# Gaming Community Website: "The Gathering"

# **Information System Final Report**

**Senior Capstone ITEC 4750** 

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# **Revision History**

| Name                 | Date      | Reason for Changes                               | Version |
|----------------------|-----------|--|---------|
| First Draft          | 2/4/2025  | Initial Draft of IS Report                       | 1.0     |
| Draft Update         | 2/7/2025  | Proofreading adjustments for clarity             | 1.0     |
| Report 2 First Draft | 3/6/2025  | Initial Draft of IS Development Report 2         | 1.1     |
| Report 2 Update      | 3/19/2025 | Updated Report 2 with more details for clarity   | 1.1     |
| Report 3 First Draft | 4/8/2025  | Initial Draft of IS Implementation Report 3      | 1.2     |
| Report 3 Update      | 4/12/2025 | Updated for accuracy and clarity                 | 1.2     |
| Final Report Draft   | 4/14/2025 | Merging of all reports for final report          | 1.3     |
| Plugin Update        | 4/16/2025 | Updated list of plugins                          | 1.3     |
| Sections Update      | 4/18/2025 | Added Conclusion and Technology References       | 1.3     |
| Final Draft          | 4/27/2025 | Updated plugins, expanded Evaluation, final edit | 1.4     |
|                      |           |  |         |

#### 1. Introduction

The Gathering is a tabletop gaming community website designed to serve as a hub for players. The site will enable users to learn about different tabletop games, view upcoming events, and connect with other enthusiasts. Built on the WordPress platform and hosted on a public server, the website is being developed by a team of six stakeholders who wish to give back to their community. The project is designed with future growth in mind, starting with support for three popular games and anticipating the addition of more games as the community grows.

Our mission is to provide a safe, centralized platform for tabletop gaming enthusiasts to connect with one another, learn about other games they might not be familiar with, and see some of the latest events in their area. Our vision is to build the website so that it grows and expands along with its community, offering more features and support for a wider variety of games.

## 2. Project Overview

#### 2.1 Purpose

This website will serve as a central hub for users with shared interests to connect with and learn about other games played in the community. While there is a plethora of websites with information on tabletop games available online, many of them are either too broad, targeted towards a general audience, or too specific, focusing solely on fans of one particular game. This website aims to be a centralized platform for tabletop enthusiasts of every kind.

## 2.2 Technical Requirements

The website will be built using WordPress due to the platform's flexibility and ease of use. It will also be hosted on a public server that is optimized for WordPress website (the hosting provider is to be determined). This setup will ensure the website's availability and functionality while minimizing downtime.

#### 2.3 Product Features

The Website will include features and plugins that provide functionality for a Home / Greeting page, a blog page, a Learn How to Play page, an Upcoming Events page, a social hub, and a Contacts / Feedback page.

The Home / Greeting Page will be a simple landing page with information about the website and the organization.

The blog page will consist of organization approved articles pertaining to all things Tabletop Gaming related. This will include news about upcoming events or games, tips on how to improve game strategies, an overview of how to play games the website supports, and other subjects of interest related to tabletop gaming.

The Learn How to Play page will be a gallery of videos (embedded from the publisher's website) that will explain the rules of the game as well as links to articles or online manuals (when available). Players will also be able to reach out to the community via social platforms and community forums.

The upcoming events pages will show a calendar of events organized by games and locations in which they are being held. This will include conventions, meetups, and launch events held by members of the community, or public events.

The social hub will be a centralized place where users can connect with one another and ask questions or share information with others in the community.

## 3. Project Charter

The scope of this project is to build a website with all necessary features to run the operation requirements of the community. The website will be built using WordPress hosted on a public server by a reputable host provider. It will include (but not limited to) a Home page, blogs, a Learn How to Play page, an event page, and a community forum page.

#### 3.1 Specific Product Features

- **Home Page:** The main landing page that provides information about the website and organization.
- **Blog Page:** A webpage with articles posted by registered authors. This page will provide news, game guides, and other information relevant to the community.
- Learn How to Play Page: A gallery page with useful videos and articles that will teach users how to play varies games that the organization supports.
- Event Calendar: An embedded web application that will allow users to look at upcoming events organized by games and geolocation.
- **Community Forums:** An embedded forum that will allow users to communicate with others within the community.
- Login / User Profile: The website will feature user login system, using a register email and password, and have a basic user profile that will allow users to customize their display name, email notifications, geolocation, and favorite games.
- **Feedback form:** There will also be a contacts form for users to submit feedback or report issues regarding the website or misconduct within the community.

