

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	11/02/2026
Team ID	LTVIP2026TMIDS36154
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
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Data Source	<ul style="list-style-type: none">- UNESCO World Heritage Sites dataset (Excel / CSV)- Official UNESCO published records- Supplementary country-level information (optional enrichment)
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2. Data Visualization Layer

Component	Technologies/Tools Used
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Dashboard Tool	<ul style="list-style-type: none">- Tableau Desktop for dashboard design and development- Tableau Public for publishing and sharing dashboards
Features	<ul style="list-style-type: none">- Interactive filters (Region, Country, Category, Year of Inscription)- Geospatial world map using Tableau Geo Roles- Bar charts, Line charts, KPI indicators, Highlight tables- Story feature for guided insights

3. Data Storage Layer

Component	Technologies/Tools Used
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Storage Format	<ul style="list-style-type: none">- Excel file storage (Primary dataset)- Tableau Extract (.hyper) for optimized performance
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Data Handling	<ul style="list-style-type: none">- Structured tabular format- Categorized heritage types and regional groupings
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4. Security & Access Control (If Published

Online)

Authentication - Tableau Public profile access control (if shared)
- Tableau Server user permissions (if deployed privately)

Data Access control - Role-based access (if hosted internally)
- Row-level security (if required for restricted datasets)

5. Data Processing & ETL Layer

Component	Technologies/Tools Used
ETL / Data Cleaning	- Microsoft Excel (initial formatting and cleaning) - Python (Pandas) for optional advanced preprocessing - Tableau Calculated Fields for transformations
Data Enrichment	- Country codes and regional classification - External demographic or geographic indicators (if integrated)