Vision Document

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Introduction

The project aims to create a computerized version of the Kivi board game, allowing players to enjoy interactive gameplay on a single machine.

Problem Statement

This project seeks to digitize the traditional Kivi board game to provide an engaging and accessible gaming experience for children and families. The solution will support multiple players, including human-versus-human and human-versus-computer modes, with varying computer difficulty levels. The game will cater to users with color vision deficiencies to ensure inclusivity, and it will offer features like game saving and potential future expansion for networked play.

Stakeholders & Key Interests

Stakeholders	Key Interests
Players	Enjoyable, challenging, and inclusive gameplay
Children	Fun and educational game experience
Parents	Safe, family-friendly entertainment
Developers	Successful design and implementation of the game
Accessibility Advocates	Inclusive design for users with color vision deficiency
Future Network Teams	Scalable architecture for networked gameplay

Users & User-Level Goals

User	Goals
Child Player	Play a fun game and improve strategy skills
Parent	Ensure child-friendly and safe gaming environment
Human Player	Compete against friends or computer opponents
Computer Player	Provide challenging gameplay with easy and hard difficulty modes

Summary of System Features

- The system shall allow 2, 3, or 4 players to play the game.
- The system shall support both human-versus-human and human-versus-computer gameplay.
- The system shall provide two levels of AI difficulty: Easy and Hard.
- The system shall allow users to save and load games for future sessions.
- The system shall include features to accommodate users with color vision deficiency.
- The system shall offer an intuitive, child-friendly user interface.
- The system design shall support potential future networked gameplay.

Project Risks

- Designing an effective AI with appropriate difficulty levels may be complex.
- Ensuring compatibility with accessibility features for color vision deficiency.
- Meeting deadlines and completing all deliverables within the given iterations.
- Balancing between maintaining simple gameplay and providing engaging challenges.
- Implementing game-saving features efficiently.
- Potential lack of experience in extending the game for networked play.