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.