

# Tic-Tac-Toe: The Game

Progress Report 2  
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CPET 499 Web Systems

# Project Summary

- This web application contains the classic Tic-Tac-Toe game that is full functional and can display statistics for the amount of games a user wins, loses, and ties.
- Users will have the ability to create a unique username in order to link their login and statistics to

# Overview

- Main Components
  - Login for both player 1 and player 2, registration for new players, and ability to logout
  - Selection of X or O
    - Randomly selects a player to be the first picker
  - Fully functional Tic-Tac-Toe gameboard
    - Switches between user depending on who went first
    - Places picture of x or o depending on user
    - Updates statistics at conclusion of round
    - Games will continue until user clicks end game button

# Project Scope

- Activities
  - Designing the website
  - Building the website
  - Design the database
  - Build the database
  - Code game logic
- Testing
  - User registration, Login
  - All scenarios that can happen in a game of Tic-Tac-Toe
  - Random user selected to pick x or o

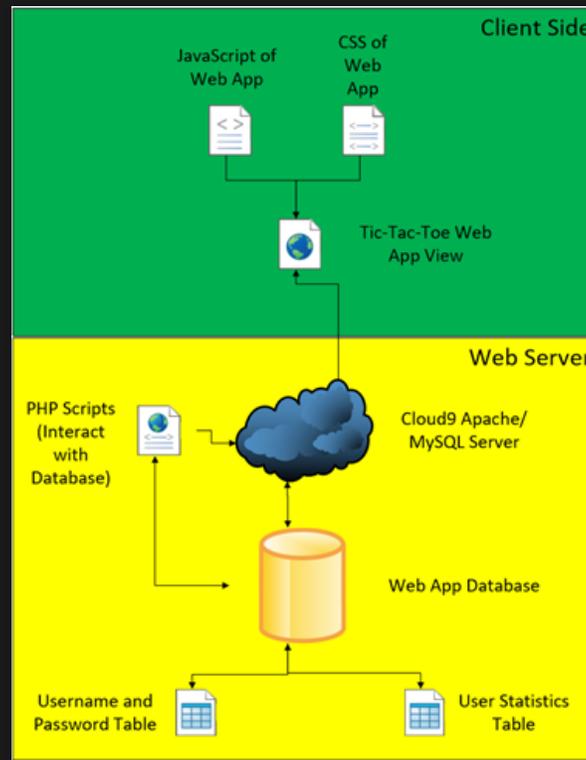
# Problems/Corrections

- MySQL
  - Ran Into Query Issues with PHP – Corrected By Looking Into Correct Syntax for SQL
- CSS
  - Ran into centering issues – Correct By Finding Properties That Dynamically Set Position
- AJAX
  - Ran into issues of Needing Code Ran After the Execution of a PHP Script – AJAX Allows us to Run Specific Code Upon Completion of a PHP Script with Needed Data

