Heuristic Evaluation Report
Product: Boggle Game Application
Storyboards Evaluated: Logging In, Creating a Game, Viewing the Leaderboard, Viewing User Stats

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Overview

This document provides a heuristic evaluation of the Boggle Game Application's storyboards using Nielsen's 10 Usability Heuristics. Each storyboard is evaluated independently for violations. Issues are identified, explained, and connected to the heuristic they violate.

Storyboard 1: Logging In
Summary of Scenario

The user opens the Boggle app, enters their username and password, and is shown the home dashboard.

Heuristic Violations

1. Visibility of System Status

In the storyboard, after the user presses "Log In," there is no indication that the system is processing the login. There is no loading icon, text feedback, or progression indicator. This creates uncertainty about whether the app received the input.

2. Error Prevention

The login form allows the user to submit empty or invalid fields, but no constraints or warnings are shown. This may lead to unnecessary errors, such as submitting a blank username.

3. Help Users Recognize, Diagnose, and Recover from Errors

There is no error message for incorrect credentials. Users would not know why login failed or what to do next.

Storyboard 2: Creating a Game
Summary of Scenario

The user selects the option to create a new Boggle game, chooses settings and board size, and generates a playable board.

Heuristic Violations

1. Match Between System and the Real World

The storyboard uses terms like "Generate Seed" and "Custom Mode," which may not be intuitive to a casual game user. These technical labels may confuse new players who expect simpler wording (e.g., "Start Game," "Choose Board Size").

2. User Control and Freedom

Once a user starts creating a game, there is no "Back" or "Cancel" option shown. If the user chooses the wrong settings, they cannot easily undo or exit the process.

3. Consistency and Standards

Some screens show buttons labeled "Start," others say "Generate," and others use icons without explanation. These inconsistencies break standards and may confuse the user.

4. Aesthetic and Minimalist Design

The game creation screen contains many settings at once—board size, difficulty, seed, and mode—without grouping or hierarchy. This clutter can overwhelm a new player.

Storyboard 3: Viewing the Leaderboard

Summary of Scenario

The user navigates to the leaderboard to see global rankings, high scores, and stats from other players.

Heuristic Violations

1. Visibility of System Status

If the leaderboard needs to load data from the server, the storyboard does not show any loading or updating feedback, leaving the user unsure whether the data is current.

2. Recognition Rather Than Recall

Players' names, dates, and scores appear in a compact layout without clear labeling. Users must recall what each number represents (e.g., "Is this the round time? Score? Streak?").

3. Flexibility and Efficiency of Use

There is no filtering or sorting option for the leaderboard (e.g., by friend list, daily/weekly scores). This forces users to manually scan through long lists, reducing efficiency.

4. Consistency and Standards

The leaderboard uses different formatting styles than the stats page (fonts, alignment, spacing), which breaks visual consistency across the app.

Storyboard 4: Viewing User Stats

Summary of Scenario

The user goes to their profile to see personal statistics such as total games played, wins, best score, and achievements.

Heuristic Violations

1. Visibility of System Status

The storyboard does not indicate whether the stats are live-updated or need time to refresh. Users may not know if they are seeing old or current data.

2. Match Between System and the Real World

Some metric names—like "Seed Efficiency," "Word Density," or "Board Factor"—do not align with typical game terms. This may confuse casual players.

3. Recognition Rather Than Recall

Certain statistics appear without icons or explanations, requiring users to remember what they represent. For example, small numbers appear next to unlabeled boxes.

4. Aesthetic and Minimalist Design

The stats page contains large amounts of numerical data without visual hierarchy. Important stats (like best score) do not stand out from minor stats.

Conclusion

Across all four storyboards, the most frequent heuristic violations include:

1. Visibility of System Status

No loading indicators, progress feedback, or confirmations are shown in any scenario.

2. Recognition Rather Than Recall

Terms, icons, and data appear without labels, requiring the user to remember meanings.

3. Consistency and Standards

Button labels, formatting styles, and layout patterns vary across screens.

4. Match Between System and the Real World

Several terms are too technical for casual players.

5. Error Prevention

Login and game creation screens allow preventable mistakes without warnings.

Overall Recommendation

Refine labeling, provide clear system feedback, maintain visual consistency, and reduce cognitive load through better grouping and clearer terminology. Adding tooltips, icons, validation messages, and loading indicators would significantly improve usability.