INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 8.165

Open Source Platform for Generating Static Websites

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ABSTRACT: The platform proposed i.e the The Open Source Platform For Gene ratingStatic Websites will enable collaborators to edit, create or review and publish content without having to write code or deal with the issue of version control. Writers can concentrate on writing. Editors can accept content and publish it with ease. Developers do not have to be able to comprehend a completely new concept. It provides a simple web interface for managing content of our websites.No additional packages or console commands are needed.We can design and modify pages and posts as well as manage images. We can make use of the markdown editor in order to add them to our posts or pages. There's no need to play around using the console .With this system, we are able to manage the images on our website visually, and upload or remove them with just a few clicks.It is an open source framework that is easily employed to manage the website's content dynamically, as well as create static websites from the content.

KEYWORDS: Stop dealing with the console,Edit content beautifully,Easy image management.

I. INTRODUCTION

"The proposed platform will permit users to collaborate on the creation, editing or review and publish content without having to write code or deal with the control of versions. Writers can concentrate on their writing. Editors can review the content and then publish it with ease. Developers do not have to study a new approach."

Companies create websites (in-house or through outsourcing) to stay ahead of the IT fashion. The specifications for each of these websites match. For instance, they require a certain amount of slideshows, galleries, pages and blogs. In addition, some may require additional features. One of the most popular options developers utilize in these situations is using some of the most popular CMS like WordPress, Joomla etc. or a static site generator. The CMS is a vast codebase, and adding new themes or features to this is a brand new textbook to study and an entirely new programming language for developers. Static Website Generators have the disadvantage of being expensive or only command-line-based. We concentrate on the static website.

- We offer a user-friendly web interface for managing content for our web pages.
- No additional packages or console modifications are required. We will handle those.
- You can make and edit pages and posts, manage images, and use a markdown editor to incorporate them into your posts or pages.

"Stop dealing with the console":
One of the biggest obstacles in creating static sites is altering the console, which most users don't like.
Let us take care of the tangled parts so that you can concentrate on what is essential: the content.
"Edit content beautifully":
Utilize the built-in Markdown editor to edit and create your pages and posts and preview your results side-by-side.
Front Matter is Front Matter that is separated from the content. You can browse images on your website to add them.
"Easy image management":
Images are the essential pieces of information needed for a site.

This allows you to visually manage your images on your site and upload or remove them with a few clicks.

II. FEASIBILITY STUDY- PROBLEM

In order to develop a static business website, we need either of the following:

1. **Senior Developers:**
o Can code the website in dynamic languages, in order to benefit from code reuse
o Are expensive resources for a company
o Can use CMS, HTML or other server side languages (PHP, ASP etc)

2. **Junior Developers:**
o Can use CMS or HTML
o While coding, primarily never benefit from code reuse, as HTML doesn't support it

3. **Content Operators:**
o Cannot code or develop
o Can only insert content on the given form
o Can structure the content using GUI formatting tools (after training)

Static websites are easy to develop, but may be a hassle to develop bigger websites as well as maintain those websites. They are preferred due to performance & cost-to-host benefits. Developers may find it easy to code a small website, but they prefer to automate tasks for bigger websites, using either dynamic scripts or by the use of CMS, thus taking away the power of static websites. Static website generators, on the other hand, are difficult to use or costly to use.

III. PROPOSED SOLUTION

A multi-user, multi-website Content Management System cum Static Website Generator. A framework that can be readily used to manage the content of websites dynamically as well as generate static websites out of that content.

Features (Modules)
∟ User Authentication & Authorisation:
▪ User Registration & Login
▪ User Management
▪ Roles & Permissions
∟ Templating Engine based themes
∟ Markdown based content
∟ GUI based live-website editor
∟ Static website generator

Benefits
CMS: Keeping the tasks closer to the ground, we provide the most common features of a CMS inbuilt, with added features.
Templating Engine: Creating a new template or adapting some other theme for our project should be the task of ease & simplicity. A templating engine will enable the developer to convert the variables & methods available in core to be used in views, thus making it easier to develop new templates for the system.

IV. PSEUDO CODE

At the developer's site:

There are markdown files and the blade template on our site for development. Markdown is text files with .md or .markdown extensions. It can be transformed into Html. It is designed to ensure that it can be converted to Html as well as various other formats. It defines the content that can be viewed in the browser. In addition to the content, it includes a finite number symbolism (*,! and so on) to format text. Many web pages have a section of text that is common to most of them. This authoritative content is developed in a layout file which is then extended by the other pages. Template files include headers, and the footers that contain the content will be integrated. The markdown files, as well as the templates, are constructed using the Handle. phar build-in command line interface, which generates HTML files.

At user site:

Users interact with the browser and ask the server to provide certain content. Browsers only recognize HTML. For static websites, the server must offer the information in the same manner as it is stored in the file system. When the user initiates a request for help, it loads the page faster without making any changes or modifications. Here nothing interacts with the database or PHP interpreter is carried out. "Forwards the HTML contents to browser exactly as that it was".

V. PROJECT CODE

- Heder.php
- Footer.php
- Index.php
- Function.php
- Explode.php
- Editor.php
- Content.php
- Generator.php
- Handle.php
- .htaccess
- Session.php
- Login.php
- Logout.php
- MD Content
- Blade File
- Blade Extend
- Generated File

VI. PROSPECT AUDIENCE

Junior / Senior Web Developers, developing websites for small to medium sized firms / organisations.

VII. FACILITIES REQUIRED

- ❖ 3 pc's
- ❖ IDE
- ❖ Internet connectivity
- ❖ OS – Windows/Linux

VIII . METHODOLOGY

INCREMENTAL MODEL:

The Incremental Model is a method of software development where the model is designed, implemented and tested incrementally (a little more added each time) until the product is finished. It involves both development and maintenance. The product is defined as finished when it satisfies all of its requirements. The product is decomposed into a number of components, each of which are designed and build separately. Each component is delivered to the client when it is complete. This allows partial utilization of product and avoids a long development time.

Ist increment

- ▪ Core Module
- ▪ Template Engine - For building templates
- ▪ Markdown Files - Create MD files
- ▪ CUI - Command user interface to generate static files

2nd increment

- ▪ GUI – Graphical User Interface

3rd increment

- ▪ Advance user authorisation

4th increment

- ▪ Performance screen

IX. CONCLUSION

As a result of our research that we completed, weincorporated several packages together in a way that we were able to build static websites and thus decreasing the amount of resource used on the server side. It also reduced the time needed for PHP interpreters each time a client requests the server. The generator will mix markdown files and blade template file, then build them, and then generate the necessary HTML file to be sent to the server. In turn, the server will satisfy the needs for the user. Servers will automatically have the HTML file, so it is not necessary to go through the process before giving it back to clients.

ACKNOWLEDGMENT

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BIOGRAPHY

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