Group 8

Author: Mingzhao Guo

Software Specifications

Hua Rong Dao

Table of Contents

[System Architecture 2](#_Toc44467789)

[Software Specifications 2](#_Toc44467790)

[S1: GameUI implement 2](#_Toc44467791)

[S2: GameProcessor 6](#_Toc44467792)

[S3: ChessDB 6](#_Toc44467793)

## System Architecture

The system architecture is shown below:

手机屏幕截图

描述已自动生成

## Software Specifications

### S1: GameUI implement

图片包含 游戏机, 文字, 照片, 不同

描述已自动生成手机屏幕截图

描述已自动生成

图片包含 游戏机, 截图

描述已自动生成

#### S1.1: Play Game

* S1.1.1: The chess on board UI can be chosen by player

1. The player could reselect the chess.
2. The currentChess in chessDB update.

* S1.1.2: The player could choose the destination of the current chess

1. The clickpoint in chessDB update.
2. Current chess moves to click place.

* S1.1.3: resume

社交网络的手机截图

描述已自动生成

1. Get the data form startDB.
2. Return to the start position.

#### S1.2: Check solution

手机屏幕截图

描述已自动生成

* S1.2.1: check solution(use uppaal)

1. The information send to uppaal is the matrix correspond to the current board.
2. The uppaal model could tell the player whether the current board has solution.

#### S1.3: Change Model

手机屏幕截图

描述已自动生成

社交网站的手机截图

描述已自动生成

* S1.3.1: Could choose from five default opening

1. Get the data form chessDB.
2. Change the opening.
3. Updata the data in startDB.

#### S1.4: DIY opening

许多照片放在一起

描述已自动生成 许多照片放在一起

描述已自动生成

手机截图图社交软件的信息

描述已自动生成

* S1.4.1: Player could place the chess by their own

1. Player place the chess by their own.
2. Update the data in startDB.
3. Change the opening.

#### S1.5: Change theme

* S1.5.1: The player could choose from 2 themes

### S2: GameProcessor

#### S2.1: gameProcessor

* S2.1.1: Judge if the move is illegal.

1. Trans the board into matrix
2. Move the current chess
3. Judge whether the move is illegal

* S2.1.2: Judge if the player win.

1. Judge whether CaoCao move to the exit

### S3: ChessDB

#### S3.1: chessDB

* S3.1.1: Stall the current chess
* S3.1.2: Stall the current position of all chesses
* S3.3.3: Stall the click point