#### 3.2 Feasibility & Project Constraints

Regular interment testing will take place to ensure that the website maintains functionality after each major change. After launch, the support team will be responsible for addressing customer queries and making change requests as needed. The operations development team will run tests on updates and changes before they are applied to the live website. Since the website will run on the

WordPress platform, many updates will come through those designated channels. This should ensure that the website remains secure and functions properly.

Additions to which games the website supports will come from the community. Requests can be made via feedback form, and the support team will work to add the necessary information to the website's systems to include the addition.

In the event that the website's host provider is no longer able to support WordPress, or the plug-ins necessary for the website's functionality, then a new host provider will be chosen, and the website will be migrated to the new host.

## 4. Planning & Team Dynamics

#### 4.1 Team Roles & Responsibilities

- Russell Dennis Project Management
- Alexander Devenish Front-end Development
- Paulo Freire Research & Analysis
- Justin Greene Backend Development
- Matthew Hajec Backend Development
- Tilahun Muche Quality Assurance

#### 4.2 Communication & Collaboration

Most communications will take place on a designated Discord server. Team members will be able to collaborate on each milestone. There, discussions and resource materials will be shared with all users and feedback can be given towards each milestone. Important announcements and emails will go out closer to due dates. All changes and updates to the project will also be posted during designated channels.

Each team member will also have access to a shared OneDrive folder containing all documents used for this project. Each team member will also have access to the WordPress site via a unique admin account and will be able to make contributions as needed.

#### 4.3 Work Breakdown Structure

- January 8<sup>th</sup> February 18<sup>th</sup>: Initial Planning of Project and first draft of documentation.
- February 19<sup>th</sup> March 16<sup>th</sup>: Active development of website structure and core features.
- March 17<sup>th</sup> April 6<sup>th</sup>: Second stage development on additional features with regular testing.
- April 7<sup>th</sup> April 24<sup>th</sup>: Beta testing and final adjustments
- April 25<sup>th</sup>: Website Public Launch

#### 5. Overview of Infrastructure

The Gathering website is being developed using WordPress and hosted on a web server running Apache and PHP; managed by hosting provider Cloud Access which uses the MySQL database language. The WordPress core files with the directories of wp-admin, wp-content, and wp-includes will manage content, user authentication, and the integration of plugins. A few development plugins are already in use with more added as needed. These plugins provide the Content Management System with necessary development features. The theme also provides the necessary tools to create the website's layout and functionality. Additionally, to boost performance and security, the management team will enforce SSL certificates for HTTPS connections and run regular backups and monitoring. This infrastructure allows for functionality and scalability to meet project and community needs.

## 6. System Specifications

#### 6.1 Hosting

Cloud Access (CloudAccess.net) will be the initial managed hosting provider for this project. They specialize in Joomla and WordPress content management systems and offer a comprehensive platform that includes optimized cloud hosting environments resources to assist developers in building and maintaining this website.

Established in 2008, CloudAccess.net has grown to serve nearly 10,000 satisfied clients. This hosting provider delivers tailored hosting solutions for WordPress ensuring optimal performance and security. Their hosting plans come with SSL certificates, daily offsite backups, and automated restoration features to minimize downtime.

#### **6.2** Content Management System

**WordPress** is a widely used open-source content management system (CMS) that will allow the development team to create and manage the website with ease. It will allow ongoing maintenance and adjustments from teams with minimum programming experience. It also allows for scalability, user management, and there is an extensive developer community with resources and support ensuring that any team can get familiar and up-to-speed with the website's internal infrastructure and systems.

## **6.3** Third-Party Plugins

- HybridMag: The main theme that was chosen for this project. This theme plugin
  manages the layout and style of the style while also adding some functionality and
  development tools.
- **Stackable**: This plugin provides an extensive library of development tools allowing developers to implement designs and features not included with the initial template.

- **bbPress**: This plugin provides functionality for forums allowing users to communicate by creating threads. This feature is necessary for the community hub service provided by the website.
- Duplicate Page: This plugin allows developers to quickly and efficiently copy
  existing pages to speed up development and create consistent styling throughout the
  website.
- The Events Calendar: This plugin allows developers to implement an event calendar feature that will show users upcoming events.
- User Registration & Membership: This plugin provides functionality for users to create and manage their user accounts. An account is required to use the forums and communicate with others in the community.
- **WPIDE:** WordPress file manager with code editor. Used to create custom plugins for additional functionality.
- **Toggle CTA Button:** Custom plugin that toggles the "Call to Action" button (used for user sign in) when a user is signed into the website.

