

# DETAILED GRADE BREAKDOWN

## Assignment 5

Student ID: 101208

Repository: LLMs-and-Multi-Agent-Orchestration---Assignment5

Assessment Date: 2025-12-23

## FINAL SCORE: 77.0 / 100

### Performance Tier: Potential

## Skills Summary

Skill	Score	Status
Ui Ux	8.0/10	✓ Excellent
Quality Standards	3.0/10	✗ Poor
Project Planning	10.0/10	✓ Excellent
Testing Quality	10.0/10	✓ Excellent
Version Management	4.0/10	■ Fair
Research Analysis	10.0/10	✓ Excellent
Extensibility	4.5/10	■ Fair
Code Documentation	10.0/10	✓ Excellent
Config Security	10.0/10	✓ Excellent
Costs Pricing	7.5/10	✓ Good

# Skill: Ui Ux

**Score: 8.0/10 points**

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
Screenshots/images (1+)	3.0	2.4	✗
Screenshots/images (5+)	3.0	2.4	✗
UI documentation	2.0	1.6	✗
User guide exists	2.0	1.6	✗
<b>TOTAL</b>	<b>10.0</b>	<b>8.0</b>	

## What Was Found

- Found 13 image(s)/screenshot(s)
- Excellent visual documentation with 5+ images
- UI documentation found: requirements.txt, docs\USER\_GUIDE.md

## What Was Missing

- All criteria met!

## How to Improve (+2.0 points)

1. Add UI screenshots to README.md (+2.0 points)

# Skill: Quality Standards

Score: 3.0/10 points

Status: X Poor

## Points Breakdown

Criterion	Max Points	Earned	Status
Linting configuration	2.0	0.6	X
CI/CD pipeline	3.0	0.9	X
Code style guide	2.0	0.6	X
Pre-commit hooks	2.0	0.6	X
Project setup file	1.0	0.3	X
<b>TOTAL</b>	<b>10.0</b>	<b>3.0</b>	

## What Was Found

- Code style guide found: CONTRIBUTING.md

## What Was Missing

- All criteria met!

## How to Improve (+7.0 points)

1. Configure linting tools (pylint, eslint, etc.) (+2.0 points)
2. Set up CI/CD pipeline (GitHub Actions, GitLab CI, etc.) (+3.0 points)
3. Set up pre-commit hooks for automatic quality checks (+1.0 point)
4. Configure quality assurance tools (+1.0 point)

# Skill: Project Planning

**Score: 10.0/10 points**

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
PRD.md exists	2.0	2.0	✓
ARCHITECTURE.md exists	5.0	5.0	✓
Problem Statement	1.0	1.0	✓
Functional Requirements	1.5	1.5	✓
Success Metrics	0.5	0.5	✓
<b>TOTAL</b>	<b>10.0</b>	<b>10.0</b>	

## What Was Found

- PRD.md found
- Problem Statement found in PRD
- Functional Requirements found in PRD
- Success Metrics found in PRD
- ARCHITECTURE.md found

## What Was Missing

- All criteria met!

# Skill: Testing Quality

**Score: 10.0/10 points**

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
Test files exist	3.0	3.0	✓
Multiple test files (>3)	2.0	2.0	✓
Test framework configured	2.0	2.0	✓
Test functions (>10)	3.0	3.0	✓
<b>TOTAL</b>	<b>10.0</b>	<b>10.0</b>	

## What Was Found

- Found 15 test file(s)

## What Was Missing

- All criteria met!

# Skill: Version Management

Score: 4.0/10 points

Status: ■ Fair

## Points Breakdown

Criterion	Max Points	Earned	Status
Git commits >10	2.0	0.8	✗
Meaningful commit messages	2.0	0.8	✗
PROMPT_BOOK.md exists	5.0	2.0	✗
Branching strategy	1.0	0.4	✗
<b>TOTAL</b>	<b>10.0</b>	<b>4.0</b>	

## What Was Found

## What Was Missing

- All criteria met!

