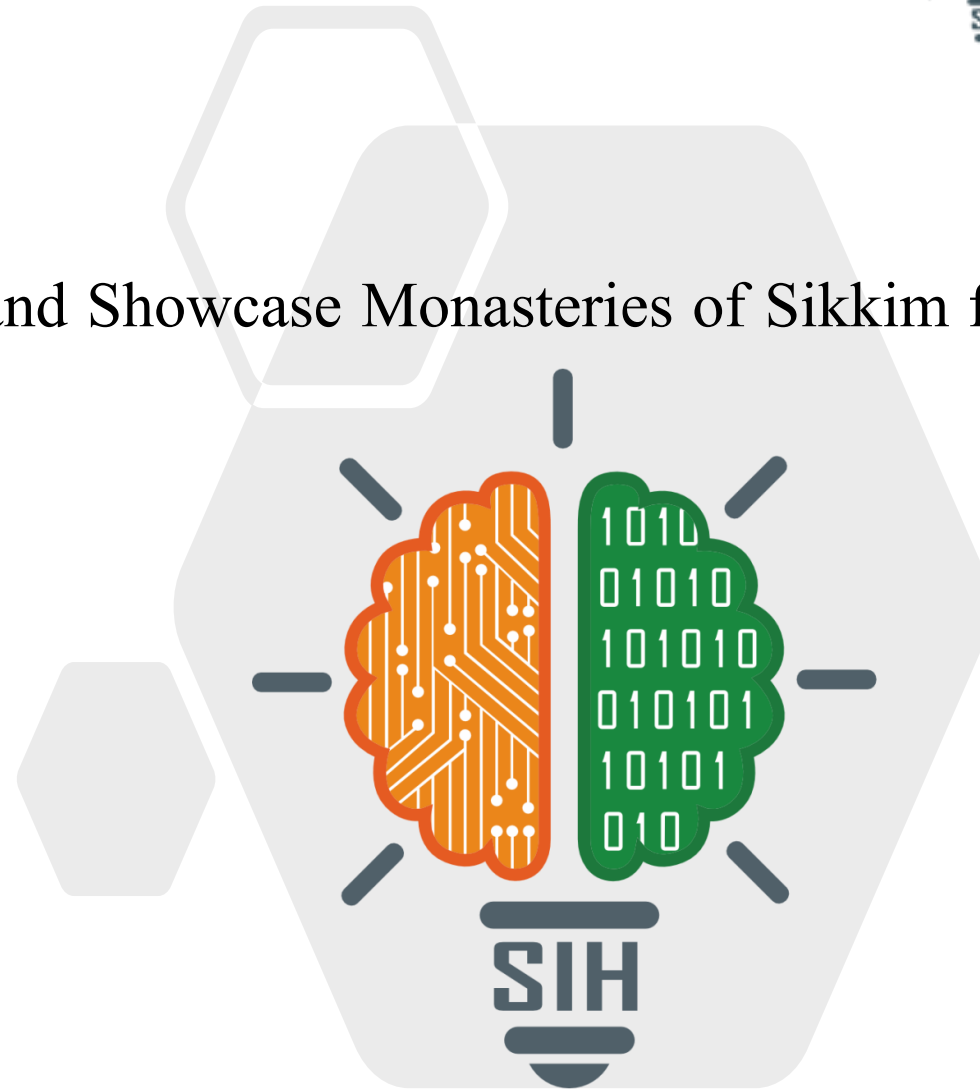


# SMART INDIA HACKATHON 2025



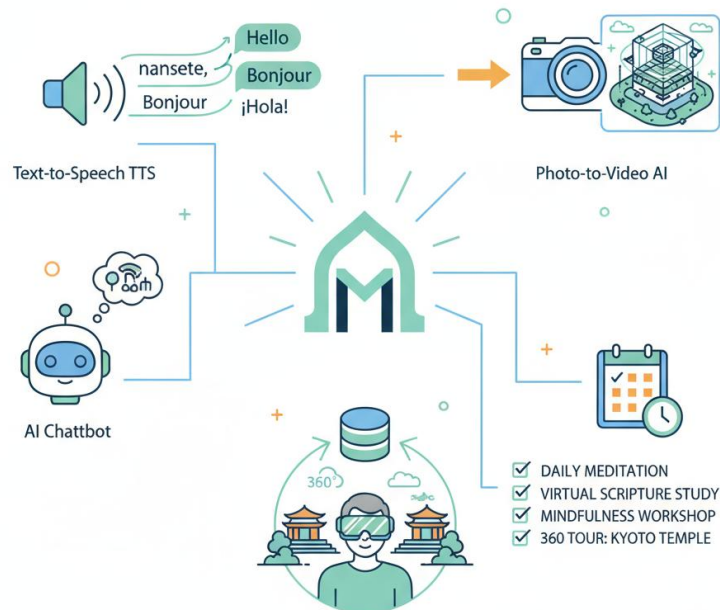
- **Problem Statement ID** – SIH25061
- **Problem Statement Title-** Digitize and Showcase Monasteries of Sikkim for Tourism and Cultural Preservation
- **Theme-** Travel & Tourism
- **PS Category-** Software
- **Team ID-** 86211
- **Team Name** – Mark 42



