The Game

Project Phase II

Misty Camp
mcamp2@my.athens.edu
ITE 450: Human-Computer Interaction

Table of Contents

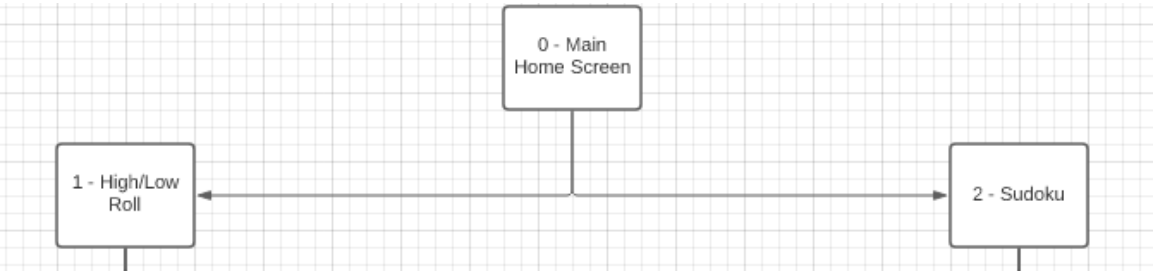
1. Hierarchical Task Analysis (HTA)

1.1 Overview

The hierarchical task analysis (HTA) documents the interaction a user will have with the game. The HTA for this design is divided into three diagrams to provide a clear illustration of what can be expected.

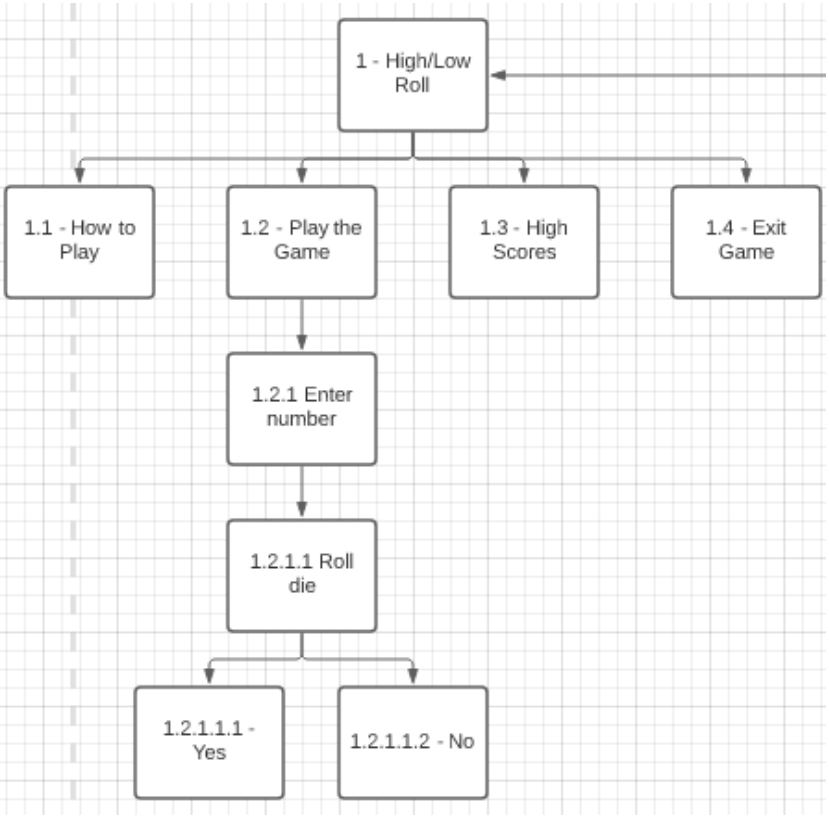
1.2 Main Home Screen

There are two options from the main home screen. A user can select to play High/Low Roll or Sudoku.



