

Prototype Submission — AI Heritage Restorer & Culture Preserver

1. Problem Statement

India's cultural treasures—old photographs, manuscripts, and videos—are rapidly degrading.

Who is affected:

- **Students** → Forced to study dull, static textbook content.
- **Tourists** → Miss immersive cultural experiences.
- **Families** → Risk losing old memories & personal heritage.
- **Museums/Schools** → Lack affordable digital revival systems.

Why it matters:

Without preservation, India risks losing personal and national heritage. Current systems are costly, inaccessible, or non-interactive. We need an AI-powered solution that is low-cost, engaging, and scalable.

2. Your Solution

We propose a Web App Prototype: AI Heritage Restorer & Culture Preserver.

Core Features:

- Upload old photos, manuscripts, or documents.
- AI restores clarity & adds realistic colors.
- GPT generates short engaging cultural stories.

- TTS narrates history in multiple Indian languages.
- Before vs After preview + option to download/share.

✨ **Unique Value:** A mix of visual + audio + storytelling, built using OpenAI APIs.

3. Use of OpenAI APIs

- **GPT-4o** → Text generation, converting dull descriptions into stories.
- **DALL·E** → Image restoration & colorization.
- **Whisper** → Converting old audio recordings/interviews to text.
- **TTS (OpenAI Voice Models)** → Narration in Indian languages.

Workflow:

Upload → DALL·E restore → GPT story → TTS narration → Output (preview + share).

4. Feasibility

Tech Stack:

- **Frontend** → React.js / Tailwind / HTML-CSS (for prototype, Figma mockups + Replit).
- **Backend** → Python (Flask/FastAPI).
- **AI Tools** → OpenAI APIs (DALL·E, GPT, Whisper, TTS).
- **Hosting** → Replit / Vercel.

Prototype Scope (for Demo):

- Restore **1 black & white photo**.
- Narration in **English + Hindi**.

- Show **Before/After** side by side.
- Provide **Download/Share** option.

5. Prototype Demo (User Journey)

Example Flow with Taj Mahal:

1. Upload:

- User uploads a 1930s black & white photo of the *Taj Mahal*.

2. Restore & Colorize:

- **DALL·E** restores clarity and adds realistic marble-white shine with sky and garden colors.

3. Generate Story:

- **GPT** produces text:
“The Taj Mahal, built in 1632 by Emperor Shah Jahan, is a timeless symbol of love. Located in Agra, this white marble wonder blends Persian, Indian, and Islamic styles. Recognized as a UNESCO World Heritage site, it attracts millions of visitors each year.”

4. Narration:

- **AI TTS** narrates in **English + Hindi**:
 - English: *“The Taj Mahal is a symbol of eternal love and heritage.”*
 - Hindi: *“ताजमहल अनन्त प्रेम और धरोहर का प्रतीक है।”*

5. Cultural Note (Preservation Angle):

- *“The Taj Mahal continues to inspire Mughal art, poetry, and traditions. Friday prayers are still held at its mosque, keeping cultural heritage alive.”*

6. Output:

- User sees Before vs After images side by side.
- Short narrated clip (optional video) available for download/share.

6. Team Details

- **Member 1 – UI/UX Designer & Integrator (Figma + Replit)**

- Create wireframes/screens, app layout.
- Build basic prototype in Replit (upload button, preview, description).