# IDEA TITLE

## ❖ Proposed Solution (Describe your Idea/Solution/Prototype)

### Detailed Explanation of the Proposed Solution



### How It Addresses the Problem

- Remote Accessibility via digital immersion
- Cultural Heritage Archival Repository
- Enhanced Tourist Engagement & Interaction
- Local Community & Guide Integration
- Scalable Multilingual Global Access

### Innovation and Uniqueness of the Solution

- AI-driven Multilingual Narration Engine
- Photo-based Generative Video Synthesis
- Context-aware Chatbot Travel Assistant
- Immersive Geo-tagged VR Exploration
- Tech-Culture Fusion for Preservation

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# TECHNICAL APPROACH



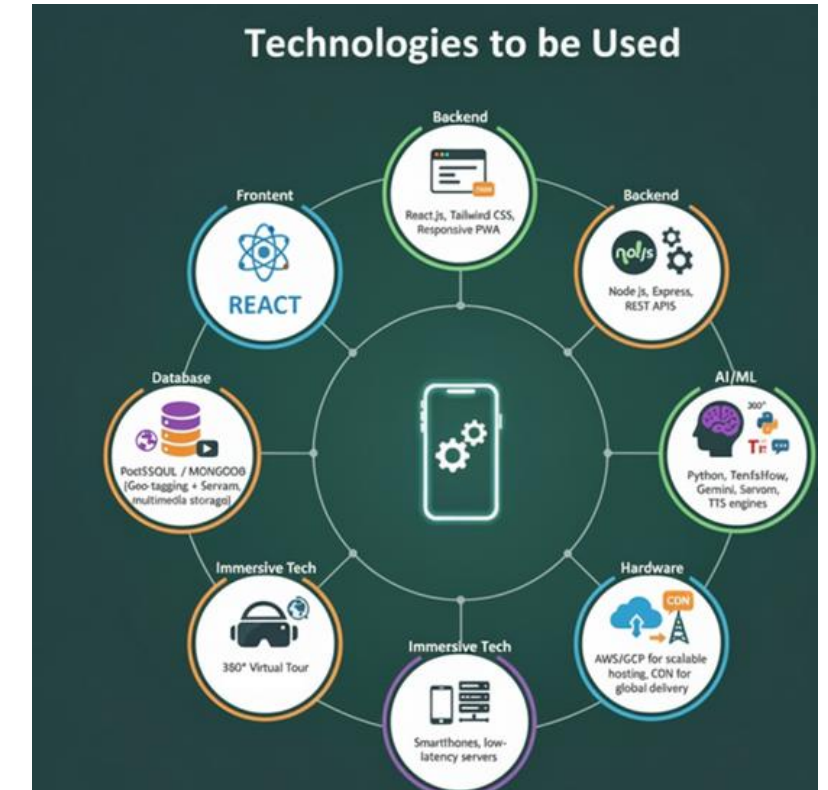
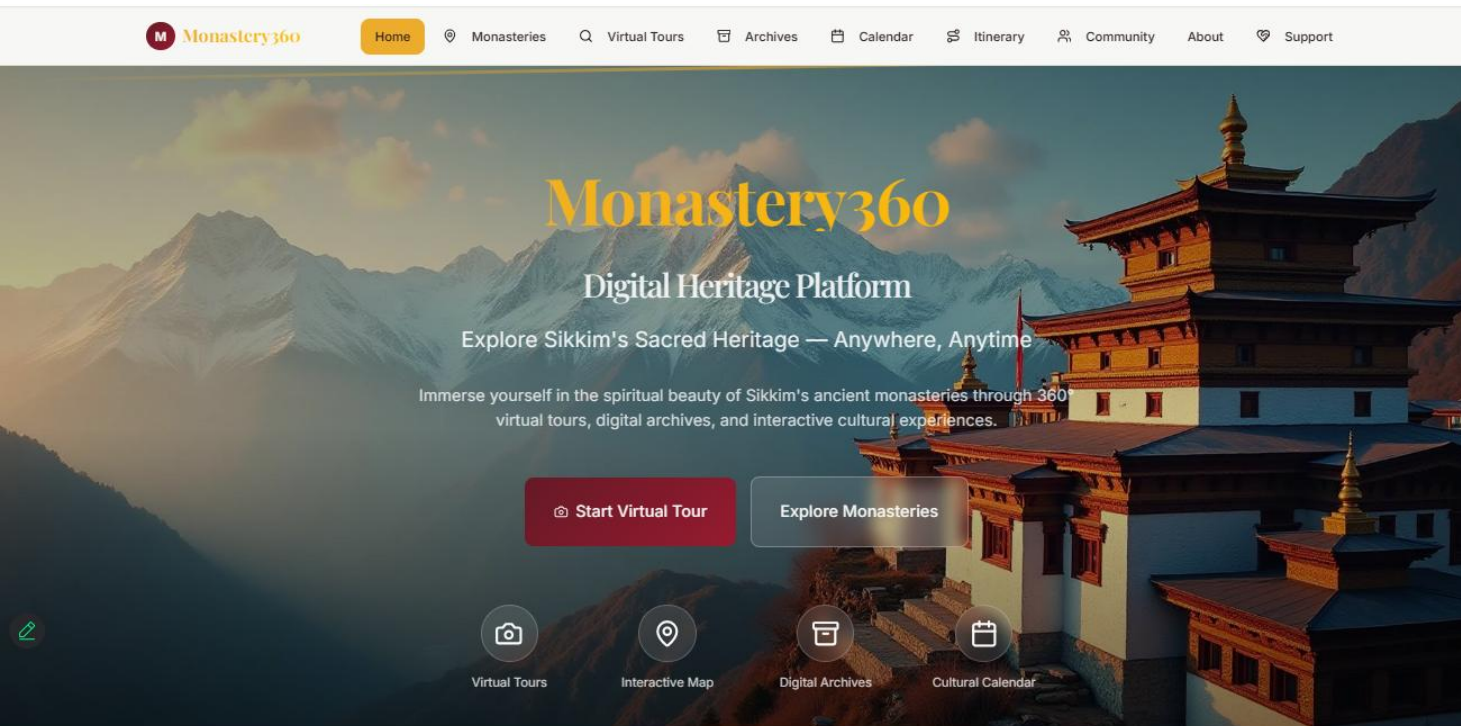
## AI-Powered Narration

