

# AI Usage Log - Mobile Money Database Project

## Project: Mobile Money Transaction Database (momo\_db)

**Group Name:** Group 7

**Date Range:** January 20-26, 2026

### Log Entry 1

**Date:** January 22, 2025A

**Time:** 14:30

**AI Tool Used:** Grammarly

**Purpose:** Grammar and syntax checking

**Task Description:** Reviewed the Design Philosophy section of the documentation for grammatical errors and clarity improvements.

**AI Input:** Pasted draft paragraphs from design philosophy document

**AI Output Used:** Corrected punctuation errors, suggested replacing "data duplication" with "duplicate data" for clarity

**Original Work Preserved:** Yes - all technical concepts, database design decisions, and explanations were my own

**Policy Compliance:** ✓ Permitted use (grammar checking)

### Log Entry 2

**Date:** January 23, 2025

**Time:** 09:15

**AI Tool Used:** ChatGPT

**Purpose:** Research MySQL best practices

**Task Description:** Researched standard practices for indexing foreign keys in high-traffic transaction tables

**AI Input:** "What are MySQL indexing best practices for foreign key columns in financial transaction systems?"

**AI Output Used:** Confirmed that indexing sender\_id and receiver\_id improves JOIN performance; learned about composite index benefits for frequently paired queries

**Citation:** Referenced MySQL documentation recommended by AI (<https://dev.mysql.com/doc/refman/8.0/en/optimization-indexes.html>)

**Original Work Preserved:** Yes - index placement decisions based on my schema analysis and query patterns

**Policy Compliance:** ✓ Permitted use (research with citation)

### Log Entry 3

**Date:** January 24, 2025

**Time:** 16:45

**AI Tool Used:** VS Code SQL Extension (IntelliSense)

**Purpose:** SQL syntax verification

**Task Description:** Verified correct syntax for CHECK constraint declarations in CREATE TABLE statements

**AI Input:** Typed CHECK constraint, extension provided syntax highlighting and error detection

**AI Output Used:** Confirmed parentheses placement and constraint naming syntax were correct

**Original Work Preserved:** Yes - constraint logic (amount > 0, sender\_id != receiver\_id) was my design

**Policy Compliance:** ✓ Permitted use (syntax verification)

### Log Entry 4

**Date:** January 25, 2025

**Time:** 11:20

**AI Tool Used:** Grammarly

**Purpose:** Grammar and clarity checking

**Task Description:** Proofread JSON Data Modeling documentation for professional presentation

**AI Input:** Pasted complete JSON examples and mapping documentation

**AI Output Used:** Fixed comma splices, improved sentence flow in explanatory paragraphs, and suggested consistent capitalization for technical terms

**Original Work Preserved:** Yes - all JSON schemas, SQL-to-JSON mappings, and API response structures were my original work

**Policy Compliance:** ✓ Permitted use (grammar checking)

## Declaration

We certify that all AI usage documented above complies with the course AI Usage Policy. No AI tools were used to generate database designs, schemas, business logic, relationships, or technical reflections. All core project work represents my original analysis and implementation.