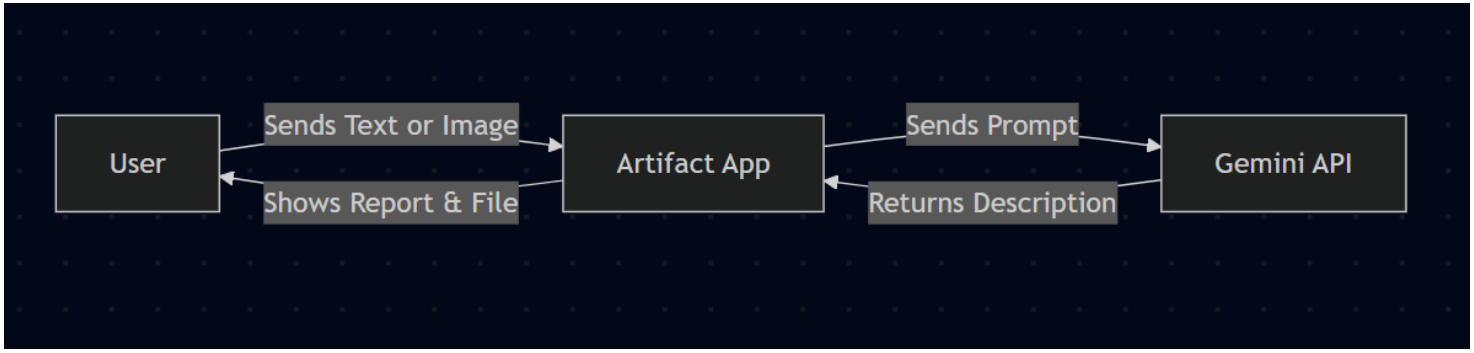
Project Design Phase-II
Data Flow Diagram & User Stories

Date	31 January 2026
Team ID	LTVIP2026TMIDS24242
Project Name	Gemini Historical Artifact Description
Maximum Marks	4 Marks

Data Flow Diagram (DFD) - Level 0 (Context Diagram)

Instead of an image, I will describe the flow clearly so you can visualize or draw it:

1. **User** sends **Artifact Query** (Name or Image) -> **WebApp (Streamlit)**
2. **WebApp** sends **Structured Prompt + Image Data** -> **Gemini AI Service**
3. **Gemini AI Service** processes data and sends back **Generated Description (Text)** -> **WebApp**
4. **WebApp** formats data and displays **Artifact Analysis Report** -> **User**
5. **User** requests **Download** -> **WebApp** generates **.txt/.md File** -> **User**



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
History Enthusiast	**Artifact Research**	USN-1	As a user, I want to enter an artifact's name to get a detailed historical description.	I can type a name, click "Generate", and see a structured report with background, facts, and significance.	**High**	Sprint-1
		USN-2	As a user, I want to upload an image of an artifact to identify and analyze it.	I can upload a JPG/PNG, and the AI correctly identifies the object and provides its history.	**High**	Sprint-1
		USN-3	As a user, I want to adjust the length of the description (Short/Long) to suit my reading time.	I can use a slider to select between 500-2000 words and the output length changes accordingly.	**Medium**	Sprint-2
	Content Management	USN-4	As a user, I want to download the analysis as a text or markdown file.	I can click a "Download" button and save the report to my device.	**Medium**	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
	Engagement	USN-5	As a user, I want to see a random "Did You Know?" fact in the sidebar.	Every time I load the app or refresh, a new historical fact is displayed in the sidebar.	**Low**	Sprint-2
Museum Curator	**Presentation**	USN-6	As a curator, I want the interface to look professional and museum-themed (dark/gold).	The app uses a specific color palette (Terracotta/Dark) and fonts (Serif) that feel premium.	**High**	Sprint-1
Administrator	**System Config**	USN-7	As an admin, I want to configure the Google API key securely.	The app runs using an API key stored in .env or Streamlit secrets without hardcoding it.	**Critial**	Sprint-1