

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	22/06/2025
Team ID	LTVIP2025TMID48315
Project Name	Heritage Treasures: An In-Depth Analysis of UNESCO World Heritage Sites in Tableau
Maximum Marks	4 Marks

Technology Stack

1. Data Source Layer:

Component Technologies/Tools Used

- Data Source
- UNESCO World Heritage Sites dataset (CSV / Excel / API)
 - External sources (e.g., country info, population data for enrichment)

2. Data Visualization Layer

Component	Technologies/Tools Used
Dashboard Tool	<ul style="list-style-type: none">- Tableau Desktop for design- Tableau Public or Tableau Server for publishing/sharing
Features	<ul style="list-style-type: none">- Interactive filters (region, country, type, year)- World map (using Geo features)- Bar and line charts, highlight tables

3. Data Visualization Layer

Component	Technologies/Tools Used
Dashboard Tool	<ul style="list-style-type: none">- Tableau Desktop for design- Tableau Public or Tableau Server for publishing/sharing

Component	Technologies/Tools Used
Features	<ul style="list-style-type: none"> - Interactive filters (region, country, type, year) - World map (using Geo features) - Bar and line charts, highlight tables

4. Security & Access Control (If Hosted Privately)

Component	Technologies/Tools Used
Authentication	Tableau Server / Tableau Cloud user permissions
Data Access	Row-level security (if sensitive data is involved)

5. Data Processing & ETL Layer

Component	Technologies/Tools Used
ETL / Data Cleaning	<ul style="list-style-type: none"> - Microsoft Excel (initial cleaning) - Python (Pandas) for automated cleaning, filtering, merging - Alteryx or Tableau Prep for advanced data prep workflows (optional)
Data Enrichment	- Country codes, GDP, population data from World Bank (optional)