

# DETAILED GRADE BREAKDOWN

## Assignment 5

Student ID: 109994

Repository: LLMs-and-Multi-Agent-Orchestration---Assignment6

Assessment Date: 2025-12-23

## FINAL SCORE: 89.5 / 100

Performance Tier: Good

## Skills Summary

| Skill              | Score   | Status      |
|--------------------|---------|-------------|
| Ui Ux              | 10.0/10 | ✓ Excellent |
| Quality Standards  | 9.0/10  | ✓ Excellent |
| Version Management | 10.0/10 | ✓ Excellent |
| Project Planning   | 7.5/10  | ✓ Good      |
| Testing Quality    | 10.0/10 | ✓ Excellent |
| Extensibility      | 3.5/10  | ✗ Poor      |
| Research Analysis  | 10.0/10 | ✓ Excellent |
| Code Documentation | 10.0/10 | ✓ Excellent |
| Costs Pricing      | 9.5/10  | ✓ Excellent |
| Config Security    | 10.0/10 | ✓ Excellent |

# Skill: Ui Ux

**Score: 10.0/10 points**

Status: ✓ Excellent

## Points Breakdown

| Criterion               | Max Points  | Earned      | Status |
|-------------------------|-------------|-------------|--------|
| Screenshots/images (1+) | 3.0         | 3.0         | ✓      |
| Screenshots/images (5+) | 3.0         | 3.0         | ✓      |
| UI documentation        | 2.0         | 2.0         | ✓      |
| User guide exists       | 2.0         | 2.0         | ✓      |
| <b>TOTAL</b>            | <b>10.0</b> | <b>10.0</b> |        |

## What Was Found

- Found 14 image(s)/screenshot(s)
- Excellent visual documentation with 5+ images
- UI documentation found: LOGGING\_GUIDE.md, requirements.txt, docs\BUILDING\_BLOCKS.md

## What Was Missing

- All criteria met!

# Skill: Quality Standards

Score: 9.0/10 points

Status: ✓ Excellent

## Points Breakdown

| Criterion             | Max Points  | Earned     | Status |
|-----------------------|-------------|------------|--------|
| Linting configuration | 2.0         | 1.8        | ✗      |
| CI/CD pipeline        | 3.0         | 2.7        | ✗      |
| Code style guide      | 2.0         | 1.8        | ✗      |
| Pre-commit hooks      | 2.0         | 1.8        | ✗      |
| Project setup file    | 1.0         | 0.9        | ✗      |
| <b>TOTAL</b>          | <b>10.0</b> | <b>9.0</b> |        |

## What Was Found

- Code style guide found: docs\CONTRIBUTING.md

## What Was Missing

- All criteria met!

## How to Improve (+1.0 points)

1. Set up pre-commit hooks for automatic quality checks (+1.0 point)

# Skill: Version Management

Score: 10.0/10 points

Status: ✓ Excellent

## Points Breakdown

| Criterion                  | Max Points  | Earned      | Status |
|----------------------------|-------------|-------------|--------|
| Git commits >10            | 2.0         | 2.0         | ✓      |
| Meaningful commit messages | 2.0         | 2.0         | ✓      |
| PROMPT_BOOK.md exists      | 5.0         | 5.0         | ✓      |
| Branching strategy         | 1.0         | 1.0         | ✓      |
| <b>TOTAL</b>               | <b>10.0</b> | <b>10.0</b> |        |

## What Was Found

- Prompt documentation found: docs\PROMPT\_BOOK.md

## What Was Missing

- All criteria met!

# Skill: Project Planning

Score: 7.5/10 points

Status: ✓ Good

## 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         | 0.8        | ✗      |
| Functional Requirements | 1.5         | 1.1        | ✗      |
| Success Metrics         | 0.5         | 0.4        | ✗      |
| <b>TOTAL</b>            | <b>10.0</b> | <b>7.5</b> |        |

## What Was Found

- PRD.md found
- Success Metrics found in PRD
- ARCHITECTURE.md found

## What Was Missing

- All criteria met!

## How to Improve (+2.5 points)

1. Add Problem Statement section to PRD.md (+1.0 point)
2. Add Functional Requirements section to PRD.md (+1.5 points)

# 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 11 test file(s)

## What Was Missing

- All criteria met!

# Skill: Extensibility

Score: 3.5/10 points

Status: **X** Poor

## Points Breakdown

| Criterion                   | Max Points  | Earned     | Status   |
|-----------------------------|-------------|------------|----------|
| Plugin/extension system     | 3.0         | 1.0        | <b>X</b> |
| Modular structure (3+ dirs) | 3.0         | 1.0        | <b>X</b> |
| Interfaces/APIs             | 2.0         | 0.7        | <b>X</b> |
| Extension documentation     | 2.0         | 0.7        | <b>X</b> |
| <b>TOTAL</b>                | <b>10.0</b> | <b>3.5</b> |          |

## What Was Found

## What Was Missing

- All criteria met!

## How to Improve (+6.5 points)

1. Create plugin/extension system for modularity (+3.0 points)
2. Break down large files into smaller modules (+2.0 points)
3. Document how to extend/customize the system (+1.5 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 1 Jupyter notebook(s) and 39 research document(s)
- Visualizations found in 1 notebook(s)
- Found 48 data file(s) for analysis

## What Was Missing

- All criteria met!

# 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 (31847 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: Costs Pricing

Score: 9.5/10 points

Status: ✓ Excellent

## Points Breakdown

| Criterion              | Max Points  | Earned     | Status |
|------------------------|-------------|------------|--------|
| Cost analysis document | 5.0         | 4.8        | ✗      |
| Cost mentions in docs  | 3.0         | 2.8        | ✗      |
| Budget tracking        | 2.0         | 1.9        | ✗      |
| <b>TOTAL</b>           | <b>10.0</b> | <b>9.5</b> |        |

## What Was Found

- Cost analysis document found: docs\COST\_ANALYSIS.md
- Cost calculations found in code
- API pricing analysis found (excellent for LLM projects)

## What Was Missing

- All criteria met!

## How to Improve (+0.5 points)

1. Create dedicated budget tracking document (+0.5 points)

# 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

# Overall Assessment Summary

## Key Strengths (8+ points)

- Ui Ux: 10.0/10
- Quality Standards: 9.0/10
- Version Management: 10.0/10
- Testing Quality: 10.0/10
- Research Analysis: 10.0/10
- Code Documentation: 10.0/10
- Costs Pricing: 9.5/10
- Config Security: 10.0/10

## Critical Gaps (<5 points)

- Extensibility: 3.5/10

## Recommended Actions

### Immediate Priority:

- All critical areas addressed - focus on optimization

### High Priority:

- Improve Extensibility (3.5/10 points)