



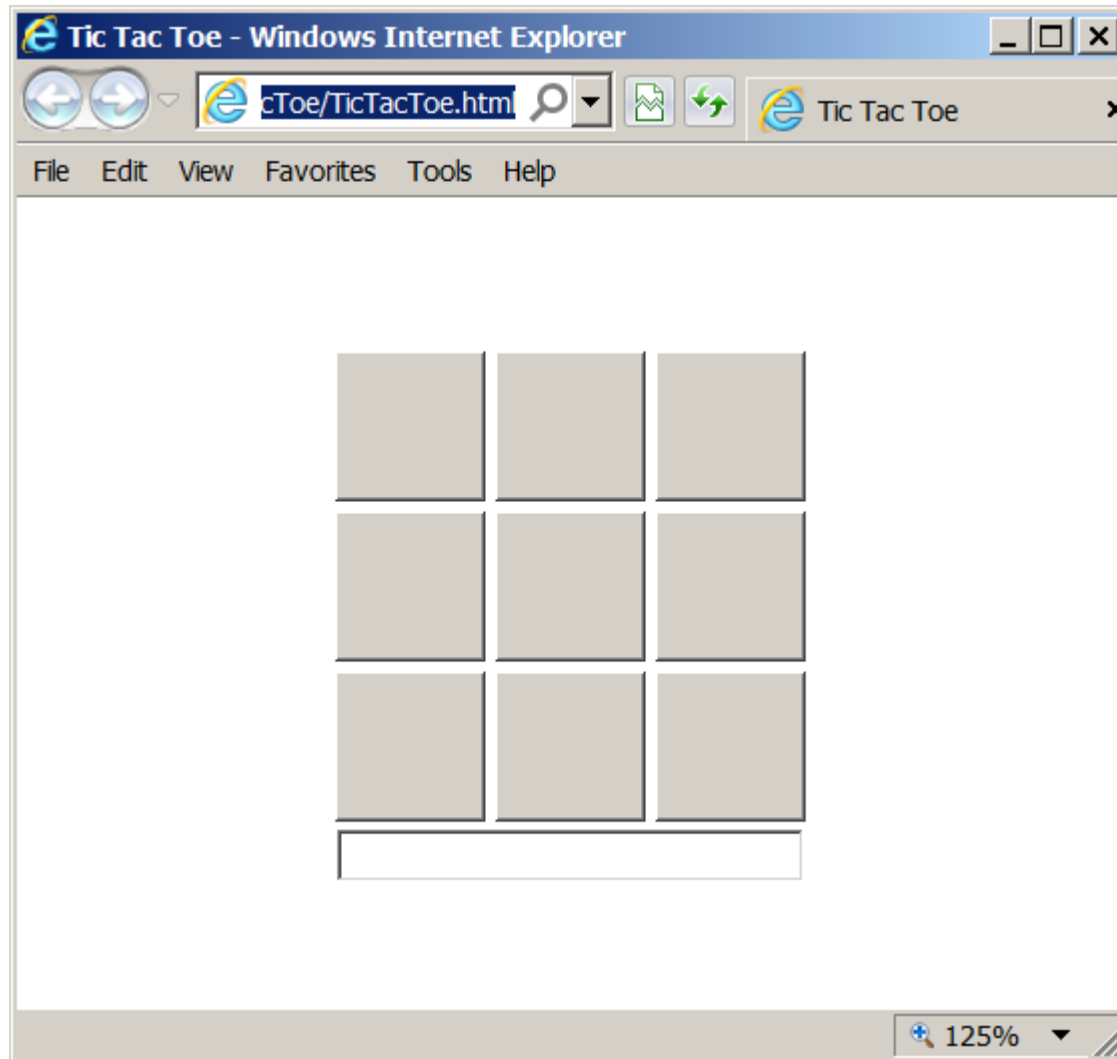
Project 8: Tic Tac Toe



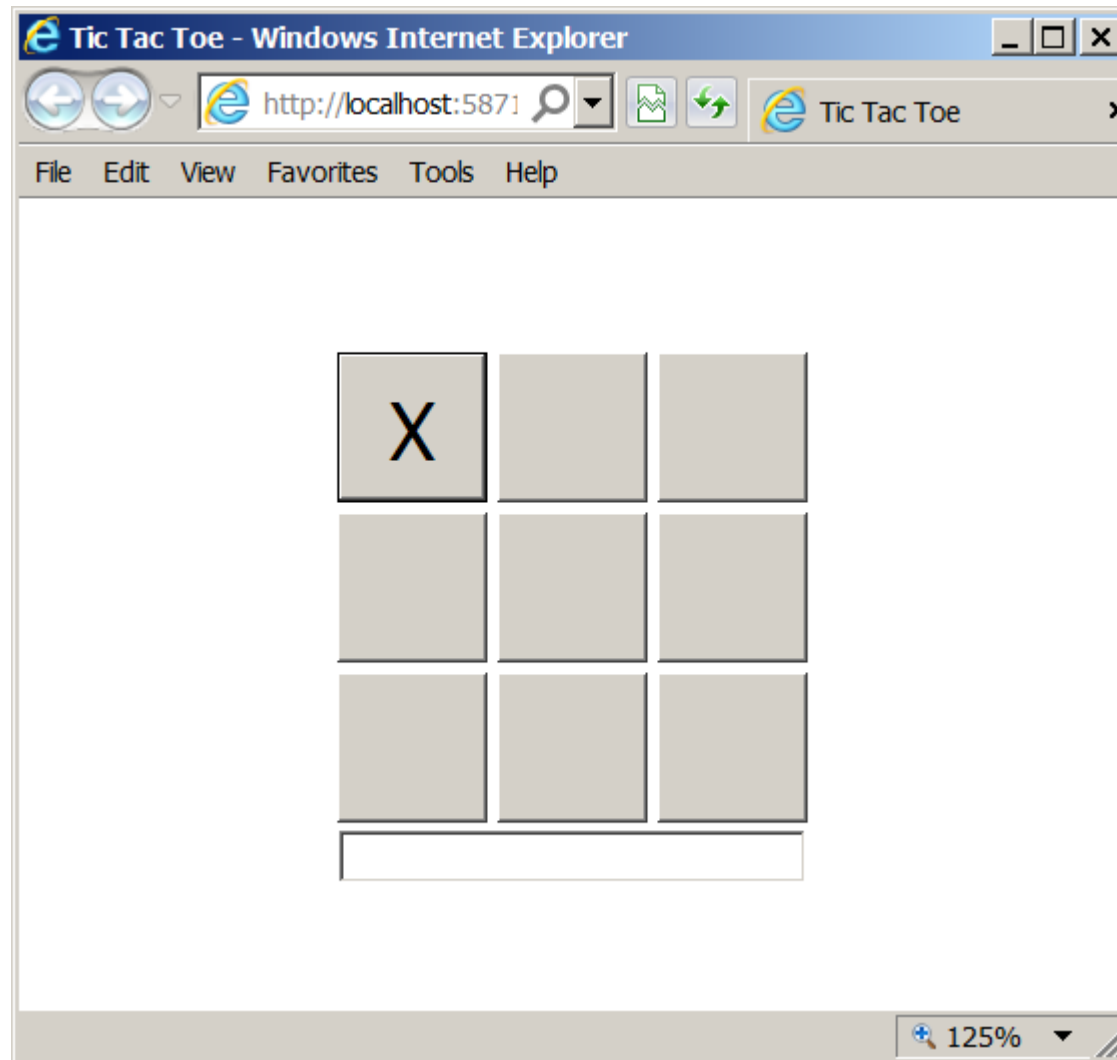
Assignment

- Write an HTML and JavaScript page that permits users to play Tic Tac Toe.