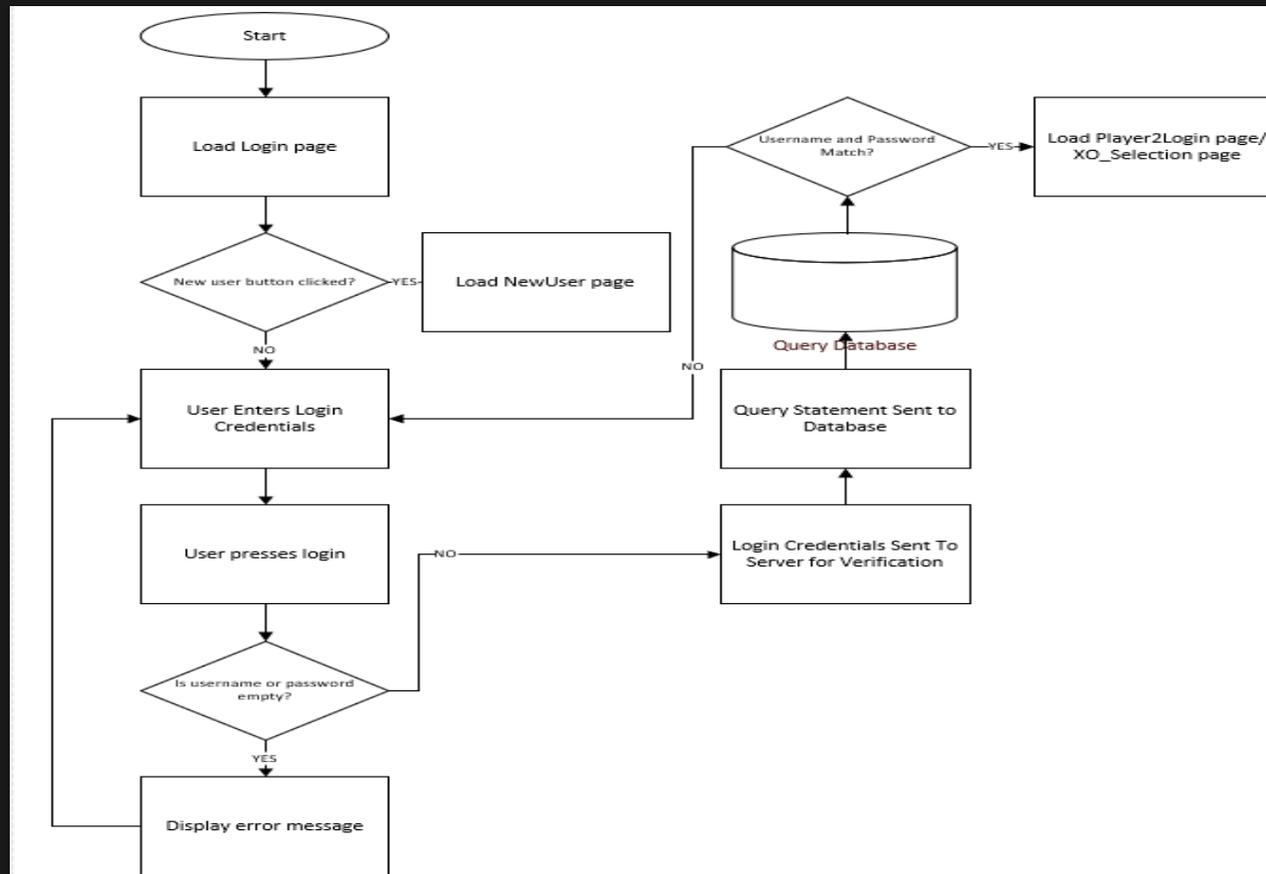
# Milestones/Deliverables

- Web Application
  - Front-end components completed
  - Back-end components completed
  - Database built
  - Application tests
- Final Report
- Final Presentation

