

[SCHOOL NAME] | Department of Career & Technical Education

Program: Computer Technology / Programming & Software Development

Course Code: [Insert Code, e.g., TE81]

DOCUMENT: TECHNICAL DEBUGGING LOG	VERSION: 2025.1
STUDENT NAME: _____	DATE: _____
PROJECT: Web Application MVP	PERIOD: _____

I. PROBLEM IDENTIFICATION

Documentation of technical barriers encountered during the development sprint.

1. Symptom Description:

(What is the observable failure? e.g., "Script terminates on line 15" or "Null value returned from database")

2. Environment & Location:

(File path, function name, or line number)

3. Raw Error Output:

(Paste terminal output, browser console error, or PHP log snippet below)

> _____

II. TROUBLESHOOTING STRATEGY (TECHNICAL COMPETENCY)

Identify the industry-standard method used to isolate the root cause.

- ☐ **Trace Logic:** Variable inspection via var_dump(), print_r(), or console.log().
- ☐ **Network/Environment Audit:** Inspection of DevTools Network tab or Server Logs.
- ☐ **Peer Review:** Structured code walkthrough with a team member.
- ☐ **Documentation Research:** Consultation of official language specifications (PHP.net / MDN).
- ☐ **AI-Assisted Analysis:** Used AI to interpret error syntax (Student must explain logic).

III. RESOLUTION STEPS & RESULTS

Action Taken (Attempt 1):

Action Taken (Attempt 2):

Final Resolution Status:

☐ **RESOLVED**

☐ **UNRESOLVED / ESCALATED** (Requires Instructor Intervention)

IV. METACOGNITIVE REFLECTION

Alignment with Danielson Framework Domain 4a (Reflecting on Teaching & Learning).

1. Root Cause Analysis:

(Why did this error occur? e.g., Syntax, Logical Flaw, Database Connection, Permission Issue)

2. Prevention Strategy:

(What technical takeaway will you apply to future development to avoid this specific bug?)

V. INSTRUCTOR VERIFICATION

Reviewer Initials: _____ **| Feedback:** _____