

<u>www.ijaar.co.in</u>

ISSN – 2347-7075 Peer Reviewed Vol.12 No.4 Impact Factor – 8.141 Bi-Monthly March – April 2025



Guidelines For Indian Government Websites (GIGW 3.0) And Wordpress Plugins For Library Websites

De Braganza Rodrigues Francis Terence<sup>1</sup> & Dr. Shivraj V. Thorat<sup>2</sup>

 <sup>1</sup> Research Scholar, Department of Library and Information Science, Shivaji University, Kolhapur, Maharashtra.
<sup>2</sup> Assistant Librarian, Barr. Balasaheb Khardekar Knowledge Resource Centre, Shivaji University, Kolhapur, Maharashtra.
Corresponding Author - De Braganza Rodrigues Francis Terence DOI - 10.5281/zenodo.15696700

### Abstract:

Established guidelines ensure that the library website is searchable and accessible to users. However, developing a website requires technical skills in web technologies. Similarly, guidelines can be highly technical and difficult for a librarian to understand and implement. WordPress, a Content Management System (CMS) and the Guidelines for Indian Government Websites and Apps (GIGW 3.0) provide a relatively simple and non-technical language that can help in this regard. Furthermore, WordPress has several plugins that align with these guidelines. This descriptive paper highlights how WordPress plugins can assist in the development of a searchable and accessible library website that complies with website guidelines.

Keywords: GIGW, WordPress Plugin, Library Website, Sticky Menu, Search, FAQs, Sitemap, Accessibility, gtranslate.

## Introduction:

A website is a collection of files and related resources accessible through the World Wide Web and the Internet via a domain name. around a "homepage" or landing page (Britannica, n.d.).

The library can use a website as a platform to provide information regarding the library and its collection. The website can provide services to its users, such as access to open resources, the catalogue, etc. The advantage of having a library website is that it can give access to users without physical and time constraints.

## Content Management System (CMS):

One way to develop a library website is to use a Content Management System (CMS). A CMS is a piece of software used to organise, manage or change the content of a website (Oxford Advanced Learner's Dictionary, n.d.). There are several CMS. However, the most popular CMS is WordPress (GeeksforGeeks, n.d.).

WordPress was first developed in 2003. It is a free and open-source software built on PHP and MySQL, with a GPLv2 license and the software can be downloaded from its official website at https://wordpress.org. Over 43% of all sites across the web use WordPress. The most recent version of WordPress is 6.8.1, released on April 30, 2025 (WordPress, The greatest advantage n.d.-a). of WordPress is that it is intuitive and easy to use, and has thousands of readily available plugins created by developers that can be used to enhance the website. A WordPress plugin is a package of code that can be installed on a WordPress website to add new features or functionality (WordPress, n.d.-b).

## Guidelines for Indian Government Websites (GIGW):

The Guidelines for Indian Websites (GIGW) Government were formulated in the year 2009 by the National Informatics Centre (NIC). The aim was to ensure guidance on desirable practices covering the entire lifecycle of websites, web portals and web applications, right from conceptualisation and design to their development, maintenance and management (Ministry of Electronics & Information Technology, n.d.).

In 2019, GIGW 2.0 was developed to include guidance on mobile apps by including standards evolved by international bodies like the World Wide Web Consortium (W3C), ISO 23026, and Web Content Accessibility Guidelines (WCAG 2.1). Feedback and consultations from industry, society and government organisations were also included (Ministry of Electronics & Information Technology, n.d.).

Thereafter, in 2023, GIGW 3.0 was introduced. It offered upgraded guidelines on the accessibility of websites and apps provided specific and guidance to government organisations on how to improve the user interface (UI) and user experience (UX). This version is titled "Guidelines for Indian Government Websites and Apps". However, since the acronym GIGW gained wide currency, the acronym has been retained, with the letter "W" signifying "Websites and Apps" (Ministry of Electronics & Information Technology, n.d.).

Although it is expected that all the websites/apps owned by government organisations must comply with these guidelines, some of these guidelines can also be adopted for developing library websites in WordPress that make the website searchable and accessible to users.

## **Literature Review:**

Nearly twenty-four years ago, Wu & Liu (2001)suggested that librarians can develop websites to keep academic faculty updated on their teaching and research disciplines. Although (Benzing, 2006) found that the websites were getting more flexible, efficient, and consistent.

