



Unilamp Website

Author : Wachirapong Nittaya 650510678

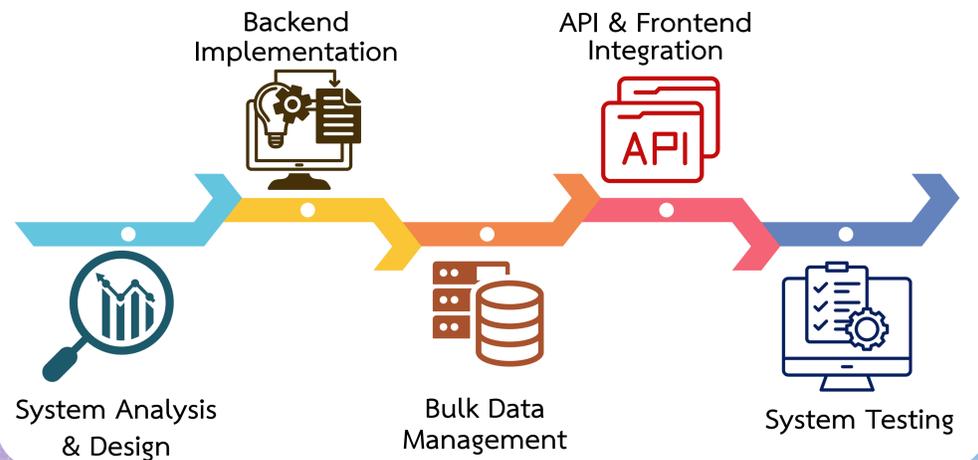
Advisor : Assistant Professor Dr. Kornprom Pikulkaew

Company : SmartSoftAsia Co., Ltd

ABSTRACT

This project develops a Headless CMS-based website for Unilamp, decoupling the WordPress backend from the Next.js frontend. The system is engineered to manage complex lighting product data and accessories using Custom Post Types (CPT) and Advanced Custom Fields (ACF). Data is dynamically served via WPGraphQL and REST API for high performance and flexibility. A key feature is the customized Excel import system, which streamlines bulk data management for administrators. Testing results demonstrate that the system effectively fulfills functional requirements, providing a scalable foundation for the company's digital asset management.

METHODOLOGY



INTRODUCTION

The Unilamp Website development project aims to modernize the company's online presence through a complete UI redesign and enhanced functionality. A core objective is to streamline the management of complex product data, allowing non-technical administrators to independently update products, accessories, modular solutions, and other resources without requiring programming expertise.

To achieve this, the system implements a Headless CMS architecture, decoupling content management from the presentation layer. WordPress, integrated with Advanced Custom Fields, serves as the backend engine for data management, while Next.js is utilized as the frontend framework to ensure high performance and a seamless user experience. Data is dynamically retrieved via WPGraphQL and REST API, providing a flexible and scalable foundation for the company's digital platform.

CONCLUSION

The Unilamp website development successfully achieves its goals by providing a robust and efficient product management system through a Headless CMS architecture. Key outcomes include:

- **Structured Data Management:** Successfully organized complex relationships between products, accessories, and modular solutions using Custom Post Types and Advanced Custom Fields.
- **Operational Efficiency:** The implementation of custom Excel templates for bulk data importation significantly streamlines the administrative workflow.
- **Scalable Foundation:** The system provides a solid and scalable foundation for future enhancements, such as multi-language support and refined user access control.

TECHNOLOGY



ARCHITECTURE

