SummarAlze - Milestone 3 Final Report

NUS Orbital 2025

Team Name: SummarAIze

Level of Achievement: Apollo 11

Foreword

Greetings Orbital Evaluators, Advisors, and fellow Orbitees.

This document presents the full technical report and reflective documentation for SummarAIze, an AI-powered learning aid designed to assist students with revision through summarization, mind mapping, and test simulation features.

As Orbital 2025 participants, we set out to solve the challenge faced by many Singaporean students: navigating a mountain of revision content before exams. We realized that existing tools—while helpful—rarely integrated summarization, mind maps, and test prep into a cohesive platform. This inspired us to develop SummarAIze.

In this README, you'll find detailed insights into our motivation, design decisions, technical architecture, challenges faced, and the milestones we've achieved. Each major feature is explored in depth, including user authentication, AI integration, OCR processing, Firebase database design, and interactive UI logic. We have also included unit, integration, and user testing results, as well as comprehensive diagrams.

This project has been a transformative learning experience, introducing us to full-stack software engineering, CI/CD, and collaborative agile development. We hope this documentation serves as a clear, comprehensive record of what we've built and why.

Posters

Milestone 1 Poster: [Insert Image Placeholder]

Milestone 2 Poster: [Insert Image Placeholder]

Milestone 3 Poster: [Insert Image Placeholder]