

Republic of the Union of Myanmar
Ministry of Science and Technology
Myanmar Institute of Information Technology

Project Title - **Lotus Shrine:**
An AI-Enhanced Virtual Platform for Buddhist Meditation,
Prayer, and Spiritual Reflection

Team Members -

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1. Project Objectives

In Myanmar, traditional Buddhist practices such as meditation, prayer, and observing precepts have long been fundamental to the culture. However, the fast pace of modern life has created challenges for many, including limited time and difficulty traveling to pagodas for regular pilgrimages or meditation. To address these issues and use technology to support religious habits, the **Lotus Shrine project** was created.

This project is an online platform that makes it easy for people to engage in spiritual practices from anywhere. Its features include virtual pilgrimage, online meditation, and access to daily Buddhist scriptures and sacred chants. Additionally, the project includes the **Koe Na Win Vow** (Nine-Day Vow), which allows users to systematically track their personal spiritual journey through a dedicated **Koe Na Win Dashboard**. This dashboard helps users record prayer requests, get reminders for meat-free days, and log reflections on their meditation practice.

Here is the main **objectives** of our project.

- **Promote mindfulness and spiritual connection:** To leverage accessible digital technology to foster mindfulness, devotion, and a deeper connection to Buddhist practices in the modern age, ultimately aiming for inner peace for all users.
- **Provide a comprehensive virtual platform:** To offer an accessible and inclusive digital space for Buddhist meditation and prayer experiences for users worldwide, regardless of their physical location.

- ***Develop the Koe Na Win Dashboard:*** To build and integrate the personalized "Koe Na Win Dashboard" for logged-in users, enabling them to track spiritual activities, manage meat-free day reminders, maintain a reflection journal, and fulfill traditional bead-counting vows with automated guidance and notifications.
- ***Create immersive virtual environments:*** To develop an immersive pagoda viewing experience that realistically simulates a physical visit, including the ability to view the pagoda from specific traditional "corners" (e.g., Monday corner) corresponding to a user's birthday, thereby enhancing the spiritual connection.
- ***Integrate intelligent posture detection:*** To implement guided meditation sessions with AI-powered posture detection using Google Teachable Machine, providing real-time feedback to users for improved alignment and practice.
- ***Ensure privacy and security:*** To prioritize user privacy and data security by requesting clear permissions for webcam access, ensuring no video data is stored or transmitted, providing options to turn posture detection on/off, and securely storing all logged-in user data accessible only to them.

2. Project Abstract

The Lotus Shrine project is an innovative web-based application designed to provide a virtual platform for Buddhist meditation and prayer, catering to users who may not be able to physically travel to pagodas or monasteries. It seamlessly blends ancient Buddhist practices with modern web development and AI integration to foster mindfulness, peace, and cultural connection.

This mid-term report outlines the significant progress made on the project. We are pleased to report that the project is currently halfway through its scheduled duration and is nearing completion. We have successfully implemented core features, including immersive pagoda viewing, guided meditation sessions, and importantly, the AI-based posture detection for meditation and other yoga poses. The primary remaining task is the completion of the "Koe Na Win Dashboard" for logged-in users. Following the upcoming mid-term seminar, we will focus on refining and upgrading the system based on the valuable feedback received from our supervisors and advisor.

3. Project Advantages

- **Accessibility from Anywhere** Users can engage in meditation and prayer online from any location, eliminating the need for travel.
- **Enhanced Spiritual Focus** The platform provides an immersive pagoda view that simulates a real pilgrimage experience. This, along with special sounds and visuals, helps improve the user's mental calmness and focus.
- **AI-Powered Practice** With posture detection, users can experience guided meditation that provides alerts to help them maintain the correct body posture.
- **Personal Spiritual Log** The **Koe Na Win Dashboard** allows users to organize and save their personal prayer records, reminders, and reflections on their meditation practice.

- **Daily Dhamma Readings** Users receive daily Buddhist scriptures, which helps strengthen their spiritual practice and mindfulness.
- **Integration of Technology and Myanmar Culture** The project offers a seamless digital transformation for Buddhist communities, making it easier for them to adapt to modern technology.

4. Project Area

1. Religious and Spiritual Practice

- Virtual pagoda visits for those unable to travel physically.
- Online chanting, meditation guidance, and Dhamma teachings.
- Personalized **Koe Na Win Dashboard** to track spiritual practices and reminders.

2. Education and Cultural Preservation

- Teaching Buddhist values, chants, and meditation methods to youth or learners abroad.
- Preserving Buddhist traditions in digital form for future generations.
- Sharing authentic cultural experiences with international audiences.

3. Tourism and Virtual Experience

- Promotes Myanmar's pagodas and Buddhist heritage through immersive virtual tours.
- Can support digital tourism initiatives, especially for international visitors.

4. Technology and Innovation

- Demonstrates practical integration of **Web Development, AI, and UX design** in real-world cultural applications.
- Can serve as a model for other faith-based or cultural digital transformation projects.