#### 6.4 Programming Languages

- PHP (Hypertext Preprocessor): PHP serves as the backbone of WordPress, handling server-side operations and the dynamic generation of web pages. The core WordPress software, as well as themes and plugins, are primarily written in PHP.
- HTML (HyperText Markup Language): HTML structures the content on web pages, defining elements such as headings, paragraphs, links, and images. In WordPress, PHP generates HTML to display content to users.
- CSS (Cascading Style Sheets): CSS is used to style and layout HTML elements, controlling aspects like colors, fonts, and spacing. In WordPress, themes utilize CSS to ensure consistent and visually appealing designs across the site.
- **JavaScript**: JavaScript adds interactivity and dynamic features to WordPress websites, such as sliders, pop-ups, and form validations.

- Apache Web Server: This project will be using Apache for web services. Apache
  processes the incoming HTTP requests and serves the appropriate content. It works
  in conjunction with PHP, the scripting language in which WordPress is written, to
  generate dynamic content. This setup allows WordPress to render pages based on
  user interactions and database queries.
- MySQL Database: MySQL functions as the relational database management system
  (RDBMS) that will store all the data for this website, including pages, user
  information, and settings. When content is requested, WordPress uses SQL queries
  to retrieve the necessary data from the MySQL database, processes it through PHP,
  and then serves it via Apache to the user's browser.

## 7. User Experience Design

The interface of the website is being designed with convenience and organization in mind. The home page of the website features the latest updates and news from blogs, events, and announcements. Users are able to navigate the website without having to login. However, users are not about to communicate without first signing into their account. The login button is located in the top right corner of the site in the navigation bar.

The site is designed for users to get to almost any page from any page with as few clicks as possible. Across the top are links to the main pages; this navigation bar is available on all pages. For pages with children pages, there is a dropdown box to go directly to the child page. On the parent pages, various "cards" for each game supported are located in a grid formation. Clicking on one of these cards takes the user to the designated child page with information about the clicked game.

This design should minimize time locating the information the user is looking for by only showing information relative to the game the user clicked on.

#### 8. Policies & Procedures

#### 8.1 Privacy Policy

The Gathering organization's privacy policy is detailed on the website's dedicated privacy policy page. This policy is regularly reviewed and updated by compliance specialists and outlines how user data is collected, stored, processed, and protected. It includes information on the use of cookies to enhance convenience and functionality, data retention periods, and the third-party services utilized. Additionally, the policy sets forth guidelines for ethical website use, specifies the type of content permitted, and describes the consequences for policy violations.

#### 8.2 Community Management

Appointed moderators will monitor the website's community feed to ensure compliance with the user agreements. Their responsibilities include identifying and addressing any violations—such as excessive profanity, harassment, hate speech, or other forms of misconduct—and enforcing community standards. Moderators will issue warnings, temporary suspensions, or permanent bans based on the severity and frequency of the violations. They are also tasked with encouraging positive engagement, facilitating constructive discussions, and providing support to users who report problematic content.

## **8.3** Security Procedures

For our WordPress website, the management team will implement a comprehensive security strategy tailored to the platform. Specific procedures include:

• Core, Plugin, and Theme Updates: The team will ensure that the WordPress core, along with all plugins and themes, are updated regularly. This minimizes vulnerabilities and ensures the website benefits from the latest security patches.

#### • Strong Authentication Practices:

Admin User Accounts: Only necessary user accounts will be maintained, with each
account assigned the least privilege required. All administrative and privileged
accounts will use two-factor authentication to add an extra layer of security.

- General User Accounts: User accounts will require a password that meets a set criteria: 8 characters long and at least one capital letter, one lowercase letter, one number, and one symbol. Any accounts with more than 10 failed logins in a day will be locked and require a password reset.
- **Regular Backups:** Automated daily backups of the entire website (files and database) will be conducted and stored securely offsite. This ensures rapid recovery in case of a security incident or data loss.