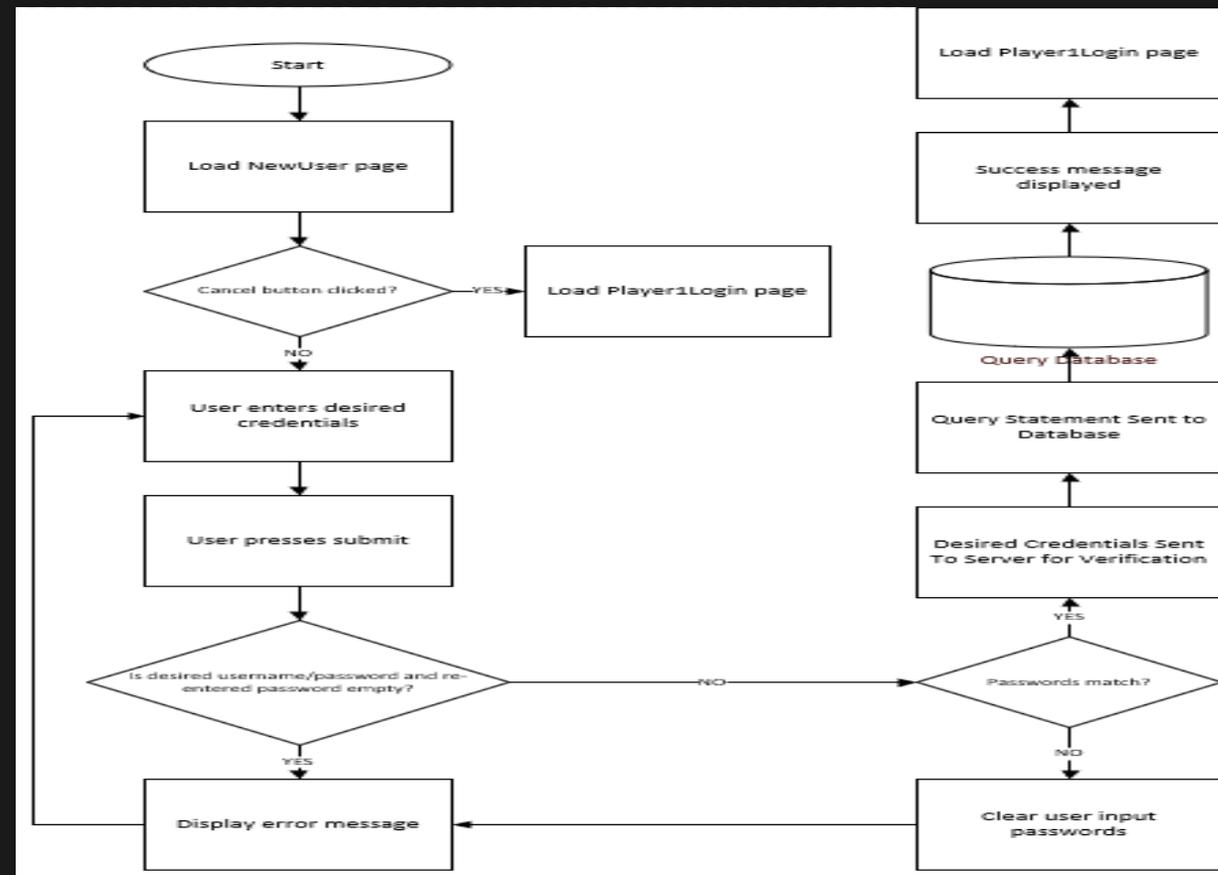
# System Design - Overview



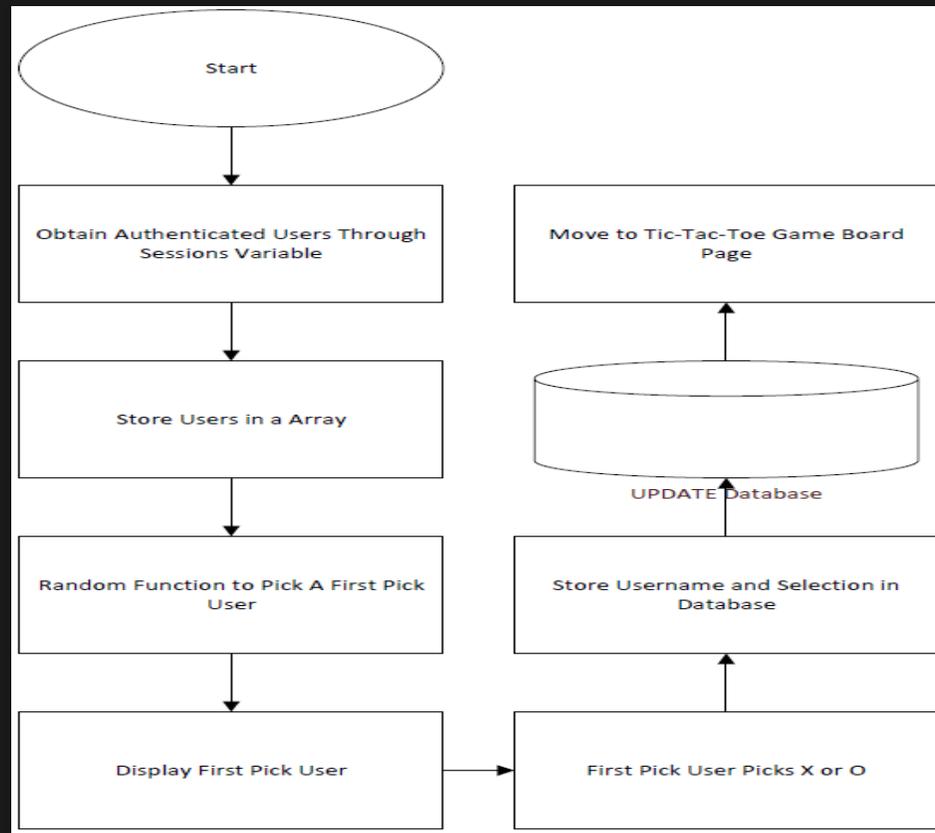
# System Design – User Login



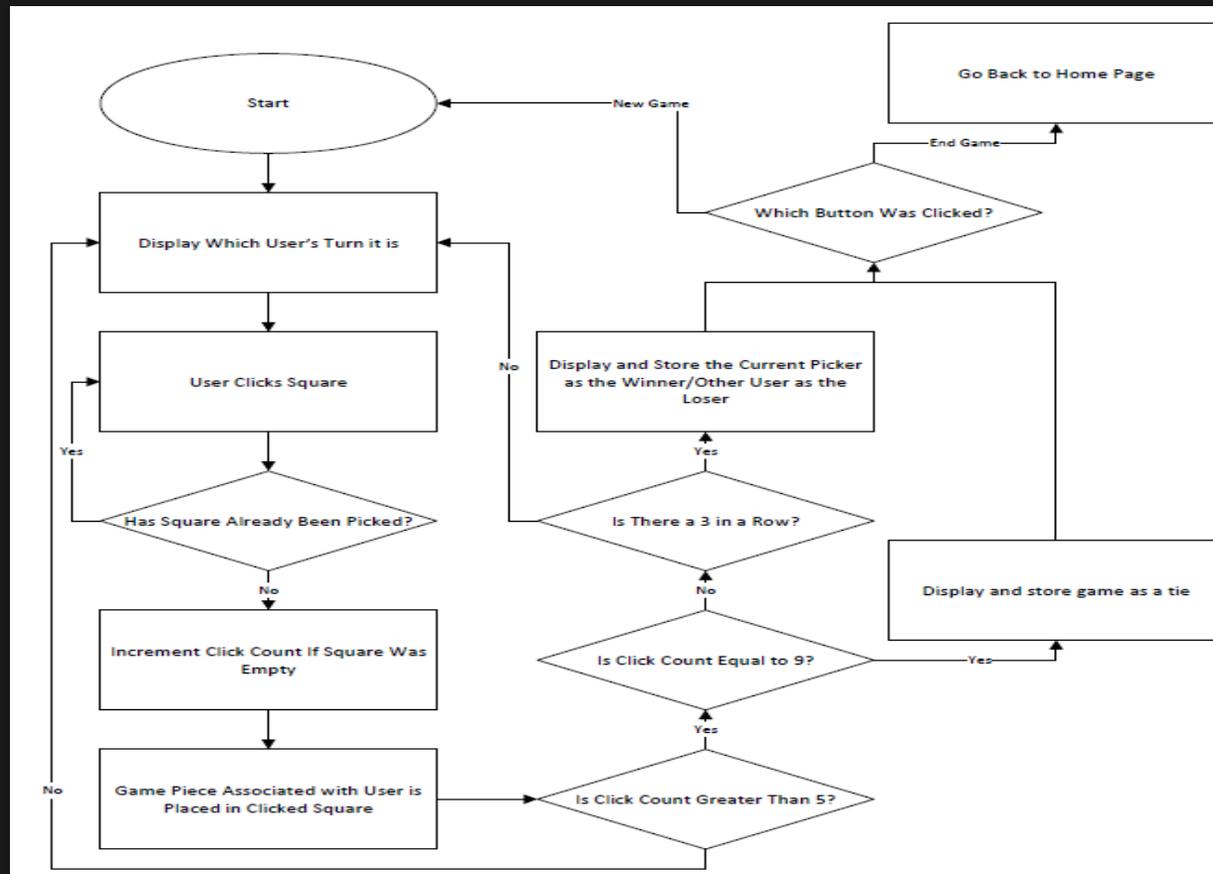