## How to Improve (+6.0 points)

1. Make more commits to document project evolution (+1.0 point)
2. Create PROMPT\_BOOK.md to document AI interactions (+5.0 points)

# Skill: Research Analysis

**Score: 10.0/10 points**

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
Jupyter notebooks exist	4.0	4.0	✓
Multiple notebooks (>2)	2.0	2.0	✓
Has visualizations/plots	2.0	2.0	✓
Analysis documentation	2.0	2.0	✓
<b>TOTAL</b>	<b>10.0</b>	<b>10.0</b>	

## What Was Found

- Found 17 research document(s)
- Found 14 data file(s) for analysis

## What Was Missing

- All criteria met!

# Skill: Extensibility

Score: 4.5/10 points

Status: ■ Fair

## Points Breakdown

Criterion	Max Points	Earned	Status
Plugin/extension system	3.0	1.4	✗
Modular structure (3+ dirs)	3.0	1.4	✗
Interfaces/APIs	2.0	0.9	✗
Extension documentation	2.0	0.9	✗
<b>TOTAL</b>	<b>10.0</b>	<b>4.5</b>	

## What Was Found

## What Was Missing

- All criteria met!

## How to Improve (+5.5 points)

1. Create plugin/extension system for modularity (+3.0 points)
2. Further refactor to smaller modules (+1.0 point)
3. Document how to extend/customize the system (+1.5 points)

# Skill: Code Documentation

**Score: 10.0/10 points**

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
README.md >1KB	3.0	3.0	✓
Installation instructions	1.0	1.0	✓
Usage examples	1.0	1.0	✓
Code structure documented	2.0	2.0	✓
Python docstrings (>50%)	3.0	3.0	✓
<b>TOTAL</b>	<b>10.0</b>	<b>10.0</b>	

## What Was Found

- README.md found (19806 bytes)
- Installation instructions found in README
- Usage examples found in README
- docs/ directory found
- Package \_\_init\_\_.py with documentation found

## What Was Missing

- All criteria met!

# Skill: Config Security

Score: 10.0/10 points

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
No hardcoded secrets (CRITICAL)	5.0	5.0	✓
.env.example exists	2.0	2.0	✓
.gitignore exists	1.0	1.0	✓
Uses environment variables	2.0	2.0	✓
<b>TOTAL</b>	<b>10.0</b>	<b>10.0</b>	

## What Was Found

- No hardcoded secrets found in production code
- .env.example file found
- .gitignore file found with .env properly ignored

## What Was Missing

- No hardcoded secrets found in production code

# Skill: Costs Pricing

Score: 7.5/10 points

Status: ✓ Good

## Points Breakdown

Criterion	Max Points	Earned	Status
Cost analysis document	5.0	3.8	✗
Cost mentions in docs	3.0	2.2	✗
Budget tracking	2.0	1.5	✗
<b>TOTAL</b>	<b>10.0</b>	<b>7.5</b>	

## What Was Found

- Detailed cost analysis found in: docs\PRD.md, scripts\run\_experiment\_4.py
- Cost calculations found in code
- API pricing analysis found (excellent for LLM projects)

## What Was Missing

- All criteria met!

## How to Improve (+2.5 points)

1. Create dedicated cost analysis document (e.g., COSTS.md) for better organization (+2.0 points)
2. Create dedicated budget tracking document (+0.5 points)

# Overall Assessment Summary

## Key Strengths (8+ points)

- Ui Ux: 8.0/10
- Project Planning: 10.0/10
- Testing Quality: 10.0/10
- Research Analysis: 10.0/10
- Code Documentation: 10.0/10
- Config Security: 10.0/10

## Critical Gaps (<5 points)

- Quality Standards: 3.0/10
- Version Management: 4.0/10
- Extensibility: 4.5/10

## Recommended Actions

### Immediate Priority:

- All critical areas addressed - focus on optimization

### High Priority:

- Improve Quality Standards (3.0/10 points)
- Improve Version Management (4.0/10 points)
- Improve Extensibility (4.5/10 points)