- **Member 2 – Storytelling & Narration Lead (GPT + TTS)**

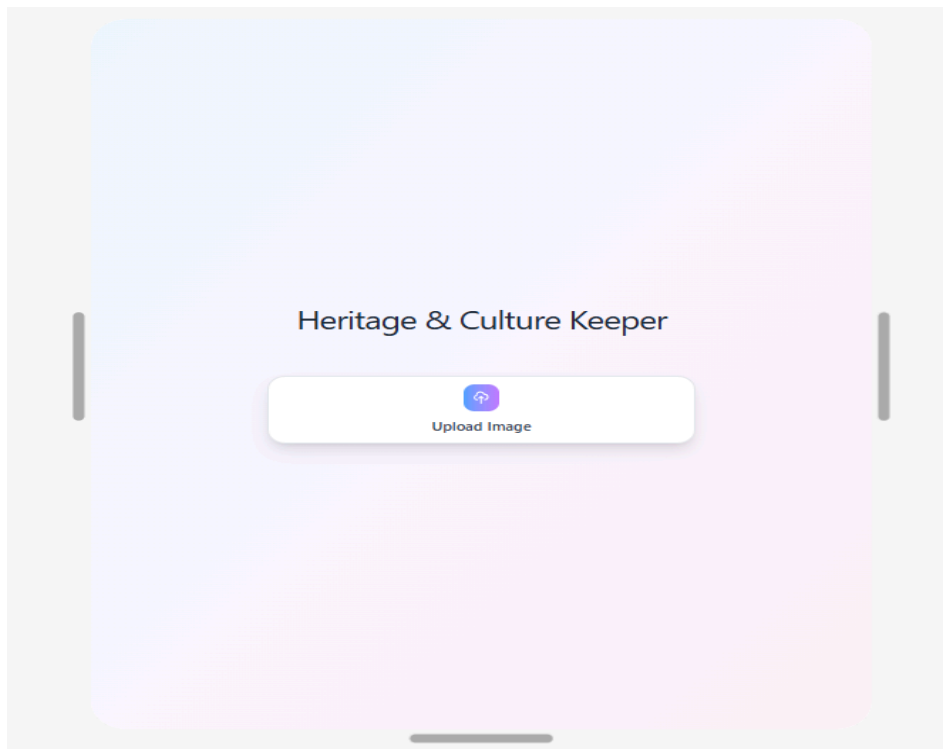
- Use GPT to generate cultural stories/descriptions.
- Add TTS voice narration in English/Hindi.
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- **Member 3 – AI Media Specialist (DALL-E + Whisper)**

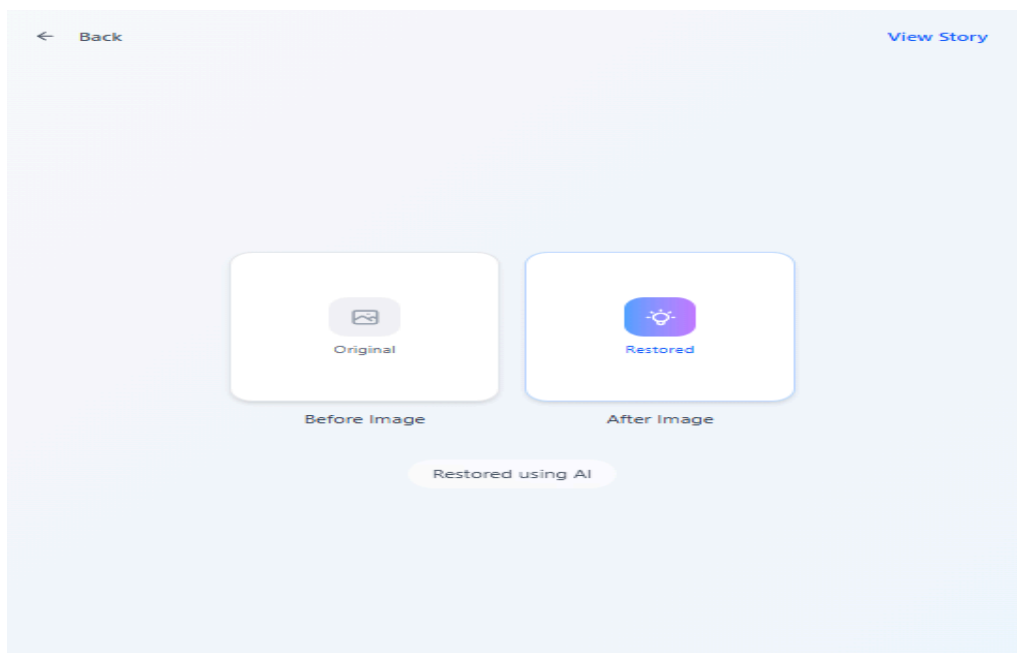
- Generate Before/After restored images.
- Test audio-to-text (Whisper) with any demo cultural audio.

