Software Requirements Spec: Arimaa

Purpose: The purpose of our system is to provide a platform for users to play Arimaa on the computer, instead of using a chess board. Using our system, users will be able to take turns controlling the pieces or a user can play against our basic Al.

System Overview: The system is built on Java 1.8 using Swing to handle the graphical components. The images are loaded as part of the pieces onto the game's board. There are BoardState and Game classes that handle the logic of how the pieces and players interact with the game.

Major Feature List

- Ability for two players to take turns playing against each other on the same machine
- Basic Artificial Intelligence that can be played against
- Ability to Load/Store a game
- Variable Turn Timers to allow different difficulty of games
- Ability to undo moves
- Graphical component to display the state of the game in real-time

Use Cases

- The users should be able to move their pieces
- The users should be able to freeze other pieces by moving a strong enemy piece near them
- Stronger enemy pieces should be able to push and pull the weak pieces
- The user should be able to load and save the game
- The user should be able to play against the Artificial Intelligence
- The user should be able to win by getting a rabbit across to the enemy side
- The user should be able to win by forcing the opposing player to have no moves left
- The user should be able to create games with a variable turn timer