#### • File Integrity and Access Controls:

- File Monitoring: Regular integrity checks will be conducted to detect unauthorized changes to core files or configurations.
- File Editing Restrictions: Direct file editing from the WordPress dashboard will be disabled to prevent unauthorized modifications.
- Secure File Permissions: File and directory permissions will be set according to best practices, restricting access only to essential users and processes.

#### • Regular Security Audits and Monitoring:

- Vulnerability Assessments: Scheduled audits will be performed to identify potential vulnerabilities.
- Log Monitoring: Activity logs for the website, including user actions and server events, will be monitored for suspicious activity.
- o Incident Response: A clear incident response plan is in place, detailing steps for immediate action, investigation, and remediation if a breach is detected. Affected users will be notified as required by legal and regulatory guidelines.

## 9. Budget

| Initial Cost        | Hours | Rate | Total   |
|---------------------|-------|------|---------|
| Website Development | 120   | \$25 | \$3,000 |

| Reoccurring Cost |        |      |       |
|------------------|--------|------|-------|
| -                | Months |      |       |
| Web Hosting      | 12     | \$25 | \$300 |

Much of the cost for this project will be in development. It will take approximately 120 hours for development to put together an MVP (Minimal Vital Product). After which, there will be a monthly cost for a hosting subscription to keep the website live. However, this initial budget does not include ongoing maintenance for the website after launch; that will be covered on an As Needed basis.

## 10. Overview of Implementation & Maintenance

The Gathering is being developed on the host server, meaning that launching the website will be straightforward. Prior to launch day, the public-ready build of the site will be linked with its domain (TheGathering.org) and made accessible to the public. An announcement will go out via social media channels to inform the community that the website is live and ready for use.

During the first 30 days after launch, the development team will continue post-launch development to resolve any outstanding issues or bugs. After which, maintenance responsibilities will be transferred to the long-term support team, which will run regular security audits, perform core/theme/plugin updates, moderate the community, and plan any future feature releases.

## 11. Implementation

#### 11.1 Pre-Launch

Before the site goes public, a final round of testing will be performed, and any issues will be addressed. This includes testing the website across multiple browsers and devices to ensure responsiveness and accessibility.

• Cross-Browser Compatibility: Ensuring the website functions properly on popular browsers such as Chrome, Firefox, Safari, and Edge.

- **Responsive Design:** Verifying that the site layout adjusts appropriately across various screen sizes, including desktops, tablets, and smartphones.
- Accessibility Compliance: Checking for ADA and WCAG compliance to ensure the site is usable by individuals with disabilities.
- User Experience (UX): Testing the navigation flow, load times, and interaction design to make sure the user journey is intuitive and smooth.

#### 11.2 Launch

On launch day, the website will be linked to its registered domain (TheGathering.org) and made available to the public. An announcement will be sent out via social media channels to inform the community that the website is live and ready for use.

This announcement will include:

- A brief overview of the website's purpose and features.
- Visual assets such as banners or stock images.
- A call to action encouraging users to sign up, participate, or provide feedback.

#### 11.3 Post-Launch

Once the site goes live, the development team will remain on for 30 days following launch to finalize any outstanding development tasks and resolve any unexpected issues or bugs that may come up before passing on responsibility to the long-term support team. This period is critical for addressing unforeseen issues that may not have been discovered during the testing phase.

## 12. Maintenance

#### 12.1 Long-Term Support

The long-term support team is essential for the continued success and stability of *The Gathering* website. This team will take over day-to-day maintenance responsibilities and provide ongoing improvements as needed. Their key responsibilities include:

- **Security Monitoring:** Running routine security audits, monitoring for vulnerabilities, and updating security plugins or software as threats evolve.
- **System Updates:** Managing updates for WordPress core, themes, and plugins to ensure compatibility and stability.
- Community Management: Monitoring community interactions to uphold guidelines, address disputes, and ensure a welcoming environment.
- **Feature Planning:** Identifying areas of improvement or requested features and scheduling them for future development cycles.

## 12.2 Training

A structured training process will be implemented to train any new team members that will be joining the support team after launch. This training will be conducted by the team leader using documentation, presentation, and hands-on experience; and will cover:

- WordPress updates: How to check and apply WordPress updates, assess plugin compatibility, and perform site backups.
- **Bug Reporting & Testing:** How to review reported issues, perform quality checks, and either resolve issues or forward documents to team leader for escalation.
- **Feedback:** How to view and collect user feedback. Then create reports for either bug fixes, community issues, or feature request.