However, some recent studies also point to many lacunae in the library websites. Tang, Xu, Wang, Zhang, & Zhu (2025) showed that the graphic layout and top navigation bar have a significant effect on the emotional state and perceived usability. Tavosi, Naghshineh, Zerehsaz, & Mahboub (2025) found that when top institution libraries were excluded, SEO rankings are still required to attract users. In addition, Agabirwe, Kiyingi, & Macevicute (2025) showed that poor navigation, labelling of links, and lack of awareness of the existence of the library website were some of the causes of inaccessibility. Dei (2025) found that the library websites had several issues, relating to low content and information, navigation, resources and collections, services, and support for teaching, learning and research. The findings by Jilani, Sheikh, Shah, & Saqlain (2025) showed that there was a lack of a generalised framework applicable to any academic library website for its usability evaluation. The review suggests that library websites still need to adopt guidelines or standards.

#### **Objective of the study:**

This paper highlights the importance of the Plugins of the WordPress CMS to develop a library website that complies with some of the Guidelines for Indian Government Websites and Apps (GIGW 3.0).

### Scope and Limitations of the Study:

The plugins discussed in this paper apply to library websites developed using the WordPress CMS. Furthermore, upgrading WordPress to a compatible version may be necessary for successfully installing the plugin.

#### Methodology:

The seven free plugins that are compliant with some of the GIGW 3.0 statements are discussed.

## GIGW statements, types of plugins and their purpose:

**5.1.17 Statement:** "Proper page title and language attribute, along with metadata for the page, like keywords and description, are appropriately included." (Ministry of Electronics & Information Technology, 2025).

Statement 5.1.17 relates to Search engine optimisation (SEO).

Search engine optimisation (SEO): The purpose of Search engine optimisation (SEO) is to enable optimisation by changing the structure and content, hence improving its relevance and authority to increase its visibility and web traffic. This free plugin for SEO is Yoast SEO, which can be downloaded from https://wordpress.org/plugins/wordpressseo/ (Yoast, n.d.)

**5.2.15 Statement:** "Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality." (Ministry of Electronics & Information Technology, 2025)

**5.2.20 Statement:** "In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving

focus." (Ministry of Electronics & Information Technology, 2025)

Statements 5.2.15 & 5.2.20 relate to Accessibility.

Accessibility: The purpose of Accessibility is to remove barriers that prevent interaction and access to library websites by people with disabilities. Accessibility solves problems like font size, contrast, etc. The free plugin is WP Accessibility Helper and can be downloaded at https://wordpress.org/plugins/wpaccessibility-helper/ (Volkov, n.d.)

**5.2.31 Statement:** "More than one way is available to locate a web page within a set of web pages, except where the web page is the result of, or a step in, a process." (Ministry of Electronics & Information Technology, 2025)

## Statement 5.2.31 relates to the following four plugins:

Sticky Menu: The purpose of a sticky menu is to make the menu more accessible and improve user experience. This free plugin is Sticky Menu & Sticky Header and can be downloaded at https://wordpress.org/plugins/sticky-menuor-anything-on-scroll/ (WebFactory, n.d.) Search Button: The purpose of a search button on a library website is to enable users to quickly and efficiently locate specific information without having to browse through multiple pages or menus. It saves time, enhances accessibility, and increases user engagement. This free plugin is Ivory Search and can be downloaded at <u>https://wordpress.org/plugins/add-search-</u> <u>to-menu/</u> (Dalvi, n.d.)

**Frequently Asked Questions (FAQs):** The purpose of Frequently Asked Questions (FAQs) is to provide quick, clear, and accessible answers to common queries users may have about the library website. This free plugin is Ultimate FAQs and can be downloaded at https://wordpress.org/plugins/ultimatefaqs/ (Rustaurius, n.d.)

**Sitemap:** The purpose of a sitemap is to provide a structured overview of all the pages on a library website, helping both users and search engines navigate and understand the site's content and organisation. This free plugin is Google sitemap generator and can be downloaded at <u>https://wordpress.org/plugins/googlesitemap-generator/</u> (Auctollo, n.d.)

**5.4.10 Statement:** "Website/app is bilingual with a prominent language selection link and uses Unicode characters." (Ministry of Electronics & Information Technology, 2025)

Statement 5.4.10 relates to language translation.

Language Translation: The purpose of a language translation on the library website is to allow users to view content in their preferred language, thereby improving accessibility, user experience, and inclusivity. This free plugin is gtranslate and can be downloaded from https://wordpress.org/plugins/gtranslate/ (edo888, n.d.)

# Installation Procedure for All Seven Plugins:

1. Log in to your WordPress website.

2. From Dashboard, the Plugins menu, then click on Add New Plugin.

3. Either search or upload the plugin:

a. In the search bar, search for the plugin.

b. Upload the saved plugin from the Add plugin button.

