



HEIHEI Games: Guidelines



This document was collated by **Kate Stevenson** (interim EP / Games Commissioner for HEIHEI Jan 2021- June 2021) and is now no longer being updated. If you are looking for updated guidelines please contact NZ on Air.



This document served as a work-in-progress guide for game producers and developers creating games for the HEIHEI platform. It was put together based on past learnings with the goal to share recommendations and best practices with the community of makers.

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Deliverables Explained

Cultural Strategy

This document should describe the cultural strategy as it relates to the game being produced (if required in the agreement with NZ on Air). It should include:

- explanation of the cultural strategy as it relates to the game
- confirmation of the named person/s who have committed to reviewing the content from a cultural strategy point of view
- indication of the specific stages alongside the development timeline where that cultural input is relevant and that review will happen
- confirmation that this process and any consultancy is included in the budget

Brief Game Description

This should use kid facing language and be a draft of what will be placed on the HEIHEI page related to your game. There is a 50 word limit and there will be an opportunity later to edit it.

Static Gameplay Fakes

These should represent the flow of your game. Looking to see evidence that you have considered onboarding, usability, game flow and game progress. If level progression is an important part of the game, consider how you are designing for shared devices.

Prototype

This should represent the core game loop of your game. It should help you answer questions like - does this feel like it meets the goals of my game? Do our assumptions pay off? Do we need to rethink the design of our core mechanic? Is this fun and delightful? If possible test it with some of your target audience and ask them what they think too! Always keen to hear that kids have been part of the process. We recommend testing your prototype inside the HEIHEI platform to ensure your core infrastructure is build and optimized for the platform.

Alpha

This should build on your learnings from the prototype and show evidence of development of the most important part of the game (what this is will really depend on the kind of game that is being created). Consider testing with your target audience.

Beta

This should represent the first pass at all the elements of your game, including the onboarding/tutorial. If you haven't already tested your game with your target audience (which we hope you have!) this is the time to really go deep with user testing. In the Producer report we will be looking to hear about the feedback of that testing. At this point you should test your game embedded within the HEIHEI platform to make sure it is compatible. Please make sure you have testing access and run some basic integration tests within the HEIHEI platform to make sure all is ok.

Gold

This should represent the finished game (outside of final polish). With the gold delivery explain the final changes/polish that will be done in the final step.

Final Delivery

Your final game delivery as per the minimum requirements below. This game will be placed in a test page in HEIHEI and be given a technical review to ensure it meets the requirements stated below. This delivery should also include:

- a Producer Report
- an invite to view any analytics integration and confirmation that it follows best practices for kids.
- confirmation of music licensing (if required)
- NZ on Air tamariki static logo on splash/loading screen and/or tamariki credit sequence at the end of the game
- final game description for the HEIHEI website, text description should be concise, suitable for kids to read and contain no more than 50 words
- final key art images for the HEIHEI website, the thumbnail images for the game page should be optimised PNG files and 200px by 300px pixels.
- a list of devices/browsers that the game has been tested on as this helps us with our final technical review (this can be included in the Producer's Report)
- at least 6 high resolution digital images from the Main Content for us to publish in any form free of charge.
- a "final" Cost Report representing a true and fair view of the costs of the Project and accounting for all income received in relation to the Project and the expenditure of the Project Budget.
- invoice for this instalment

NZ on Air will also require:

- evidence of completion of all Content (via a copy delivered to us on USB or DVD)
- a statistics report as per our requirements outlined [here](#)
- confirmation you have completed our diversity survey.
- a link that will persist for at least 1 year from the date of publication to all Content (see contracting requirements)

Minimum Requirements

Mobile & tablet app (Webview)

iOS and Android

Games must be built in HTML5 and run in a webview inside the HEIHEI application.

Maximum Game RAM usage: 150MB

Games must play in fullscreen and preferably in landscape orientation.



We ask developers to consider that children often end up with lower spec'ed and older devices, so to ensure that the games can be accessed by as many Kiwi kids as possible, consider this when making decisions about what devices you will support.

Desktop browser (Webview)

Running within a webview in the following browsers:

Chrome, Safari, Firefox, MS Edge and Internet Explorer releases 2017 and beyond.



We ask developers to consider that children often end up with lower spec'ed and older devices, so to ensure that the games can be accessed by as many Kiwi kids as possible, consider this when making decisions about what devices you will support.

File size

Your HTML5 game should be 50MB or less (taking into consideration the mobile plans for the HEIHEI demographic).

All images should be PNG crushed to minimise size. Gamefroot can provide more technical details on this.

HUD / Interface Scale Logic

Your game should include conditional logic around the HUD / interface to scale proportional to the size of the mobile screen within the HEIHEI embed. Please test this within HEIHEI early on in your development cycle. Gamefroot can provide more technical details on this.