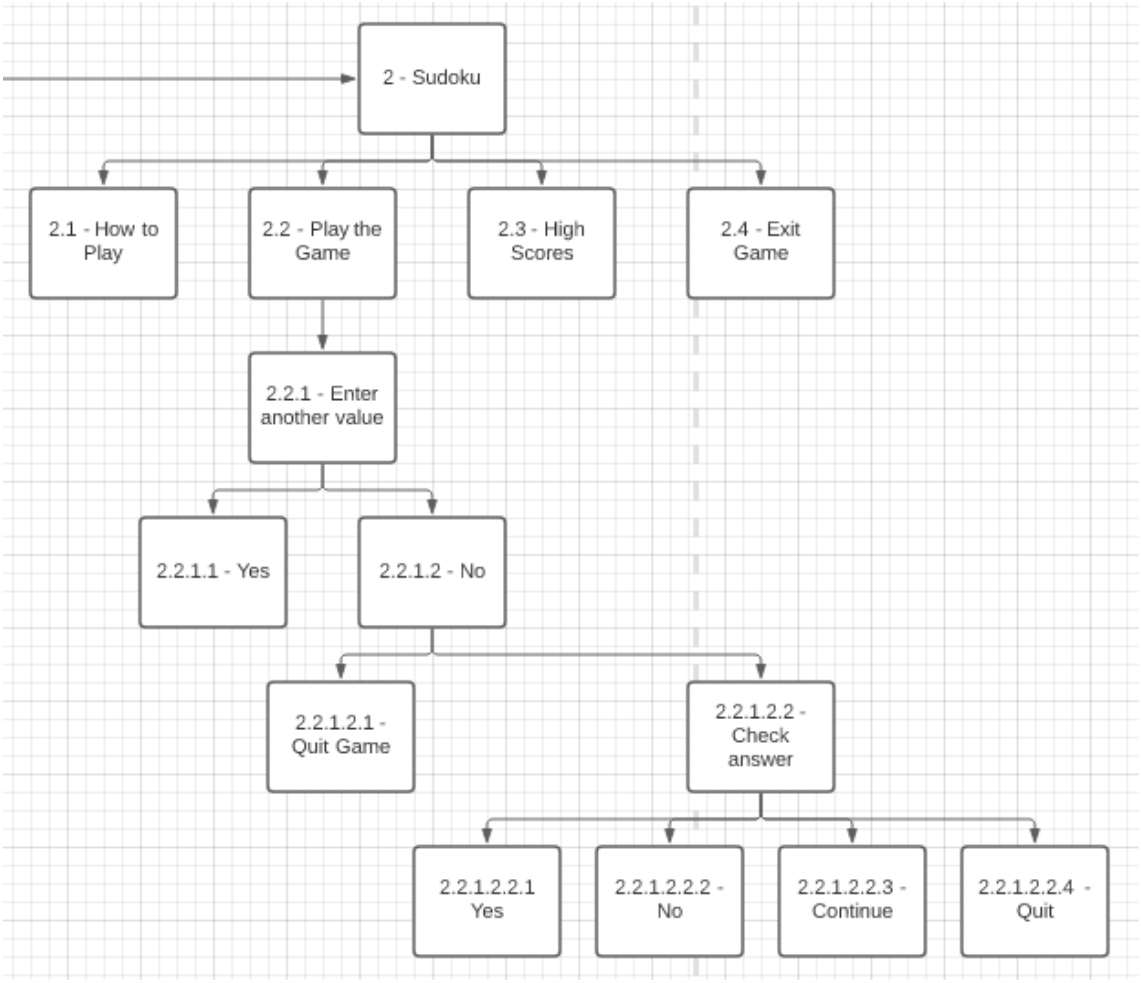
1.3 High/Low Roll

The user can choose from four options on the High/Low Roll menu.



1.4 Sudoku

The user can choose from four options on the Sudoku menu.



2. Planned Steps

2.1 Overview

The planned steps document the functionality of the game. The steps correspond to the numbers on the

HTA and explain what is happening with each selection made by the user.