Multilingual storytelling engine with natural language processing, delivering personalized monastery histories and cultural insights in real-time.



## Generative Video Synthesis

Advanced photo-to-video technology creating immersive monastery walkthroughs from historical photographs and 360-degree captures.



## VR Experience Platform

Geo-tagged virtual reality environments enabling authentic monastery exploration with spatial audio and interactive elements.



## Intelligent Travel Assistant

Context-aware AI chatbot providing instant answers about monastery customs, visiting guidelines, and cultural significance.

# FEASIBILITY AND VIABILITY



## Technical Feasibility

Scalable cloud infrastructure, proven AI technologies, VR-ready development frameworks, and robust multilingual processing capabilities ensure technical viability.




## Challenge Assessment

Limited connectivity in remote areas, technology adoption barriers among communities, data privacy concerns, computational costs, and cultural sensitivity requirements.



## Strategic Solutions

Offline-capable modules, progressive web applications, adaptive compression algorithms, phased deployment strategy, and comprehensive stakeholder engagement programs.

 **Implementation Strategy:** Our phased rollout approach begins with pilot monasteries, incorporates community feedback, and scales systematically across Sikkim's spiritual landscape while maintaining cultural authenticity.

# IMPACT AND BENEFITS

## Positive Transformation



### Global Tourism Enhancement

Immersive digital experiences attracting international visitors and extending engagement beyond physical visits.



### Financial Sustainability

Thus, securing diverse funding, managing costs efficiently, and establishing viable revenue models for long-term viability.



### Community Empowerment

Economic opportunities for local guides, artisans, and service providers through digital platform integration.



### Cultural Awareness

Deep appreciation for Buddhist heritage through authentic storytelling and interactive educational content.

## Implementation Considerations



### Connectivity Challenges

Developing offline-first solutions for remote locations



### Cultural Sensitivity

Ensuring respectful representation of sacred spaces



### Sustainability

Long-term maintenance and community ownership models






# RESEARCH AND REFERENCES



British Archive of Sikkim: <https://eap.bl.uk/collection/EAP880-1/search> (1875-1975)

Monastery Data: <http://www.sikkimeccl.gov.in/History/Monasteries/East/EasMonasterytList.aspx>


		
<b>Official Government Data</b> <b>Government of Sikkim – Monastery Database:</b> Comprehensive registry of monasteries, historical records, architectural details, and cultural significance documentation.	<b>Historical Archives</b> <b>British Library – Sikkim Manuscripts:</b> Ancient texts, historical photographs, cultural artifacts, and scholarly research providing authentic cultural context.	<b>Academic Partnerships</b> <b>Cultural Research Institutions:</b> Collaboration with universities and heritage organizations for validation, content accuracy, and ongoing research support.

## Technology Validation

Our solution leverages proven technologies including Azure Cognitive Services, and Google Cloud AI for scalable, reliable implementation.

## Cultural Authentication

Working directly with monastery leaders, local historians, and cultural preservation experts ensures authentic representation and community acceptance.

 **Next Steps:** Ready for immediate prototype development with established partnerships and comprehensive research foundation supporting our innovative approach to digital heritage preservation.

For Full Demo Visit Our Youtube Video: <https://youtu.be/eZ7TcFmYWn4>