Compatible Handling of Assets

Please ensure that the way the game is handling assets is compatible with HEIHEI. Gamefroot can provide more technical details on this.

Delivery/Hosting

HTML5 games are hosted by the HEIHEI Games platform. Partners will upload their HTML5 game in a zip file containing their game. The game must have an index.html or index.htm file. There is an option to embed HTML5 games in the platform if preferred.

Please note: In the past we have had issues with how some games handle their paths to assets not be compatible with the HEIHEI platform. Please make sure you test your embed before final delivery to make sure everything is performing as expected in situ.

Please note: Developers must ensure their HTML5 games support both 'on mouse click' events and 'touch' events, to ensure your game is usable across all endpoints. The HEIHEI platform Webview can potentially be modified to accommodate a specific game - please discuss any required modifications before beginning design or development of your game. To test game compatibility, we can give you access to the HEIHEI Games test environment.

Logos on loading/splash screen

Games funded by NZ On Air must use the NZ On Air tamariki logo assets available for [download here](#).

Information on how to apply these assets is available on page 11 of the [NZ On Air style and accreditation guidelines](#).

Example of tamariki logo on splash/loading screen



Music Licensing

We will ask to confirm that the music/SFX used in the final game has been licensed so please make sure you have documentation for that in the final delivery.

Recommendations

Onboarding/Tutorial

Carefully consider the onboarding/tutorial/instruction design of your game for the HEIHEI audience. Consider readability, reading age and how to teach required mechanics/controls to your target audience. We would like to see consideration of this in the game design and implementation in the beta.

Usability

Based on our research with local game development community we have the following quality of life standards that we expect all games to meet. Obviously not all games fit the same mold, but if it is relevant to the game you are designing we'd love you to include the following:

Pause/Settings Button:

If relevant to the kind of game being created, we'd like to see games have a pause button.

If relevant to the kind of game being created, we'd like to see games have an option for opening settings. This could include the ability to toggle sound on/off, additional game play instructions and other relevant options.

Games Platform API - Version 1

Gamefroot have built the first version of an API for HEIHEI developers. It lets developers use local storage to save data - local storage is an industry standard browser feature is integrated into the HEIHEI app via a Javascript API.

The API is necessary to ensure that saved game data works across the HEIHEI website and the HEIHEI App which has its own bespoke approach to saving data locally.

This API allows you to save game data like score, username (not online) etc. We would like to get an understanding of how it'll be used. We are putting together a list that outlines if and how each game would intend to use persistence in their game e.g. I want to save level progress, scores and an inventory. We will connect you with the API developers when you are ready to start talking about how you'd like to use this.



Access the HEIHEI API and documentation [here](#)

Game Design for Shared Devices

Recommendation that if the game uses persistence (saving game data), consider in the design the fact that children share devices and therefore game progress can allow for multiple kids using the same device. For example - for games with levels that could mean ensuring that it's always possible to replay all unlocked levels, and that going back to the beginning of a game does not delete the progress already made in unlocking levels.

Analytics/Data Collection (for Report Content Usage requirement)

Any analytics/data collection should be in compliance with best practices for collecting and storing data for children. While not required, we recommend using Amplitude, which is the same platform that the HEIHEI platform is using to collect and review anonymous data about usage of the platform. Within Amplitude you can easily enable the COPPA (Children's Online Privacy Protection Act) restrictions on IDFA, IDFV, city, IP address and location tracking. We will ask for confirmation that the any analytics/data collection has been set up to be anonymous and with no ongoing tracking or storage of any personal information.



Here's instructions of how to enable child safe restrictions with Amplitude:

<https://developers.amplitude.com/docs/coppa-childens-online-privacy-protection-act-controls>

Suggestions of what kinds of data to collect:

- User started game session (with new/returning)
- User started level (with level name)
- User completed level (with level name/score)
- User unlocked a thing (with badge name/thing name)
- User returned to game
- Time it took for user to complete a level or section

We also encourage you to collect data points that will help you understand how the specific game is being played.

Designing Across Devices

Make sure your UI elements scale in a screen safe way to accommodate the range of devices for your game.

Browser Testing & Device Compatibility

We expect that developers will test their games across a variety of devices as per the requirements. We ask developers to consider that children often end up with lower spec'ed and older devices, so to ensure that the games can be accessed by as many Kiwi kids as possible, consider this when making decisions about what devices you will support. We will ask for a list of devices that the game has been tested on as part of the final delivery in order to do the final technical review.

Performance

Games should run smoothly between 50-60 frames per second across all devices.

Optimising your Game

Consider best practices in optimising your game such as using sprite sheets to speed up your game.
