

# SGSEAM Assessment Improvement Action Report for Makahiki

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December 2014

This document describes the improvement action report after applying the SGSEAM assessment to Makahiki. It is the deliverable for the final step of the SGSEAM process. It first describes the strengths and weaknesses of the Makahiki framework from the perspectives of different stakeholders, then suggests the actions to improve the Makahiki framework from these stakeholders' perspectives.

**Table 1** lists the strengths and weaknesses of the Makahiki framework from the perspectives of different stakeholders.

Stakeholder	Assessment Result
Player perspective	<p>Strengths:</p> <ol style="list-style-type: none"> <li>1. literacy improvement is effective</li> <li>2. found self-reported awareness and behavior effectiveness</li> <li>3. player engagement level is high for the duration of 3-4 weeks</li> </ol> <p>Weaknesses:</p> <ol style="list-style-type: none"> <li>1. reduction of energy consumption is small.</li> <li>2. player engagement is low for long duration.</li> <li>3. performance downgrade and some usability issues in the latest release.</li> </ol>
System admin perspective	<p>Strengths:</p> <p>general good experience with improved cloud installation document</p> <p>Weaknesses:</p> <ol style="list-style-type: none"> <li>1. database installation documentation could be better</li> <li>2. issues in usability of the installation script</li> <li>3. difficulty in integrating an organization's LDAP and email server</li> <li>4. difficulty in using the SSL</li> </ol>
Game designer perspective	<p>Strengths:</p> <p>most of the game design interface are easy to use</p> <p>Weaknesses:</p> <ol style="list-style-type: none"> <li>1. difficulty and lack of documentation in the predicate system</li> <li>2. difficulty in generating event attendance code</li> <li>3. content creation is not WYSIWYG</li> <li>4. designing the smart grid game could be time consuming</li> </ol>
Game manager perspective	<p>Strengths:</p> <ol style="list-style-type: none"> <li>1. the submission approval interface is straight forward</li> <li>2. the batch approval feature is useful</li> <li>3. the game analytics "Status" page is very useful</li> </ol> <p>Weaknesses:</p> <ol style="list-style-type: none"> <li>1. not easy to find the event confirmation code</li> <li>2. the game site not available after the competition is over</li> <li>3. did not support automatically sending out game status emails</li> </ol>
Game developer perspective	<p>Strengths:</p> <p>can be used to develop other serious games with less effort</p> <p>Weaknesses:</p> <ol style="list-style-type: none"> <li>1. difficult to develop enhancements with the current documentation.</li> <li>2. documents have missing, confusing and inconsistent parts.</li> <li>3. steep learning curve.</li> </ol>

Table 1: Strengths and Weaknesses of Makahiki

The SGSEAM Improvement actions for Makahiki are shown in [Figure 1](#).

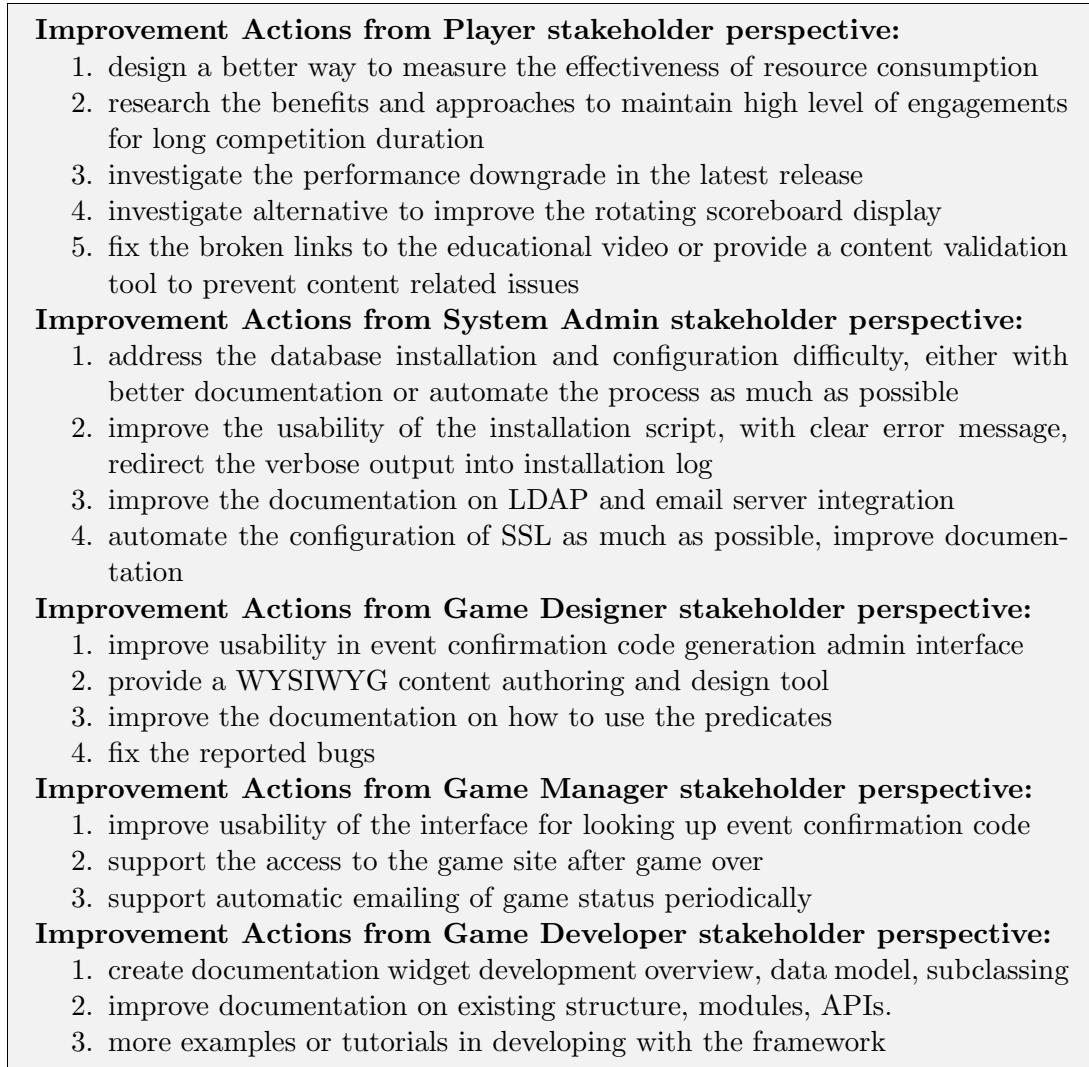


Figure 1: SGSEAM Assessment Improvement Actions for Makahiki