# System Design – New User Creation



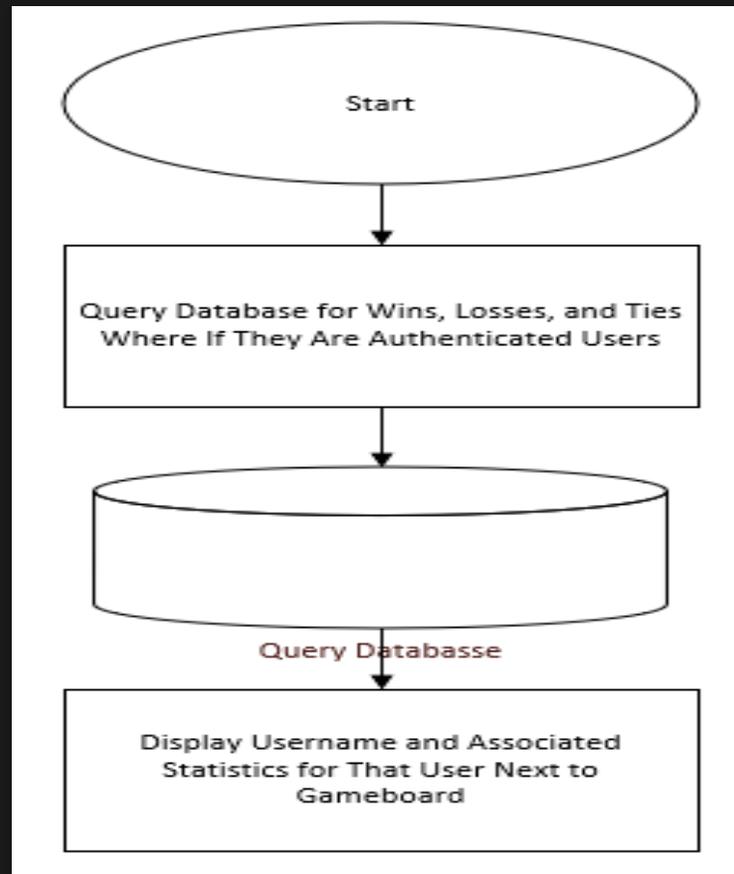
# System Design - Game Piece Selection



# System Design - Tic-Tac-Toe Game



# System Design – Statistics Display



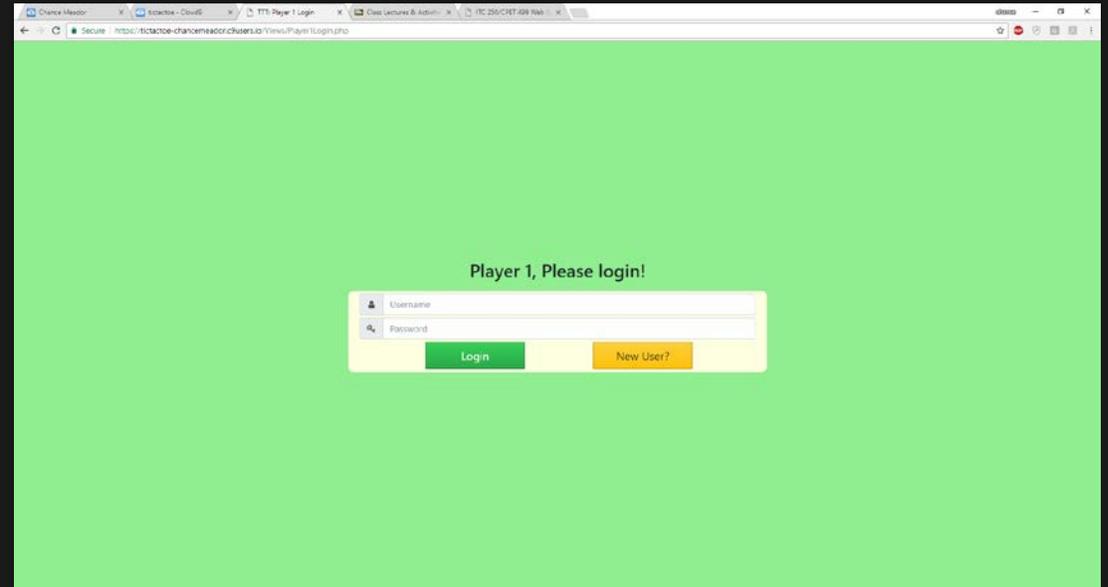
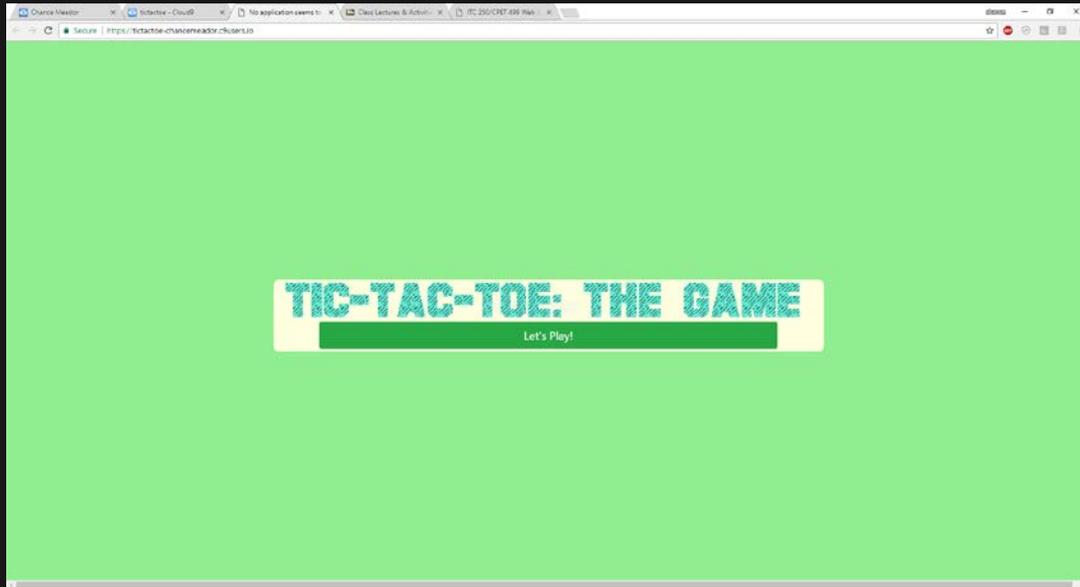
# Requirements

