

CheckMate

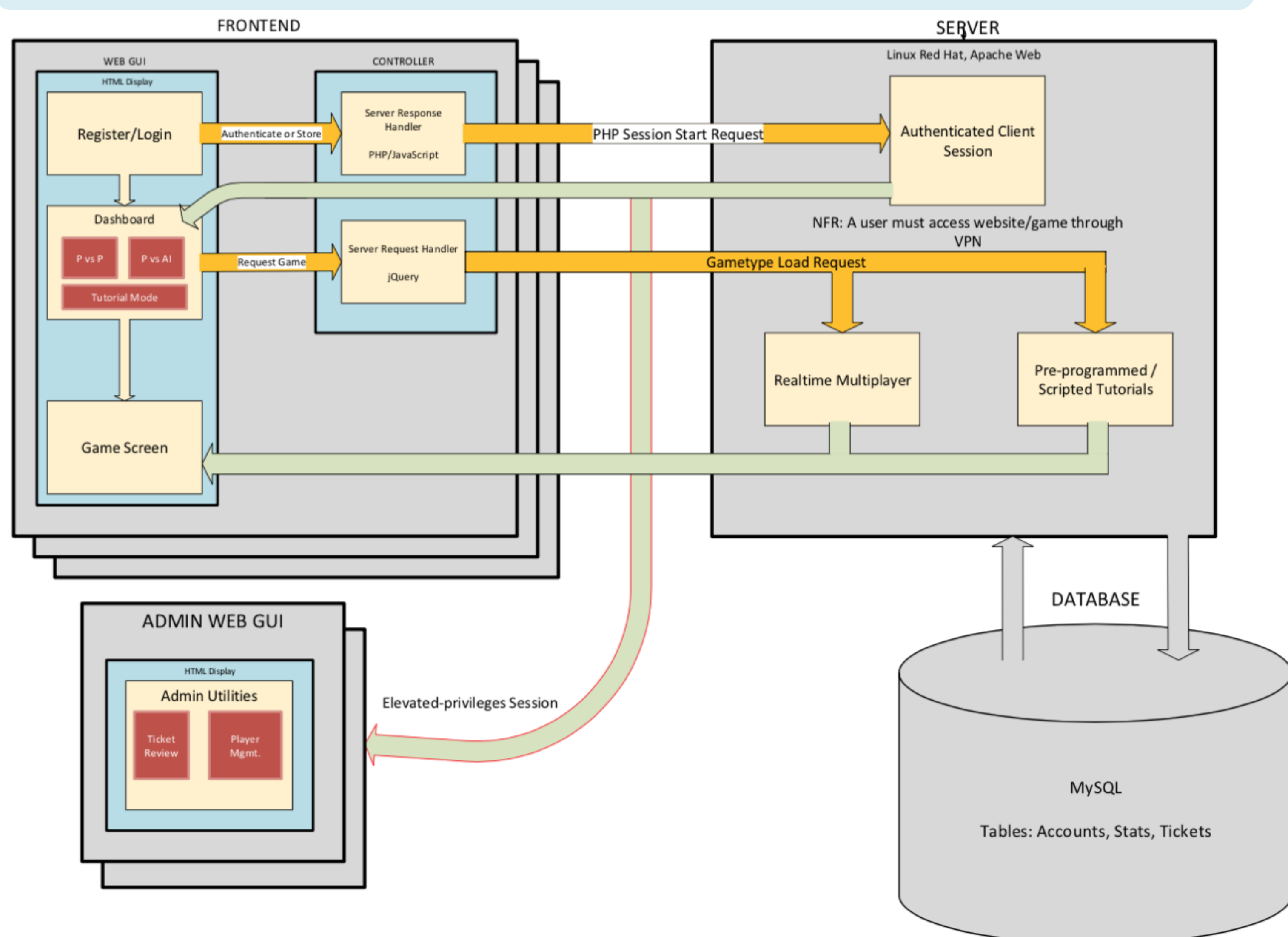
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COM S 309 FALL 2014

Project Description:

CheckMate is a website designed to teach users how to play chess, and offer users the opportunity to play against other players, computers and learn from tutorials. Players are the main actors.

Module Interfaces:



Front-End: To register, registration.php posts username, password, name and email to newuser.php. These values are stored in the Account MySQL table. To login, post username and password to validatelogin.php. These values are checked against the Account MySQL table and a new session begins. Upon successful login, the user is able to access the player0.php page. The pvp.php, pvai.php, and tutorial.php scripts and pages all become accessible to the user. They now can begin to play chess.

Chessboard: The chessboard is a visual interface for the back-end game engine, and a destination pointer for the website to allocate a player(s) for a game. Pvp.php will use the session id to match with another user. Board.js is a script that constantly listens for user mouse-clicks and provides a visual update. Upon receiving one, it transforms the click from screen (x,y) into a row and column on the game board. It then packages that row and column as a JSON object and via jQuery.ajax(), sends an update to game.php, ultimately waiting for a response. That response can contain an object that verifies a valid destination click. It can also contain an array of potential legal destination clicks. Lastly, the response can contain null values indicating an invalid move.