• **Community Moderation:** Guidelines for moderating user-generated content, addressing user concerns, and enforcing community standards.

#### 12.3 Future Funding

To ensure the long-term viability of the platform, funding for ongoing operations will come from two main sources:

- Affiliate Programs: Partnerships with reputable gaming companies will allow the site to earn commissions through affiliate marketing. Products such as gaming supplies (playmats, storage boxes, dice, etc.), packaged products, and merchandise can be promoted to community members via affiliate links.
- **Donations:** A donation system will be set up, allowing community members to contribute directly to the site's upkeep. Donations may be one-time or recurring, and contributors will be recognized in a "Supporters" section of the site.

All funds will be allocated transparently and tracked to ensure they are used for hosting fees, development costs, content moderation, and other operational needs.

## 13. Evaluation

Ongoing evaluation is essential to maintaining quality user experience and ensuring that the site aligns with the goals of *The Gathering* stakeholders. The website will include an accessible feedback system, allowing users to submit suggestions, report issues, and respond to periodic surveys. This input will help the team identify high-impact areas for improvement, monitor compliance with accessibility and ethical standards, and adjust content and functionality to better suit user needs. Evaluation results will be used to guide future development and ensure the platform remains relevant, meets compliance requirements, and remains user driven.

Feedback will be collected via a Feedback form (either hosted through the website or by a thirdparty such as Survey Monkey, Google Forms, etc.). This form will generate a report based on results that will then be forward to the support team's email address (<a href="support@thegathering.org">support@thegathering.org</a>) where it will be reviewed and, depending on results, will be documented for appropriate updates or fixes (if any). Google Analytics will also be used to monitor website traffic, and its data will also be collected for review. This data should give the support team a clear understanding of what actions need to be taken to maintain or upgrade the website as needed.

## 14. Conclusion

The Gathering is a modest website with an ambitious goal: to be the go-to community hub for tabletop gaming enthusiasts. With features like How to Play guides, news blogs, an event calendar, and interactive forums there is content for new players and veterans alike. The website's design allows the site to grow as its community does. Built using WordPress and popular plugins to ensure useability and scalability. While in its current state, the website looks unfinished, however, that will change as more user-driven content is added. Passionate members of the Long-Term support team will make sure the site remains functional and will plan new features to meet community needs. The Gathering aims to be a fun and welcoming environment for all who call themselves gamers.

## **Technology References**

• WordPress – The core content management system for this site.

Official site: <a href="https://wordpress.org/">https://wordpress.org/</a>

• **bbPress** (forum plugin) – A discussion-board plugin built by the WordPress contributors.

Directory page: <a href="https://wordpress.org/plugins/bbpress/">https://wordpress.org/plugins/bbpress/</a>

Official site: https://bbpress.org/

• **Stackable** – A comprehensive block library that transforms Gutenberg into a page builder. Directory page: https://wordpress.org/plugins/stackable-ultimate-gutenberg-blocks/

Official site: https://wpstackable.com/

• User Registration & Membership – Drag-and-drop form builder for custom registration, login, and profiles.

Directory page: https://wordpress.org/plugins/user-registration/

Official site: <a href="https://wpuserregistration.com/">https://wpuserregistration.com/</a>

• The Events Calendar – Powerful free calendar plugin for creating and managing events.

Directory page: <a href="https://wordpress.org/plugins/the-events-calendar/">https://wordpress.org/plugins/the-events-calendar/</a>

Official site: <a href="https://theeventscalendar.com/">https://theeventscalendar.com/</a>

• **HybridMag** – A modern magazine-style WordPress theme with extensive customization options.

Theme directory: <a href="https://wordpress.org/themes/hybridmag/">https://wordpress.org/themes/hybridmag/</a>

Developer site: <a href="https://themezhut.com/themes/hybridmag/">https://themezhut.com/themes/hybridmag/</a>

• CloudAccess.net (hosting) – Managed cloud hosting platform optimized for WordPress and Joomla.

Official hosting platform: https://www.cloudaccess.net/

• **WPIDE** – A powerful code editor plugin designed for editing and developing WordPress themes and plugins directly from the WordPress dashboard.

Directory page: https://wordpress.org/plugins/wpide/

Official site: https://wpide.com/

• **Toggle CTA Button** – A custom plugin that hides the Call-to-Action button when a user is signed into the website.