- UI and Data Presentation
  - Welcome Page
  - Login Pages
    - User Creation Page
  - X and O Selection Page
  - Tic-Tac-Toe Gameboard Page
    - Wins, Losses, and Tie Statistics for Each User
- Server Requirements
  - Cloud9
    - MySQL
    - Apache/PHP – Provides Public Domain Name
    - Disk Size: 2GB, Memory: 512MB, 1 CPU

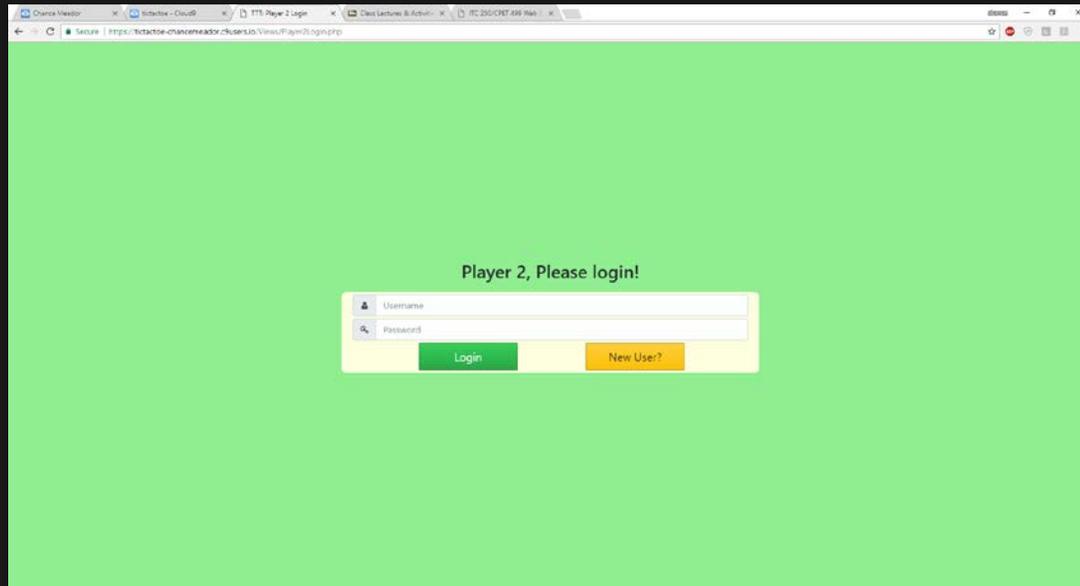
# Major Components/Tools

- Hardware
  - Cloud-Based Linux Virtual Machine (Cloud9)
  - PC to Access Cloud9 Virtual Machine for Development
- Software
  - Cloud9 Web Application
    - Text Editor
    - Apache/PHP Web Server
      - PHP
      - HTML5
      - JavaScript, JQuery, AJAX
      - CSS
    - MySQL
      - Phpmyadmin for Database Management

