

1. Tesseract LASAGNA: Modern MVP CMS Framework

Tesseract LASAGNA is a **Model View Presenter (MVP) CMS framework** designed for rapid development and high performance. It uniquely leverages **Google Sheets for its basic database model and data management**, simplifying data handling and providing a flexible foundation.

This framework is built with a focus on **scalability and a sessionless architecture**, making it ideal for modern web applications, including **Progressive Web Apps (PWAs)**.

1.1. Key Features

- **Data Management:**
 - **Google Sheets Data:** Utilizes Google Sheets for defining its Model and managing data, simplifying content updates and integration.
- **Authentication & Security:**
 - **Google OAuth 2.0 Authentication:** Secure user login via Google's robust OAuth 2.0 standard.
 - **CSP Security Headers:** Enhances security by mitigating content injection attacks.
 - **Rate Limiter:** Protects against abuse and brute-force attacks by controlling request frequency.
 - **Country Blocking:** Integrates with Cloudflare for geographical access restrictions.
- **Development & Deployment:**
 - **Makefile:** Streamlines development and deployment tasks with a comprehensive set of commands.
 - **Docker Container:** Planned official Docker image release for easy deployment and portability.
 - **PHP 7.4+ & Composer:** Built on modern PHP and managed with Composer for efficient dependency handling.
 - **CLI Support:** Extensive command-line interface for managing nearly every framework function.
 - **Redis Support:** Optional support for Redis for enhanced caching performance.
- **Front-End & User Experience:**
 - **HTML5 Design:** Modern web design foundation.
 - **Materialize CSS Framework:** Provides a responsive and elegant user interface.
 - **Font Awesome Icons:** Integrates a rich library of vector icons.
 - **Responsive Design:** Ensures optimal viewing across various devices.
 - **Progressive Web App (PWA):** Designed for rapid prototyping of high-performance PWAs.
 - **Custom Service Worker:** Enhances PWA capabilities.

- **Multi-language Support:** Built-in functionality for multilingual applications.
- **In-page WYSIWYG Summernote Editor:** For intuitive content creation directly within the application.
- **GSC Object (JavaScript):** Custom JavaScript object for client-side interactions.
- **Cloudflare CDN Support:** Optimizes content delivery.
- **Google Maps Support:** Easy integration of mapping functionalities.
- **Umami Analytics Support:** For privacy-focused web analytics.
- **Backend & API:**
 - **In-page Administration Panel:** Provides a streamlined interface for managing the application.
 - **REST API:** Dynamically generated API for flexible data access and integration.
 - **Remote Function Calls:** Enables secure remote operations via the AdminPresenter.