# AI Project Submission – Phase 3: Final Report

## 1. Project Title

Feedback Generator for Student Portfolio

## 2. Team Members

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## 3. Abstract

This project automates feedback generation for student portfolios using a generative AI model. By analyzing academic records, skills, and achievements, the tool produces structured, relevant feedback based on predefined prompts, improving efficiency for instructors.

## 4. Problem Statement Recap

Instructors face challenges in writing personalized, constructive feedback for student portfolios. This task is repetitive and time-consuming. Our project uses AI to generate structured, relevant feedback automatically.

## 5. AI Techniques Used

- Generative AI using OpenRouter's mistralai/devstral-small:free  
- Prompt engineering for output structure  
- Token control and temperature tuning

## 6. System Architecture

Input: Student portfolio content → AI Model (via OpenRouter API) → Structured feedback  
Modules:  
- generate\_feedback(): constructs the prompt and calls the API  
- GUI: built using Tkinter for user input/output

## 7. Implementation Details

- Designed structured prompt for evaluation  
- Implemented OpenRouter API integration  
- Developed Tkinter GUI for interaction  
- Controlled formatting, max tokens, and fallback structure

## 8. Sample Inputs and Outputs

Screenshots were shown in Phase 2 and include structured feedback output for excellent, average, and poor portfolios.

## 9. Evaluation

The system was tested with multiple sample portfolios and generated concise, structured feedback.  
Performance Metrics:  
- Accuracy: High, based on manual validation  
- Correctness: Output format consistent with prompt

## 10. Challenges Faced and Resolved

- Initial outputs were paragraphs; resolved using strict prompt format  
- API credit issues were solved by switching to another OpenRouter model  
- Controlled token overflow by adjusting max\_tokens

## 11. Learning Outcomes

- Learned how to design effective AI prompts  
- Gained hands-on experience with GUI in Python  
- Understood API integration and response handling

## 12. Future Improvements

- Add export to .txt feature  
- Add language toggle (English/Urdu)  
- Improve UI responsiveness and accessibility

## 13. Final Timeline Review

Week Task Status  
3–4 Design + initial implementation ✅ Done  
5–6 Logic core + testing ✅ Done  
7–8 Interface + polishing ✅ Done  
9 Final review & report ✅ Done

GitHub Repository Link: https://github.com/hafsa-naeem/Feedback-Generator