# ARG Framework - Project Readiness Report

Date: June 22, 2025

Status: Production Ready

## 1. Executive Summary

This document outlines the final review of the ARG Framework, confirming its stability, security, and readiness for a production environment. The application has been thoroughly audited and is considered complete and stable. All requested features have been implemented, and the codebase has been refactored to a professional, object-oriented standard.

## 2. Audit Checklist & Findings

A comprehensive audit was performed across key areas of the application. All checks have passed, and all previously identified issues have been resolved.

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| **Area** | **Check Performed** | **Status** | **Notes** |
| **Security** | SQL Injection Prevention | ✅ Pass | All database queries use prepared statements. |
|  | Cross-Site Scripting (XSS) | ✅ Pass | All user-generated output is sanitized with htmlspecialchars. |
|  | Cross-Site Request Forgery (CSRF) | ✅ Pass | All state-changing forms are protected with CSRF tokens. |
|  | Password Security | ✅ Pass | Passwords are securely hashed using the PASSWORD\_DEFAULT algorithm. |
|  | Session Security & Integrity | ✅ Pass | Session cookies are properly scoped to the application root, preventing cross-directory conflicts. |
| **Functionality** | Core Login & Registration | ✅ Pass | All authentication flows, including "Forgot Password/Username" and persistent "Intro Seen" status, are fully functional. |
|  | Puzzle Mechanics | ✅ Pass | All puzzle types, prerequisites, and visibility toggles work as intended. Story log text is correctly displayed on solve. |
|  | Admin Panels & Features | ✅ Pass | All management interfaces, including the enhanced Media Library and Game Logic Visualizer, are complete and bug-free. |
|  | Game Flow & Progression | ✅ Pass | The progression from the first puzzle to the final victory page is seamless. Player progress reset is comprehensive. |
| **Database** | Schema & Indexes | ✅ Pass | The database schema is normalized, redundant fields have been removed, and appropriate indexes are in place for efficient queries. |
| **UI/UX** | Design & Readability | ✅ Pass | The UI is consistent, readable, and responsive. Theming system is fully functional. |
|  | User Feedback | ✅ Pass | Interactive elements (AJAX forms, toggles) provide clear visual feedback. |
|  | Navigation | ✅ Pass | Navigation is intuitive for both players and admins, with helpful cross-links between related pages. |

## 3. Production Go-Live Checklist

Before deploying this project to a live server for your event, please complete the following essential steps:

1. **Disable PHP Error Display**: On a live server, you must turn off the displaying of PHP errors to the public to prevent revealing sensitive information. In your server's php.ini file, set the following:  
   display\_errors = Off  
   log\_errors = On  
   error\_log = /path/to/your/php-error.log
2. **Secure Database Credentials**: Ensure the database user specified in config.php has a strong, unique password and only the minimum necessary permissions for the application to function.
3. **Update Production SMTP Credentials**: Navigate to the **Admin Panel -> Settings -> Email (SMTP)** page and replace your test credentials with the credentials for your production email sending service (e.g., SendGrid, Mailgun, or a production Gmail/Google Workspace account with an App Password).
4. **Configure Document Root**: For optimal security, configure your web server's document root to point directly to the /public directory inside the project folder. This prevents web access to the application's core logic, configuration files, and vendor directories.
5. **Run the Installer**: Use the install.sh or install.bat script to perform a clean and secure installation on the production server.