Vision Document

Introduction

In this project we aim to build a computerized version of the Hooop game. It will be a game involving 2 or 4 players for each round of the game (moving their frog pieces around to try and win the game).

Problem Statement

There is currently no officially recognized digitalized version of the Hooop game. The lack of this limits opportunities for children to easily access the game and find it more engaging. Our system will provide a digital adaptation of the Hooop game that bring the same excitement and fun of the game to life. Our system will give children more accessibility to the game without having to pay for a physical game, while also providing a visually appealing environment. This will enhance accessibility, reduce need for physical resources, and offer a user-friendly experience for both recreational and educational purposes.

Stakeholders and Key Interest

Stakeholders	Key Interest
Children (Players)	Playing the game, interest is in having fun and working with engaging and easy to use controls
Parents and Guardians	Seeing to it that the game has a meaningful and fun impact on their children
Teachers	Interest is in observing how the game will affect the children educationally
Board Game Manufacturers and Publishers	How the computerized game will be a competitor and affect physical sales
Investors	Watching out for game's success, and seeing potential for revenue creation
Legal/Compliance Authorities	Ensuring the game follows laws pertaining to child data protection and all required laws
Game Developers	Making sure the game functions well

Users and User-Level Goals

Users	Goals
Players	Startup game, choose number of players, choose difficulty level of play, choose to play against human or computer, and have fun

Summary of System Features

- The system shall allow 2 or 4 players.
- The system shall offer visual cues for children with colour vision deficiency to engage easily with the game.
- The system shall enforce game rules to ensure fair play.

- The system shall allow players to save their progress and resume later.
- The system shall include guides on how to plan for new players.

Project Risks

- The task of programming the CPU/Computer player will prove challenging due to the complexity and team member's limited current knowledge in this area.
- Conveying all the needed graphical bits within the confines of Java Swing will require additional development time.
- Implementing multiplayer functionality might prove difficult and take up time, and result in bugs.
- The complex technicality of implementing the game to be visually appealing and incorporate all the features of the game.
- Possible compatibility issues across different devices.