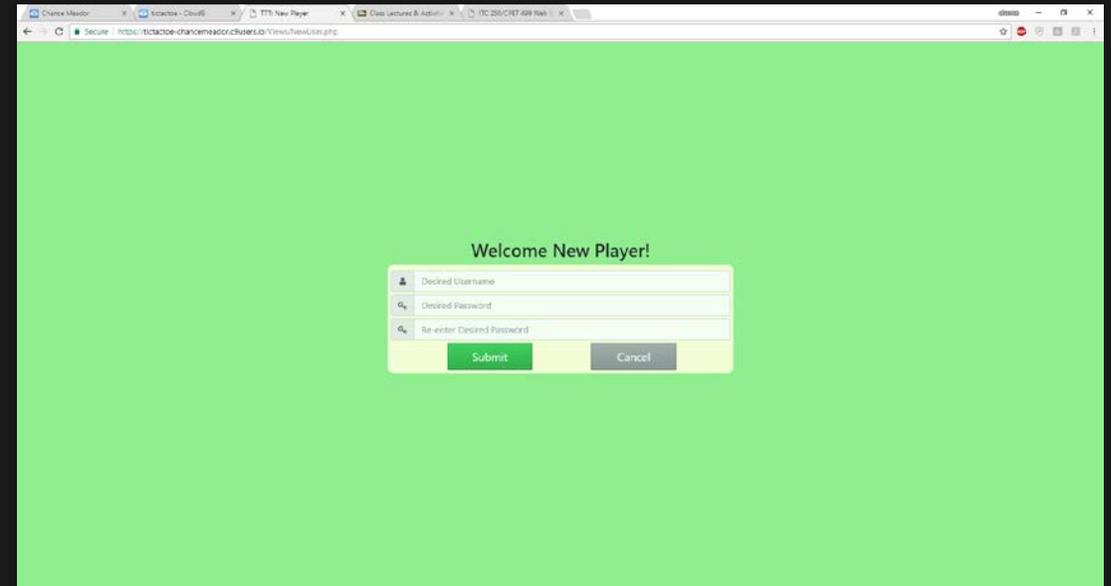
# UI



# UI – Continued (1)

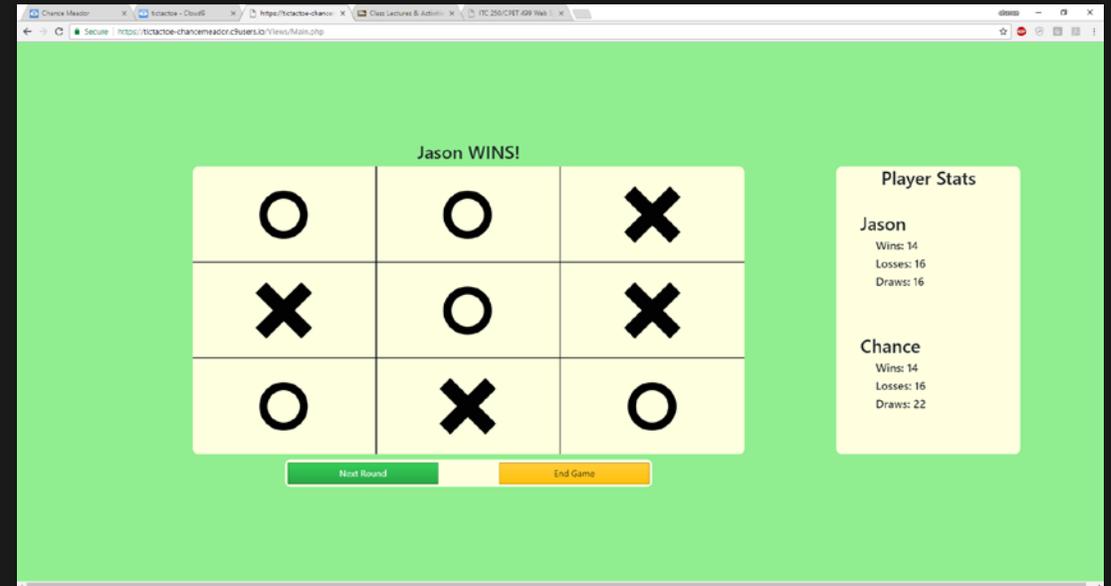
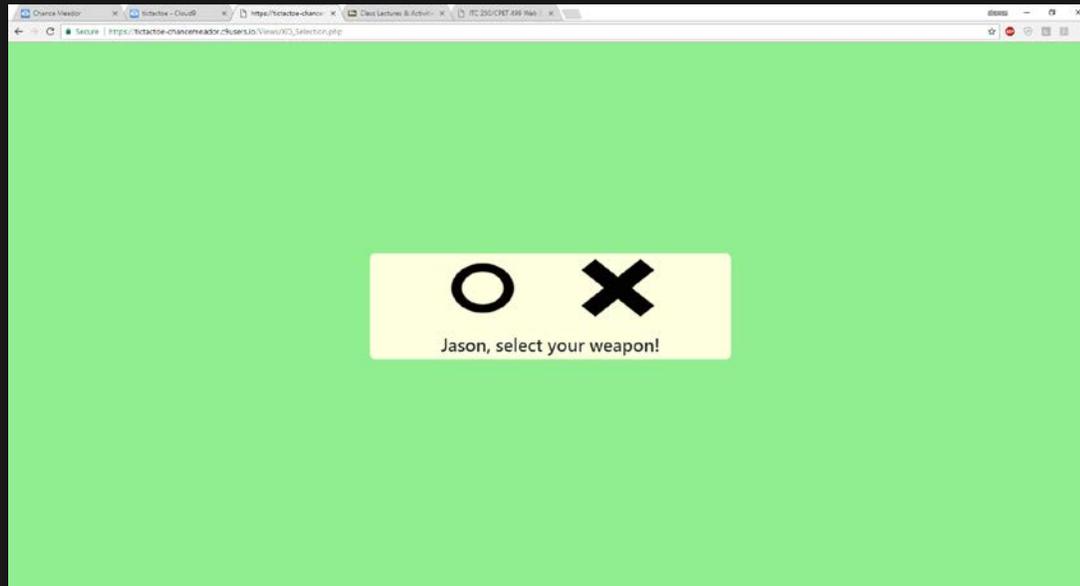


A screenshot of a web browser displaying a login page. The page has a light green background. At the top center, the text "Player 2, Please login!" is displayed. Below this text is a white login form with a light green border. The form contains two input fields: "Username" and "Password". Below the input fields are two buttons: a green "Login" button and a yellow "New User?" button. The browser's address bar shows the URL "https://tictactoe-chancemador.chuser.io/Views/Play2Login.php".



A screenshot of a web browser displaying a registration page. The page has a light green background. At the top center, the text "Welcome New Player!" is displayed. Below this text is a white registration form with a light green border. The form contains three input fields: "Desired Username", "Desired Password", and "Re-enter Desired Password". Below the input fields are two buttons: a green "Submit" button and a grey "Cancel" button. The browser's address bar shows the URL "https://tictactoe-chancemador.chuser.io/Views/Welcome.php".

# UI - Continued (2)



# UI – To Be Completed

- To Be Completed
  - All UI is complete at this time, touching up styles is all that needs to be done to make it stand out more
  - May add a header to the selection and gameboard view to display logged in players

# Functionality – Completed

- Completed Functionality
  - Tic-Tac-Toe logic is complete and can determine win, loss, and draw
  - New player can be added to database along with setting stats set to 0
  - Player's can fully login
  - Alerts are given for input validation and database problems
  - Player's can select X or O on the selection screen and it tied to their username
  - Next round button will clear gameboard and randomly select a player to go
  - End game button will log out all player's and go back to home screen

# Functionality – To Be Completed

- To Be Completed Functionality
  - Prevent user from navigating to selection and gameboard view without having player 1 and player 2 logged in

# Schedule

- Complete Back-End Work
  - Completed by: 12/5/17
- Test Web System
  - Completed by: 12/13/17
- Present Project
  - Presentation: 12/14/17, 10:30 A.M. to 12:30 P.M.