Documentation for HTML Chess Game.

Explain how you implemented your game and how it satisfies the remainder of the requirements:

First off, I just want to say how much I enjoyed doing this project. I really like working with HTML and JavaScript!

1. **Game Grid that uses CSS and is generated by JavaScript:**

I used a an 8 by 8 HTML table for my game grid (worked out great). I use cascading style sheets for both my chess board and for my home page (style for homepage and stylesheet for chess board). I used a loop to create the table that uses innerHTML to populate the table with rows and columns. CSS also used to change the colors of the tiles when valid selection takes place.

1. **User input in the form of text, select options, and/or buttons:**

I used the project guidelines specific for chess to meet this requirement. Function getName uses a text input box to get the names of the two players. I than use a button to get the two names and finally I use a drop down/select box to allow the first player to choose a color.

1. **User input in the form of mouse clicks:**

Extensive use of user input by way of mouse clicks is used to manipulate the chess pieces. Also keystroke input to get user names as well as login ID on home page.

1. **Dynamic modification of HTML using innerHTML or DOM functions**

innerHTML is used to draw out the board and also to move the pieces (notice how the board does not have to be redrawn every time.) Some use of DOM functions for xml request and also for HTML5 audio.

1. **Use of XMLHttpRequest to load JSON or XML**

I used XML for initial piece placement onto the board (see file initialSetupXML.xml). In last assignment I also created an endgame scenario. While that xml file is still in the directory, I thought using XML for initial setup had more merit for final submission.

1. **Incorporates HTML 5 audio tags, video tags, canvas, or local storage:**

I created an HTML5 audio tag for every time a player makes a valid click on a game piece. As part of this, I check to make sure browser supports HTML5 audio and if not I warn them that support is not present. I also provided two different audio support formats, .ogg and .mp3 and check to see which when will work with browser.

1. **Game logic code:**

Program sets up all pieces.

Only allows for valid moves.

The program allows the user(s) to enter two player names and assign each player a color.

The program alternates between players, allowing each to take a turn.

Only legal moves are allowed.

Allows pawns to move two squares for their first move, and only allow pawns to capture diagonally.

The program indicates when the game is over and which player won. (with alert box)

Knight moves properly (can move over other pieces in L pattern and can capture pieces properly.)

Extra stuff

Only allows player to select a piece that has a valid move.

Checks to make sure that it is players turn by only allow the right players pieces to be selected (white cannot move if blacks turn and vice versa).

Player can take back a move and select another piece if he has not moved his piece yet (just like a player in chess game can still select another piece if his hand has not let go of the piece he selects.)

Let’s player know which piece they have selected not just by color by by chess piece name (see upper right side of screen.)