetimes (LL) to Non-Lexical Lifetimes (NLL)
6	OWNERSHIP SET NOTATION (OSN):	Reasoning about memory safety in both LL and NLL contexts

ADVANCED TOPICS (PARTIAL COVERAGE):

1	RUST SYNTACTIC ANALYSIS:	Translating syntax to desugared forms, HIR, and compiler lowering passes
2	SOLANA ARCHITECTURE:	High-level design of validator deployment and smart contract invocation
3	SBPF BYTECODE:	Inspection and navigation of Solana smart contract bytecode

ANCHOR PROGRAM SECURITY

1	ACCOUNTS & PDAS:	Clear understanding of account/PDA lifecycles, derivation, and guarantees
2	CPI CALLS:	Understanding risks and lifecycle of CPI; verify target program, accounts, and post-conditions
3	INIT/REALLOC/CLOSE:	Safe initialization, resizing, and closing; rent handling, size caps, zero-init on realloc

TOKEN-2022

1	SPL/TOKEN-22 AWARENESS:	Understands differences and extensions between SPL Token and Token-22, including fees, delegates/non-transferable, and rounding
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BUSINESS REQUIREMENTS

1	SPEC → INVARIANTS:	Translate product requirements into explicit on-chain checks; spot logic bugs when spec and code diverge
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AUDITOR WORKFLOW

1	CLEAR ISSUE EXPLANATIONS:	Plain-English impact + how to exploit
2	CLEAN REPORT CRAFT:	Repro steps, severity rationale, and a concrete fix
3	POC CREATION:	Minimal Anchor/TS test that demonstrates the bug