2.2 Main Home Screen

Step 0: Plan step is to select menu option 1 or 2. The documented functionality would then be:

If user presses 1 – take them to high roll vs low roll menu

If user presses 2 – take them to sudoku menu

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

2.3 High/Low Roll

Step 1: Plan step is to select menu option 1-4. The documented functionality would then be:

If user presses 1 – how to play is displayed

If user presses 2 – play the game is displayed

If user presses 3 – high scores are displayed

If user presses 4 – game home is displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 1.1: Plan step is the instructions are displayed and return to game menu. The documented functionality would then be:

If user presses return – Step 1: high/low game menu will be displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 1.2: Plan step is to select High Roll or Low Roll. The documented functionality would then be:

If user presses high – High flag will be marked in the program to determine outcome of the game

- enter a number will be displayed

If user presses low – Low flag will be marked in the program to determine outcome of the game

- enter a number will be displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 1.2.1: Plan step is to enter a number. The documented functionality would then be:

Once user enters a number – roll the die is displayed

If the user enters an invalid number, an error message will be displayed asking them to enter a valid number.

Step 1.2.1.1: Plan step is to roll the die and select yes or no to play again. The documented functionality would then be:

User presses enter – results of the rolled die is displayed. Game compares result to guess and displays win/lose message. Play again message displayed.

If user selects yes – Step 1.2 is displayed

If user selects no – Step 1 is displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 1.2.1.1.1.1: Plan step is user pressed yes. The documented functionality would then be:

Step 1.2 is displayed again.

Step 1.2.1.1.1.2: Plan step is user pressed no. The documented functionality would then be:

Step 0 - Main game menu is displayed.

Step 1.3: Plan step is high scores are displayed. The documented functionality would then be:

If user presses return – Step 1: the high/low game menu will be displayed.

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 1.4: Plan step is exiting the game. The documented functionality would then be:

Goodbye message then Step 0 – Main game menu is displayed.

2.4 Sudoku

Step 2: Plan step is to select menu option 1-4. The documented functionality would then be:

If user presses 1 – how to play is displayed

If user presses 2 – play the game is displayed

If user presses 3 – high scores are displayed

If user presses 4 – game home is displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 2.1: Plan step is the instructions are displayed and return to game menu. The documented functionality would then be:

If user presses return – Step 2: high/low game menu will be displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 2.2: Plan step is to enter a coordinate and choose if they want to enter another one. The documented functionality would then be:

If user enters a valid coordinate – enter another coordinate message will be displayed

If users enters an invalid value – error message is displayed – try again – enter another coordinate message will be displayed

Step 2.2.1: Plan step is user will select yes or no. The documented functionality would then be:

If user selects yes – Step 2.2 is displayed

If user selects no – Quit/Check question displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 2.2.1.1: Plan step is user selected yes. The documented functionality would then be:

Step 2.2 is displayed

Step 2.2.1.2: Plan step is user selected no. User will select quit or check. The documented functionality would then be:

If user selects quit – Step 2 Sudoku menu is displayed

If user selects check – the system will check to see if the board is full

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 2.2.1.2.1: Plan step is user selected quit. The documented functionality would then be:

Step 2 – Sudoku menu is displayed

Step 2.2.1.2.2: Plan step is user selected check. The system will check if the board is full. If the board is full, display won/lost message and play again message. If the board is not full, display error message –

do you want to continue playing or quit message is displayed. The documented functionality would then be:

If the user selects yes – New board is generated and Step 2.2 displayed

If the user selects no – Step 2 displayed

If the user selects continue – same board and step 2.2 displayed

If the user selects quit – Step 2 is displayed

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 2.2.1.2.2.1 Plan step is user selected yes. The documented functionality would then be:

New board is generated and step 2.2 displayed

Step 2.2.1.2.2.2 Plan step is user selected no. The documented functionality would then be:

Step 2 is displayed.

Step 2.2.1.2.2.3 Plan step is user selected continue. The documented functionality would then be:

Step 2.2 is displayed.

Step 2.2.1.2.2.4 Plan step is user selected quit. The documented functionality would then be:

Step 2 is displayed.

Step 2.3: Plan step is high scores are displayed. The documented functionality would then be:

If user presses return – Step 1: the high/low game menu will be displayed.

If the user selects any other option, an error message will be displayed asking them to enter a valid selection.

Step 2.4: Plan step is exiting the game. The documented functionality would then be:

Goodbye message then Step 0 - Main game menu is displayed.