

# DETAILED GRADE BREAKDOWN

## Assignment 5

Student ID: 101179

Repository: llms-and-multi-agent-orchestration

Assessment Date: 2025-12-23

## FINAL SCORE: 65.5 / 100

### Performance Tier: Potential

## Skills Summary

Skill	Score	Status
Ui Ux	8.0/10	✓ Excellent
Project Planning	4.0/10	■ Fair
Research Analysis	10.0/10	✓ Excellent
Extensibility	4.5/10	■ Fair
Testing Quality	10.0/10	✓ Excellent
Quality Standards	2.0/10	✗ Poor
Code Documentation	9.0/10	✓ Excellent
Version Management	6.0/10	✓ Good
Config Security	6.0/10	✓ Good
Costs Pricing	6.0/10	✓ 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 9 image(s)/screenshot(s)
- Excellent visual documentation with 5+ images
- UI documentation found: HW5\requirements-dev.txt, HW5\requirements.txt

## What Was Missing

- All criteria met!

## How to Improve (+2.0 points)

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

# Skill: Project Planning

Score: 4.0/10 points

Status: ■ Fair

## Points Breakdown

Criterion	Max Points	Earned	Status
PRD.md exists	2.0	2.0	✓
ARCHITECTURE.md exists	5.0	0.0	✗
Problem Statement	1.0	0.4	✗
Functional Requirements	1.5	0.6	✗
Success Metrics	0.5	0.2	✗
<b>TOTAL</b>	<b>10.0</b>	<b>4.0</b>	

## What Was Found

- PRD.md found
- Some architectural information found in documentation

## What Was Missing

- All criteria met!

## How to Improve (+6.0 points)

1. Document architecture in README or ARCHITECTURE.md (+3.0 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 11 research document(s)
- Found 15 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. Define more interfaces for better extensibility (+1.0 point)
3. Document how to extend/customize the system (+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 8 test file(s)

## What Was Missing

- All criteria met!

# Skill: Quality Standards

**Score: 2.0/10 points**

Status: **X** Poor

## Points Breakdown

Criterion	Max Points	Earned	Status
Linting configuration	2.0	0.4	<b>X</b>
CI/CD pipeline	3.0	0.6	<b>X</b>
Code style guide	2.0	0.4	<b>X</b>
Pre-commit hooks	2.0	0.4	<b>X</b>
Project setup file	1.0	0.2	<b>X</b>
<b>TOTAL</b>	<b>10.0</b>	<b>2.0</b>	

## What Was Found

## What Was Missing

- All criteria met!

## How to Improve (+8.0 points)

1. Set up CI/CD pipeline (GitHub Actions, GitLab CI, etc.) (+3.0 points)
2. Create code style guide or CONTRIBUTING.md (+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: Code Documentation

Score: 9.0/10 points

Status: ✓ Excellent

## Points Breakdown

Criterion	Max Points	Earned	Status
README.md >1KB	3.0	2.7	✗
Installation instructions	1.0	0.9	✗
Usage examples	1.0	0.9	✗
Code structure documented	2.0	1.8	✗
Python docstrings (>50%)	3.0	2.7	✗
<b>TOTAL</b>	<b>10.0</b>	<b>9.0</b>	

## What Was Found

- README.md found (6485 bytes)
- Installation instructions found in README
- Package \_\_init\_\_.py with documentation found

## What Was Missing

- All criteria met!

## How to Improve (+1.0 points)

1. Add usage examples to README.md (+1.0 point)

# Skill: Version Management

Score: 6.0/10 points

Status: ✓ Good

## Points Breakdown

Criterion	Max Points	Earned	Status
Git commits >10	2.0	1.2	✗
Meaningful commit messages	2.0	1.2	✗
PROMPT_BOOK.md exists	5.0	3.0	✗
Branching strategy	1.0	0.6	✗
<b>TOTAL</b>	<b>10.0</b>	<b>6.0</b>	

## What Was Found

- Prompt documentation found: HW1\prompts.md

## What Was Missing

- All criteria met!

## How to Improve (+4.0 points)

1. Initialize git repository and make regular commits (+2.0 points)
2. Write meaningful commit messages explaining changes (+2.0 points)

# Skill: Config Security

Score: 6.0/10 points

Status: ✓ Good

## Points Breakdown

Criterion	Max Points	Earned	Status
No hardcoded secrets (CRITICAL)	5.0	3.0	✗
.env.example exists	2.0	1.2	✗
.gitignore exists	1.0	0.6	✗
Uses environment variables	2.0	1.2	✗
<b>TOTAL</b>	<b>10.0</b>	<b>6.0</b>	

## What Was Found

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

## What Was Missing

- No hardcoded secrets found in production code

## How to Improve (+4.0 points)

1. Create .env.example file to document required environment variables (+2.0 points)
2. Implement environment variable usage in code (+1.0 point)
3. Improve overall security practices (+1.0 point)

# Skill: Costs Pricing

Score: 6.0/10 points

Status: ✓ Good

## Points Breakdown

Criterion	Max Points	Earned	Status
Cost analysis document	5.0	3.0	✗
Cost mentions in docs	3.0	1.8	✗
Budget tracking	2.0	1.2	✗
<b>TOTAL</b>	<b>10.0</b>	<b>6.0</b>	

## What Was Found

- Substantial cost discussion found (31 mentions)

## What Was Missing

- All criteria met!

## How to Improve (+4.0 points)

1. Consolidate into dedicated cost analysis document (+3.0 points)
2. Create dedicated budget tracking system (+1.0 point)

# Overall Assessment Summary

## Key Strengths (8+ points)

- Ui Ux: 8.0/10
- Research Analysis: 10.0/10
- Testing Quality: 10.0/10
- Code Documentation: 9.0/10

## Critical Gaps (<5 points)

- Project Planning: 4.0/10
- Extensibility: 4.5/10
- Quality Standards: 2.0/10

## Recommended Actions

### Immediate Priority:

- All critical areas addressed - focus on optimization

### High Priority:

- Improve Project Planning (4.0/10 points)
- Improve Extensibility (4.5/10 points)
- Improve Quality Standards (2.0/10 points)