Project Design Phase
Problem – Solution Fit Template

Date	15 February 2025
Team ID	LTVIP2026TMIDS61478
Project Name	Gemini historical Artifact Description
Maximum Marks	2 Marks

Problem – Solution Fit Template

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1. Target Customers

- Students (History / Archaeology)

- Researchers & Scholars

- Museums & Curators

- Tourists & Cultural Enthusiasts

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2. Customer Problems

Problem Type	Description
Lack of Knowledge	Users cannot easily identify unknown historical artifacts.
Time-Consuming Research	Manual research about artifacts requires books, experts, or internet search.
Limited Access to Experts	Not everyone has access to historians or archaeologists.
Incomplete Information	Online sources may provide scattered or unreliable data.

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3. Current Alternatives

- Searching manually on Google

- Consulting history books

- Asking experts or museum guides

- Using general AI tools without artifact specialization

Limitations:

- Slow process

- Inaccurate or generic results

- No direct image-based identification

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4. Proposed Solution

An AI-powered web application where users:

1. Upload an image of a historical artifact.

2. The system analyzes the image using AI.

3. Generates a structured historical description including:

   o Artifact name

   o Time period

   o Origin

   o Cultural significance

   o Material information

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5. Problem–Solution Fit

Customer Problem	Solution Feature	Fit Explanation
Cannot identify artifacts	Image recognition model	Automatically detects artifact from uploaded image
Time-consuming research	AI-generated description	Provides instant detailed explanation
Lack of expert access	Generative AI model	Acts as a virtual historian
Scattered information	Structured output format	Delivers organized and reliable details

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6. Value Proposition

- Quick artifact identification

- Accurate AI-generated insights

- Easy-to-use interface

- Accessible anytime and anywhere

- Supports education and research

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7. Benefits to Customers

- Saves time

- Improves learning experience

- Enhances documentation process

- Increases accessibility to historical knowledge

Conclusion

The solution achieves strong **Problem–Solution Fit** by directly addressing the challenges of identifying and understanding historical artifacts through an AI-based, image-driven, and user-friendly approach.