

ICT80004 Weekly Communication – Week #04

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Date Prepared: 29/08/2025 Internship Week #: 4

Day	Date	Task(s) completed
1	Monday 25 Aug 2025 8 hours	<ul style="list-style-type: none"> Completed the comparative results table for vulnerable code snippets tested on GPT-4/5, Grok, Gemini, Llama-3, and DeepSeek V1. Recorded fixes and behaviours for integer overflow, null pointer dereference, and array index out of bounds. Compared how different prompting styles (Chain of Thought, Action, Debate, Encouragement) affected the quality and reliability of model responses.
2	Wednesday 27 Aug 2025 8 hours	<ul style="list-style-type: none"> Finalised divide by zero and SQL injection test cases with fixes, explanations, and inferences. Consolidated results from all five vulnerability categories into the Week 3 & 4 Vulnerable Code Testing Report. Drafted initial taxonomy of attack categories and model failure patterns, mapping tested vulnerabilities to prompt injection risks and potential defences.

Total hours completed for the week: 16

Plans for next week: #05 week (1– 5 Sept 2025)

Expand test cases to cover more vulnerabilities and refine categories.

Begin outlining the **Prompt Injection Test Suite**, mapping each case to taxonomy categories.

Add boundary and negative test cases (e.g., LLONG_MAX overflow, invalid indices, crafted SQL payloads) to confirm guard behaviour.