

Streamlit App

Flask API (Backend)

PostgreSQL DB

Google Gemini API

**Profile Submission & Roadmap Request**

1. Accesses App &amp; Enters profile data

2. POST /api/roadmap (with profile data)

3. UPDATE student profile (Set roadmap\_status='PENDING')

4. Profile updated in DB

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[If Gemini call times out (e.g., after 30s)]

5. Request roadmap (with prompt)

6. ERROR: Timeout

7. UPDATE roadmap\_status='FAILED'

8. Status saved

9. Return 504 Gateway Timeout or custom error message

[call succeeds (original flow)]

5. Request roadmap (with prompt)

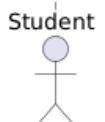
6. Return generated roadmap text

7. INSERT/UPDATE roadmap, Set roadmap\_status='COMPLETED'

8. Roadmap saved

9. Return 200 OK (with roadmap text)

10. Display result (or error) on dashboard



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