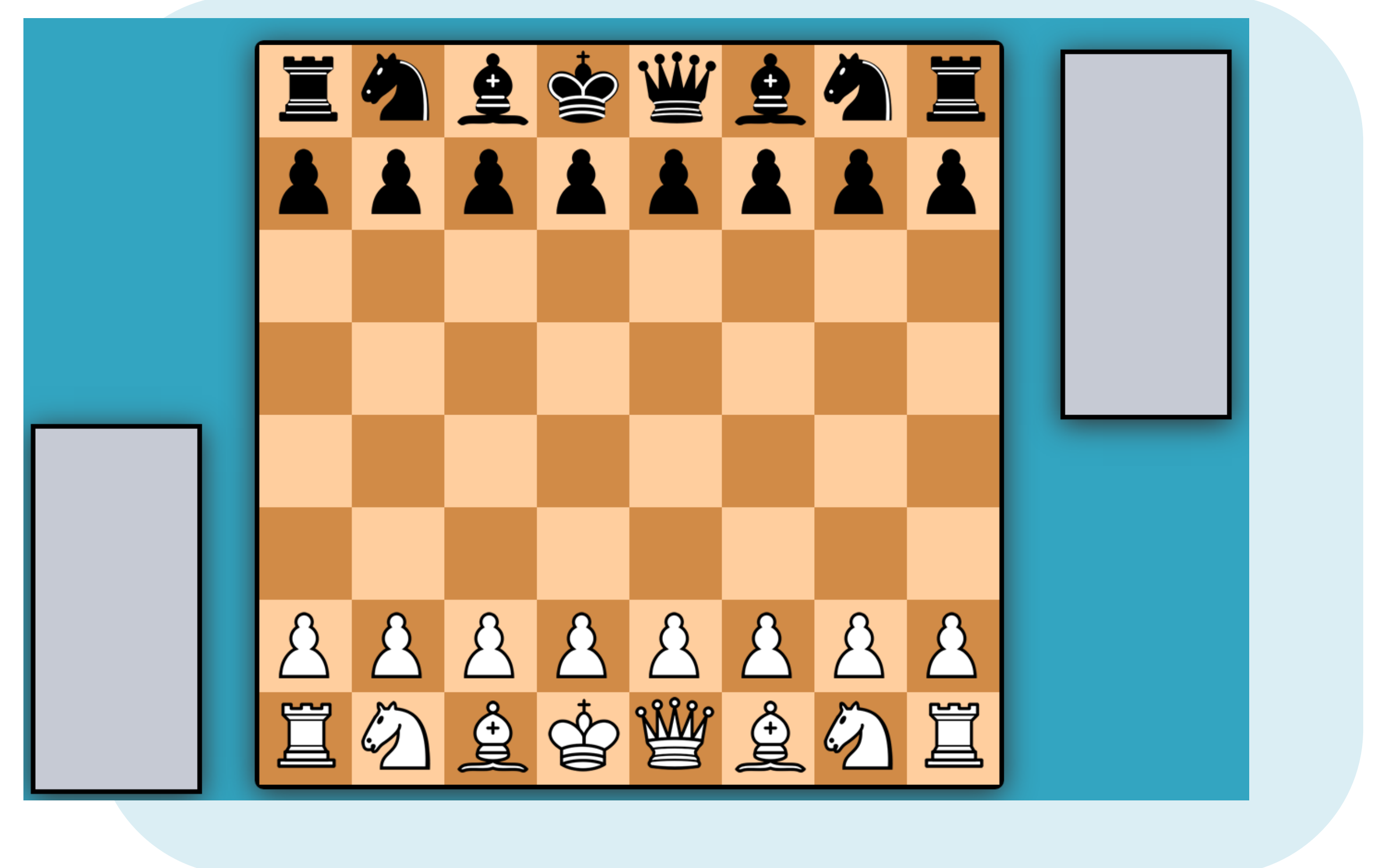
PHP Backend/Server: Username, password, name and email provided by post are inserted into the Account table, and a success/fail is pushed back. Username and password in validatelogin.php and matched to Account table values; success/fail pushed back. Create player object using the values taken from the Account table and it is stored in the session["player"] variable. The header location takes the user to the player0.php page.

User Interfaces:

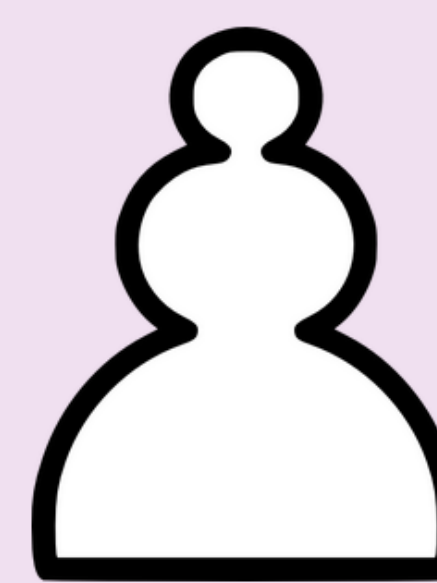
- Player versus Player -
User plays chess against live person
- Player versus Computer -
User plays chess against computer
- Tutorial Mode -
User is walked through basic chess rules and introduction to pieces and their movement
- User Registration and Login -
User can register and login, and access all game modes

Design Decisions:

- Languages to use for back-end processing
- Website design and user interface



The Pawn



This is the pawn, the chess piece of the smallest size and value.
A pawn moves one square forward along its file if unobstructed (or two on the first move), or one square diagonally forward when making a capture.
Each player begins with eight pawns on the second rank, and can promote a pawn to become any other piece (typically a queen) if it reaches the opponent's end of the board.

Previous

Next

Team Info:

Team M13

Tyler Johnston – COMS (Sr)

Sarah Files – CPRE (Sr)

Daniel Bardin – COMS (Sr)

What went wrong:

- Apartment Fire week before due date
- Team member left
- No one knew PHP

What went right:

- Completed tutorials
- Pass data from client to client

Lessons Learned:

- Learned PHP in depth
- Time management

CheckMate

Welcome, fake!

Choose a Chess mode:

Challenge another player

Challenge the computer

Start Tutorial