Bonafide Certificate

This project work on

“CMS Recommendation System”

is the bonafide work of

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Abstract

Content management system (CMS) is a software application or set of related programs that are used to create and manage digital content. We are creating a recommendation system for CMS focusing mainly on online news portals. News are newly received notable information concerning place or group or things. Everyone is concerned with the news on their own way. But it is hard to categorize the interest of news readers with one another. A recommendation system would be great idea to make a news reader familiar with only those contents he/she want to know about. So, we are making a recommendation system for CMS where we recommend the news readers their news of interests. We are doing this because in the real-life scenario people face problem reading the news article of their choice and we aim to solve this problem. The output of this CMS recommender can be implemented in various online news portals. Not only with the news, it can also be used in various other fields consisting of need for recommendation. We aim to commercialize the project as soon as it completes for the service of people.

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Acronyms

CMS	Content Management System
API	Application Programming Interface

Chapter 1: Introduction

1.1. Background

We are familiar with the idea of content management system because it is used for management, creation and modification of digital content. WordPress is also a content management system. Online news portals are mostly created using CMS. But people are having hard time finding the news they want to read. A sports person is more likely to prefer sports news rather than a businessman, but the common online news portal show the same news to all the readers. This reduces the usability among the users as users somehow must spend more time searching the right news. Hence, a recommendation system must be introduced.

Firstly, a CMS is a system for managing, creating and modifying the digital contents. A recommender is a system that implements machine learning to take the user data and ratings thus characterizing the users according to their choice of the news. They recommend each user with the different contents they like. The integrity of news is kept while the usability of users with the news platform increases. There are many famous online news portals like: ekantipur, ratopati, setopati, nagariknews, onlinekhabar, etc. But, none of them have been able to integrate recommendation system in their news portals. So, the basic idea of our project is to integrate recommendation system in the CMS for online news portals and make the news portals more efficient and easier for the users to access while save their time searching the news.

1.2 Objectives

We have the following objectives for our project:

To increase the usability of users with news portals

To facilitate the advancement of CMS with the integration of recommendation feature

To authenticate the news article and verify its truthfulness

To save the time of users searching for the right news

1.3 Motivation and Significance

The news portals are used on a very high rate by the people mostly of and above our age. But they are annoying since they show users the news which do not even concern the users. So, changes must be implemented. Thus, we came up with the idea of creating a system that recommends only the right news to the users. The right news is the news of user’s preference. When we researched, we came to know that they use the content management system and what we had to do was to implement a recommendation system on a content management system. That is why we are doing this project on CMS recommendation system.

Chapter 2: Existing Works

WordPress.com : WordPress is a free and open-source content management system (CMS) based on PHP & MySQL. Features include a plugin architecture and a template system. It is most associated with blogging but supports other types of web content including more traditional mailing lists and forums, media galleries, and online stores. Used by more than 60 million websites, including 33.6% of the top 10 million websites as of April 2019, WordPress is the most popular website management system in use. WordPress has also been used for other application domains such as pervasive display systems (PDS).

Wix.com : Wix is a cloud-based web development platform. It allows users to create HTML5 websites and mobile sites through the use of online drag and drop tools. Users may add functionality such as social plug-ins, e-commerce, online marketing, contact forms, e-mail marketing, and community forums to their web sites using a variety of Wix-developed and third-party applications. Users must purchase premium packages in order to connect their sites to their own domains, remove Wix ads, access to form builder, add e-commerce capabilities, or buy extra data storage and bandwidth.

Drupal : Drupal is a free and open-source content management framework written in PHP and distributed under the GNU General Public License. Drupal provides a back-end framework for at least 2.3% of all web sites worldwide – ranging from personal blogs to corporate, political, and government sites. It is open sourced and the contents management is easy. The UI/UX environment is easy to use.

Joomla : Joomla is a free and open-source content management system for publishing web content, developed by Open Source Matters, Inc. It is built on a model–view–controller web application framework that can be used independently of the CMS. It is cross platform environment specially focusing on the Linux environment. It is a very popular open source content management system.

Chapter 3: Procedure and Methods

First of all, the group members are going to research on how the CMS and recommendation system work together. Then the framework for building the system will be decided. At the same time, we will be collecting the appropriate data set for training the recommender system. Next, we will implement the research into code and create application as per the need. Debugging and Beta testing will also be done to make sure that the product runs smoothly. Finally, we will check for any flaws in the application and keep updating if necessary.The following flowchart will help understand the procedure to be implemented.

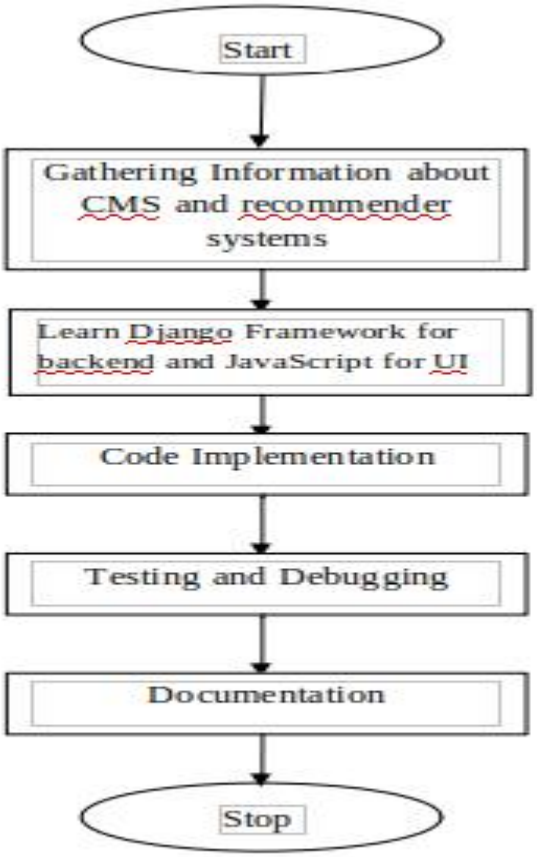

Fig 3.1. Flow Diagram

Chapter 4: System Requirement Specification

4.1. Software Specification

4.1.1. Front End Tools: CSS, HTML, JavaScript

4.1.2. Back End Tools: MYSQL, Django Framework (Python)

4.2. Hardware Requirements

Compatibility: Compatible with any device that can browse the internet

Chapter 5: Project Planning and Scheduling

5.1. Gantt Chart

The project will follow the schedule shown through Gantt chart.

Weeks -> and Works	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Research										
Learning about CMS and Recommenders										
Coding and Implementation										
Testing and Debugging										
Documentation										

References

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