4. After the plugin is uploaded, click Install Now.

5. Once the installation has finished, click Activate.

## **Conclusion:**

From the above discussion, it can be argued that these WordPress Plugins are free and open-source software, and are easy to install. Furthermore, they are suitable for meeting some of the Guidelines for Indian Government Websites (GIGW 3.0) that make the website searchable and accessible to users.

## **References:**

- Agabirwe, P., Kiyingi, G. W., & Macevicute, E. (2025). Locked out! Exploring university library websites' accessibility by students with visual disabilities. *Digital Library Perspectives*. https://doi.org/10.1108/DLP-11-2024-0189
- Auctollo. (n.d.). XML Sitemap Generator for Google. Retrieved June 4, 2025, from https://wordpress.org/plugins/google -sitemap-generator/

- Benzing, M. (2006). Luwak: A content management solution. *Library Hi Tech*, 24(1), 8–13. https://doi.org/10.1108/0737883061 0652077
- 4. Britannica. (n.d.). Definition & Facts. Retrieved June 4, 2025, from https://www.britannica.com/technolo gy/website
- Dalvi, V. (n.d.). Ivory Search. Retrieved June 4, 2025, from https://wordpress.org/plugins/addsearch-to-menu/
- Dei, D. G. J. (2025). Analysis of content, services, and resources available and accessible on websites of academic libraries. *Digital Library Perspectives*, 41(1), 100– 118. https://doi.org/10.1108/DLP-02-2024-0027
- edo888. (n.d.). Translate WordPress with GTranslate. Retrieved June 4, 2025, from https://wordpress.org/plugins/gtransl ate/
- B. GeeksforGeeks. (n.d.). Top 10 Best Content Management Systems (CMS). Retrieved June 4, 2025, from https://www.geeksforgeeks.org/bestcontent-management-systems/
- Jilani, M. A., Sheikh, A., Shah, F. A., & Saqlain, S. M. (2025). Usability evaluation of academic library websites: A systematic literature review. *Information Discovery and Delivery*. https://doi.org/10.1108/IDD-09-2024-0144

## IJAAR

- Ministry of Electronics & Information Technology, G. of I. (2025, May 30). Guidelines | Guidelines for Indian Government Websites and apps (GIGW) | India. Retrieved June 4, 2025, from https://guidelines.india.gov.in/guidel ines/
- 11. Ministry of Electronics & Information Technology, G. of I. (n.d.). Introduction | Guidelines for Indian Government Websites and apps (GIGW) | India. Retrieved June 4, 2025, from https://guidelines.india.gov.in/introd uction/
- 12. Oxford Advanced Learner's Dictionary. (n.d.). Oxford Advanced Learner's Dictionary. Retrieved June 4, 2025, from https://www.oxfordlearnersdictionari es.com/definition/english/contentmanagement-system
- Rustaurius. (n.d.). Ultimate FAQ Accordion Plugin. Retrieved June 4, 2025, from https://wordpress.org/plugins/ultimat e-faqs/
- 14. Tang, Z., Xu, X., Wang, F., Zhang, L., & Zhu, M. (2025). Effect of interface layout design of a public library website on informationseeking experience for elderly people. *Library Hi Tech*, 43(2/3), 746–762. https://doi.org/10.1108/LHT-10-2023-0517

- 15. Tavosi, M., Naghshineh, N., Zerehsaz, M., & Mahboub, S. (2025). Analysis of the relationship between visual complexity and SEO rank of library websites affiliated with top universities. *Information Discovery* and *Delivery*. https://doi.org/10.1108/IDD-06-2024-0088
- 16. Volkov, A. (n.d.). WP Accessibility Helper (WAH). Retrieved June 4, 2025, from https://wordpress.org/plugins/wpaccessibility-helper/
- 17. WebFactory. (n.d.). Sticky Menu & Sticky Header. Retrieved June 4, 2025, from https://wordpress.org/plugins/stickymenu-or-anything-on-scroll/
- WordPress. (n.d.-a). About. Retrieved June 5, 2025, from https://wordpress.org/about/
- 19. WordPress. (n.d.-b). What is a plugin? Retrieved June 4, 2025, from https://learn.wordpress.org/lesson/w hat-is-a-plugin/
- 20. Wu, Y. D., & Liu, M. (2001). Content management and the future of academic libraries. *The Electronic Library*, 19(6), 432–440. https://doi.org/https://doi.org/10.110 8/02640470110412044
- 21. Yoast. (n.d.). Yoast SEO. Retrieved June 4, 2025, from https://wordpress.org/plugins/wordpr ess-seo/