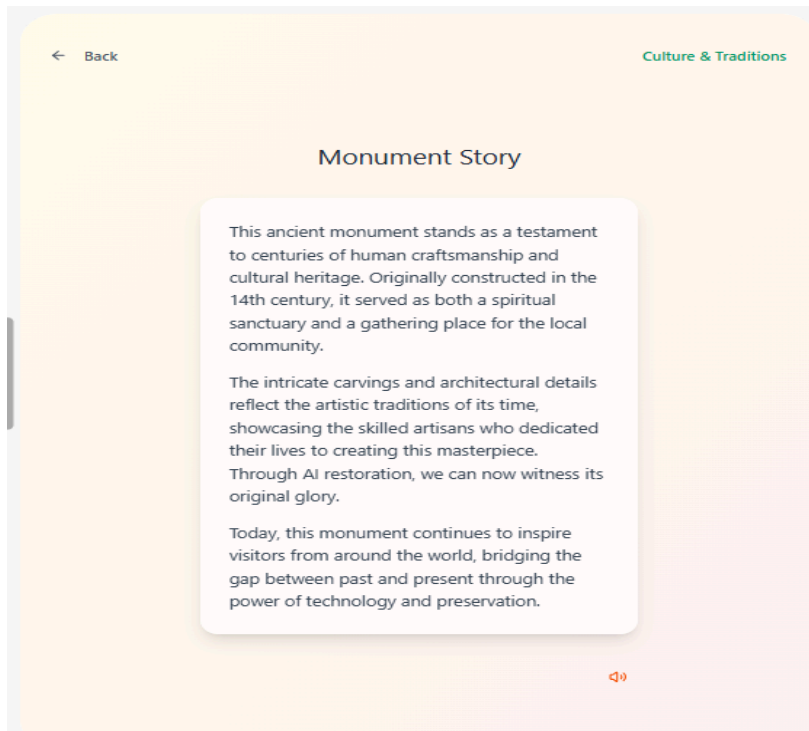
7. Screenshots / Wireframes

- **Home Screen** → Upload Button + Quick Intro

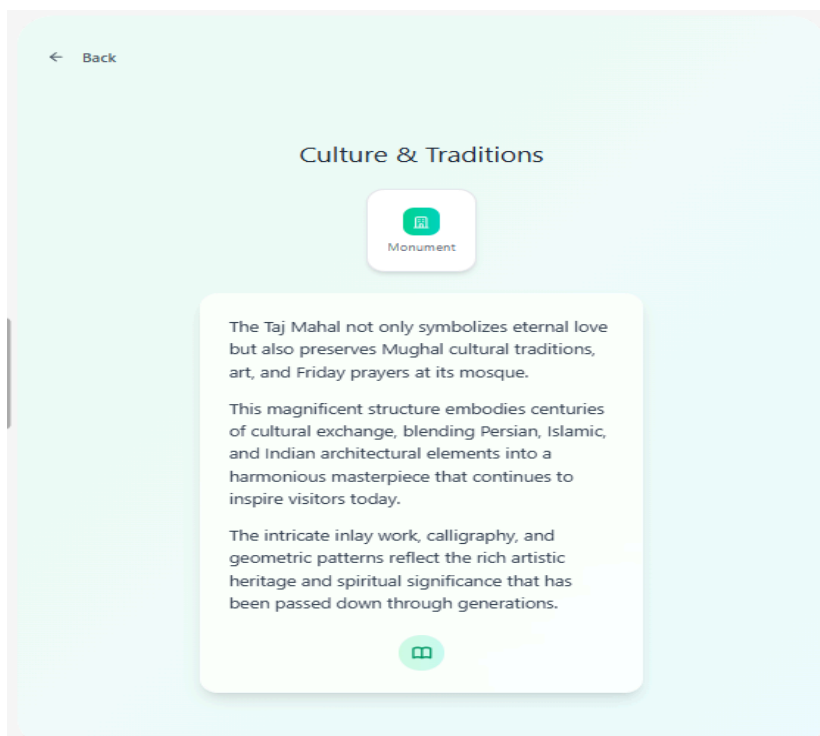


- **Preview Screen** → Before vs After comparison

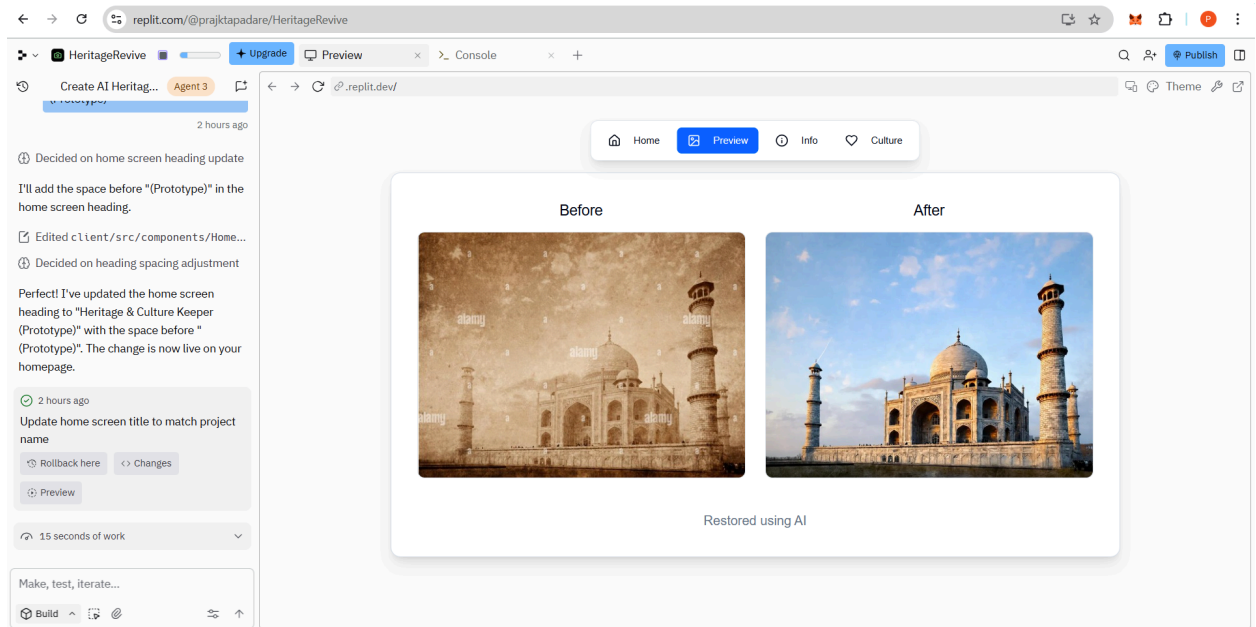





- **Info Screen** → Cultural Story text + Speaker Icon for narration.



Replit App Image



8. Demo Link Placeholders

- GitHub Repo:
<https://github.com/Prajakta11222/AI-Heritage-and-Culture-Preserver-Prototype-.git>
- Replit Demo:
<https://cd3d8448-d5dd-4701-825c-677ed5a3b8ed-00-1ifihrnis4goh.picard.replit.dev/> or
Demo Video:  prototypedemo.mp4
- Figma Mockups:
<https://www.figma.com/make/ToOtJBZVYmnaGO5mM9zcQP/Design-AI-Heritage-Restorer-UI?node-id=0-4&t=89W3SGhSjuxpGvDk-1>

9. Impact

- **Education:** Makes history engaging through stories + visuals.
- **Tourism:** Revived monuments attract interest.

- **Families:** Digital preservation of memories.
- **Culture:** Safeguards Indian heritage for future generations.

10. Pitch Tagline

🔥 *“Reviving India’s Past with the Power of AI – from black & white to colorful stories.”*

Team Name : Root Rebuilders

Member Names:

1.Prajakta Padare

2.Neha Asole

3.Riya Nitnaware