AI Python Code Reviewer

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Number of Projects Completed: 1

Project Repository: https://github.com/barakath-haseena/code-reviewer-ai.git

Experience at Elevate Labs

During my internship at Elevate Labs, I worked on building an AI-powered Python code reviewer. I gained hands-on experience with Flask, Streamlit, PDF generation, and code analysis techniques.

Introduction

This project automates the review of Python code by providing AI-based feedback, rule-based style suggestions, complexity analysis, and generates PDF reports.

Abstract

The AI Code Reviewer helps developers improve code quality by analyzing Python scripts and providing actionable feedback along with formatted outputs. It enhances learning and productivity for interns and developers.

Tools Used

Python, Flask, Streamlit, HTML/CSS, pdfkit, flake8, black, radon

Steps Involved

1. Set up Flask app and routes for code submission. 2. Integrated AI feedback engine using FullReviewer. 3. Implemented rule-based and complexity analysis. 4. Created side-by-side code diff and formatting view. 5. Added PDF report generation using html2pdf. 6. Designed clean and interactive front-end interface.

Conclusion

This project provided practical experience in AI-driven code analysis, web development, and automated report generation. It improved my understanding of software development workflows and Python best practices.