



AI Gaming – GameGen: No-Code Game Maker Tool

Problem Statement:

The challenge is to build a web-based tool that empowers anyone, even those with zero coding skills, to create and customize classic game templates. Participants will develop a solution where users can leverage AI to generate new visuals, tweak game settings, and then export their unique creations as fully playable HTML5 (H5) games.

What We're Looking For:

We are looking for an AI-powered, web-based tool that allows users to select from a list of classic game templates and personalize them through an intuitive interface. The goal is to enable even non-techie individuals to easily create and share their own versions of these games, all powered by AI. The final output should be a user-friendly platform that seamlessly guides the user from template selection to exporting a customized, ready-to-play H5 game.

Core Requirements:

- **Web-Based Tool:**
 - The solution must be an in-browser application featuring at least five playable classic game templates for customization: Flappy Bird, Speed Runner, Whack-the-Mole, Simple Match-3, and Crossy Road.
- **AI Reskin Integration:**
 - Users must be able to generate new artistic assets (such as characters, backgrounds, obstacles, etc.) using AI prompts.
 - The tool should offer simple, guided prompt flows for visual customization, covering aspects like Story/Theme/Art Style, Environment/Background, NPCs, Main Character, Difficulty settings (Easy, Medium, Hard, which in turn affect game-specific parameters), Background Music (BGM), and potentially in-app purchase items (considering a basic virtual currency economy).
 - The AI reskinning process should be quick (aiming for under 1 minute) and interactive.
- **AI-Driven Game Parameter Controls:**
 - Users should be able to modify game parameters (e.g., speed, gravity, gaps between objects, frequency of power-ups) either through natural language prompts or AI-driven smart suggestions.

- The AI should influence not only the visual aspects but also the core gameplay feel and difficulty level.
- **One-Click Export:**
 - The platform must provide a feature to export the customized game as a zipped folder containing an index.html file, ensuring the game can run offline.
- **User Experience:**
 - The tool must be designed with non-coders in mind, prioritizing simplicity and ease of use.
 - It should feature a straightforward, step-by-step workflow:
 1. Pick Template
 2. Reskin (using AI)
 3. Set Parameters (using AI)
 4. Export.

Suggested Directions (but not limited to):

- **AI-Generated Background Music (BGM):** Implement a feature allowing users to create or select unique background music for their games, powered by AI.
- **AI-Driven Logic Extension:** Explore capabilities for users to prompt for minor gameplay logic modifications (e.g., "Make moles shake before they appear") and have the game's code adapt accordingly.
- **Mobile Game Controls:** Incorporate touch and sensor-based controls into the exported H5 games to ensure they are mobile-friendly.

What's Open:

While the core requirements outline the fundamental aspects, we strongly encourage creative exploration. Consider adding more game templates, introducing advanced AI-driven personalization options, developing novel user interaction paradigms for game design, or exploring unique export formats. How can you make the game creation process even more intuitive, engaging, and powerful for users without coding experience?

What to Submit:(Participants are required to submit the following)

- A live web demo of the tool (or a screencast video if the project is hosted locally).
- Access to the source code repository (e.g., GitHub link).
- An exported sample H5 game created using the tool.

Judging Criteria (Entries will be evaluated based on the following criteria:)

- **Technical Execution:** Smoothness of AI integration and robustness of the exported H5 games.
- **Usability:** How truly accessible and easy to use the tool is for non-technical users.
- **Export Quality:** Functionality and accurate reflection of customizations in the out-of-the-box H5 game export.
- **AI/LLM Usage:** Smart and effective use of AI for generating art, potentially music, and influencing gameplay mechanics.
- **Speed:** Efficiency of the reskinning process, ideally taking less than 1 minute per instance.
- **Bonus Features:** Quality and integration of any stretch goals or additional innovative features implemented.

Terms & Conditions

- **Ownership:** All submissions, including but not limited to code, assets, and exported games, will become the property of the organizer, KGen.io.
- **Evaluation:** The judging and grading of entries will be conducted solely in accordance with KGen.io's internal policies and requirements. All decisions made by the judging panel are final.