**Game Portal Functional Documentation**

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1. Introduction<a name="introduction"></a>

The Game Portal is a web application that serves as a platform for hosting and playing various simple browser games. The portal provides a centralized location for users to access different games.

2. Games<a name="games"></a>

2.1 Falling Objects Game<a name="falling-objects-game"></a>

Description: A game where the player controls a paddle to catch falling objects of different colors.

Technologies Used: HTML, CSS, JavaScript.

Features:

* Responsive design for various screen sizes.
* Score tracking.
* Game over alert with the option to restart.

2.2 Language Game<a name="language-game"></a>

Description: A language learning game where users match English words to their Hungarian translations.

Technologies Used: HTML, CSS, JavaScript.

Features:

* User interface with input fields and feedback.
* Timer for each round.
* Integration with the server for retrieving word pairs.

2.3 Snake Game<a name="snake-game"></a>

Description: The classic Snake game where the player controls a snake to eat food and grow longer.

Technologies Used: HTML, CSS, JavaScript.

Features:

* Arrow key controls for snake movement.
* Collision detection with boundaries and food.
* Game over alert with the option to restart.

3. Database Connection<a name="database-connection"></a>

* Database: MySQL.
* Connection Script: PHP.
* Purpose: Retrieve language word pairs from the database for the Language Game.

4. Game Portal Interface<a name="game-portal-interface"></a>

* Header: Displays the name of the game portal.
* Game List: Presented in a flexible grid format.
* Each game includes a title, description, and an interactive element to launch the game.
* Current Game Display: An area that dynamically loads and displays the selected game.
* Footer: Contains a copyright notice.

5. Scripting and Interactivity<a name="scripting-and-interactivity"></a>

* JavaScript: Used for client-side scripting to enhance interactivity.
* Event Listeners: Capture user interactions, such as button clicks.
* Game Launch Functionality: Allows users to launch specific games and return to the home page.

6. Deployment<a name="deployment"></a>

* Environment: Web server (e.g., Apache).
* Languages: HTML, CSS, JavaScript, PHP.
* Database: MySQL.

7. Future Enhancements<a name="future-enhancements"></a>

User Authentication: Implement user accounts for personalized experiences.

Additional Games: Expand the game library with new titles.

Scoring System: Enhance the scoring system for a competitive element.

8. Appendix<a name="appendix"></a>

Codebase: Available on GitHub (https://github.com/MBalazs1224/EKKE\_AFP).

Contact Information: Developers and maintainers.