

# Assignment 3 - Detailed Feedback Report

Student ID: 63688

## Assessment Overview

Your submission demonstrates a foundation that shows potential but requires substantial development. While there are fundamental elements in place, there are multiple critical areas requiring attention. You have substantial potential to improve, and the recommendations below outline a clear path forward to strengthen your software engineering practices and meet the assignment requirements.

## Areas of Excellence

Your submission demonstrates particular strength in the following areas:

### Research Analysis

- Found 1 Jupyter notebook(s) and 1 research document(s)
- Research documentation includes visualizations
- Analysis libraries (pandas/numpy/scipy) used in 1 notebook(s)

### Code Documentation

- README.md found (15970 bytes)
- Installation instructions found in README
- Usage examples found in README

## Areas for Improvement and Development

The following areas require focused attention and development. Addressing these will significantly strengthen your software engineering practices and overall project quality:

## **Testing Quality**

Recommended Actions:

- Create test files for your code
- Create test files for your code
- Configure a test framework (pytest, jest, etc.)
- Write test functions (target: >10)

## **Project Planning**

Recommended Actions:

- Create PRD.md with Problem Statement, Functional Requirements, and Success Metrics
- Document architecture in README or ARCHITECTURE.md

## **Extensibility**

Current Status: Excellent modular structure (avg 0 lines/file)

Recommended Actions:

- Create plugin/extension system for modularity
- Define interfaces/APIs for extensibility
- Document extension/customization approach

## **Quality Standards**

Recommended Actions:

- Configure linting tools (pylint, eslint, etc.)
- Set up CI/CD pipeline (GitHub Actions, GitLab CI, etc.)

- Create code style guide or CONTRIBUTING.md
- Set up pre-commit hooks for automatic quality checks

## **Config Security**

Current Status: No hardcoded secrets found in production code

Recommended Actions:

- Create .env.example file to document required environment variables
- Add .env to .gitignore to prevent committing secrets
- Use environment variables for configuration
- Improve overall security practices

## **Costs Pricing**

Current Status: Limited cost documentation (2 mentions)

Recommended Actions:

- Create cost analysis document (e.g., COSTS.md, budget.xlsx)
- Add detailed cost analysis
- Create budget tracking system/document

## Priority Action Items

### Immediate Focus Areas:

These items require your immediate attention as they represent critical gaps in the current submission:

- Address Testing Quality
- Address Project Planning
- Address Quality Standards

### High Priority Enhancements:

These areas would significantly strengthen your submission and should be addressed after the immediate focus items:

- Improve Extensibility
- Improve Config Security
- Improve Costs Pricing
- Improve Version Management

## Conclusion

Your submission demonstrates potential, but requires substantial development in multiple critical areas. Focus first on the immediate priority items, which address fundamental requirements. Work systematically through each area, seeking examples and best practices. Remember that software engineering is a skill that develops through practice and iteration. Use this feedback as a roadmap for improvement.

Assessment Date: 2025-12-03

This report provides developmental feedback to support your learning and growth.