

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	19 February 2026
Team ID	LTVIP2026TMIDS34956
Project Name	Gemini Historical Artifact Description App
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Input	<ul style="list-style-type: none"> • User can enter artifact name or historical topic • User can specify desired word count
FR-2	Blog Generation	<ul style="list-style-type: none"> • System generates structured blog using Gemini API • System includes introduction, background, significance, conclusion
FR-3	Display Output	<ul style="list-style-type: none"> • Generated content is displayed on the web interface • Structured headings are shown clearly
FR-4	Download Feature	<ul style="list-style-type: none"> • User can download generated blog as text file
FR-5	Interesting Fact Feature	<ul style="list-style-type: none"> • System displays a random historical fact during generation
FR-6	API Integration	<ul style="list-style-type: none"> • System connects to Google Gemini API for content generation
FR-7	Error Handling	<ul style="list-style-type: none"> • System shows error message if input is empty • System handles API failure gracefully

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application should have a simple, user-friendly web interface accessible via browser.
NFR-2	Security	API key must be securely stored using environment variables (.env file).
NFR-3	Reliability	The system should generate accurate and structured content consistently without crashes.
NFR-4	Performance	Blog generation should complete within a few seconds depending on API response time.
NFR-5	Availability	The application should be accessible online 24/7 when deployed on cloud.
NFR-6	Scalability	The system should support multiple users if deployed on cloud infrastructure.