- Both players use a single browser.
 - Alternating plays.
- First player is X.
- Second play is Y.

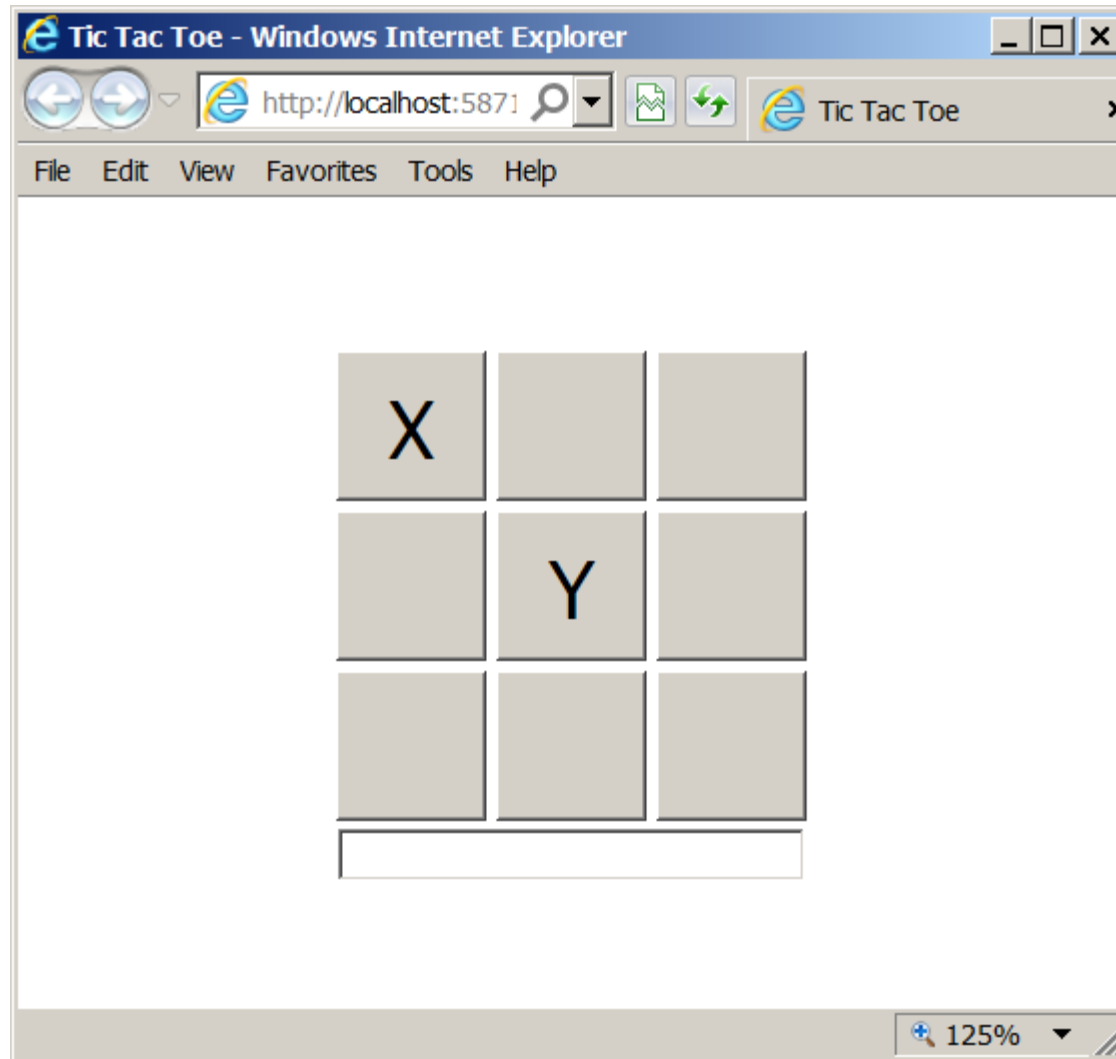
Example: Initial Screen



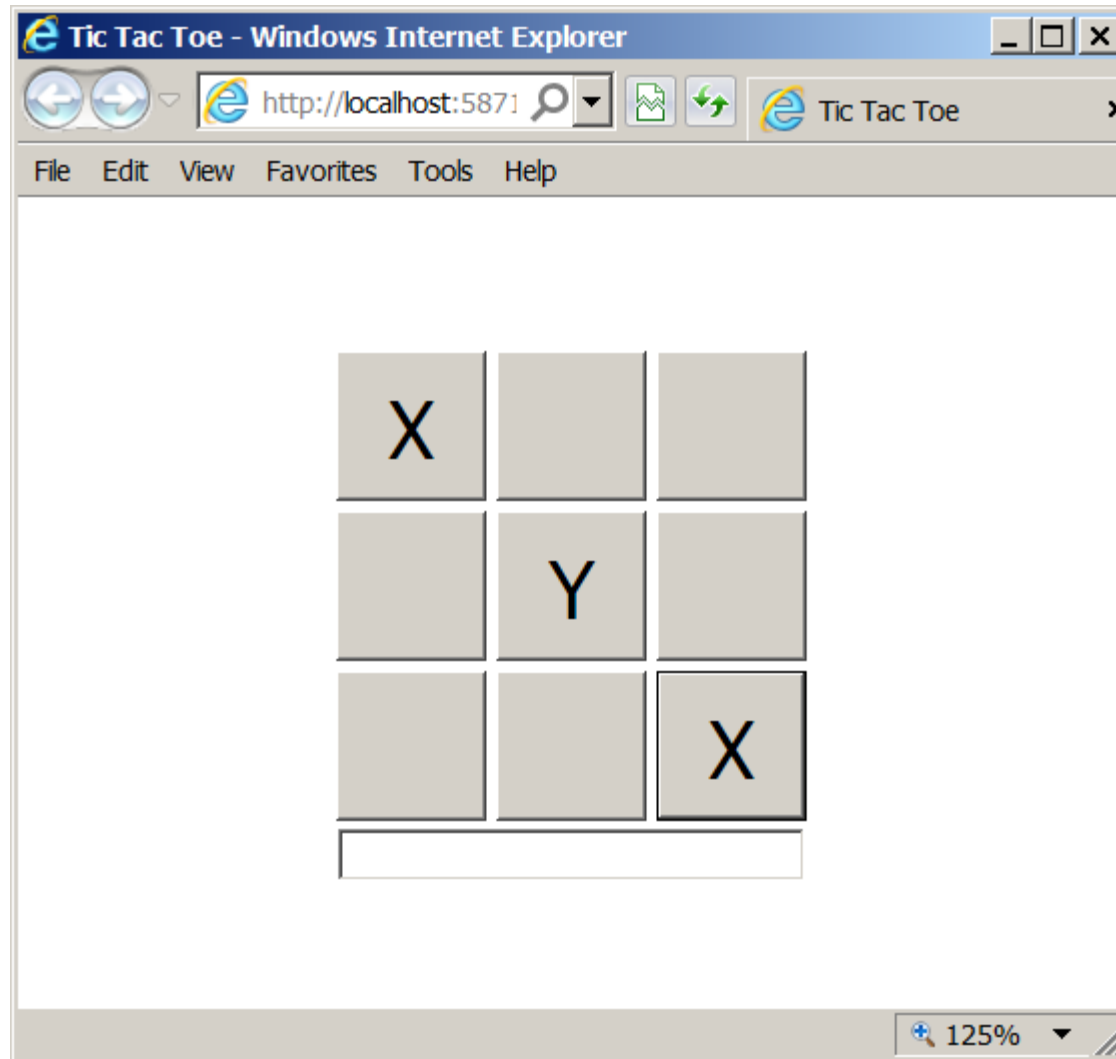
X Plays



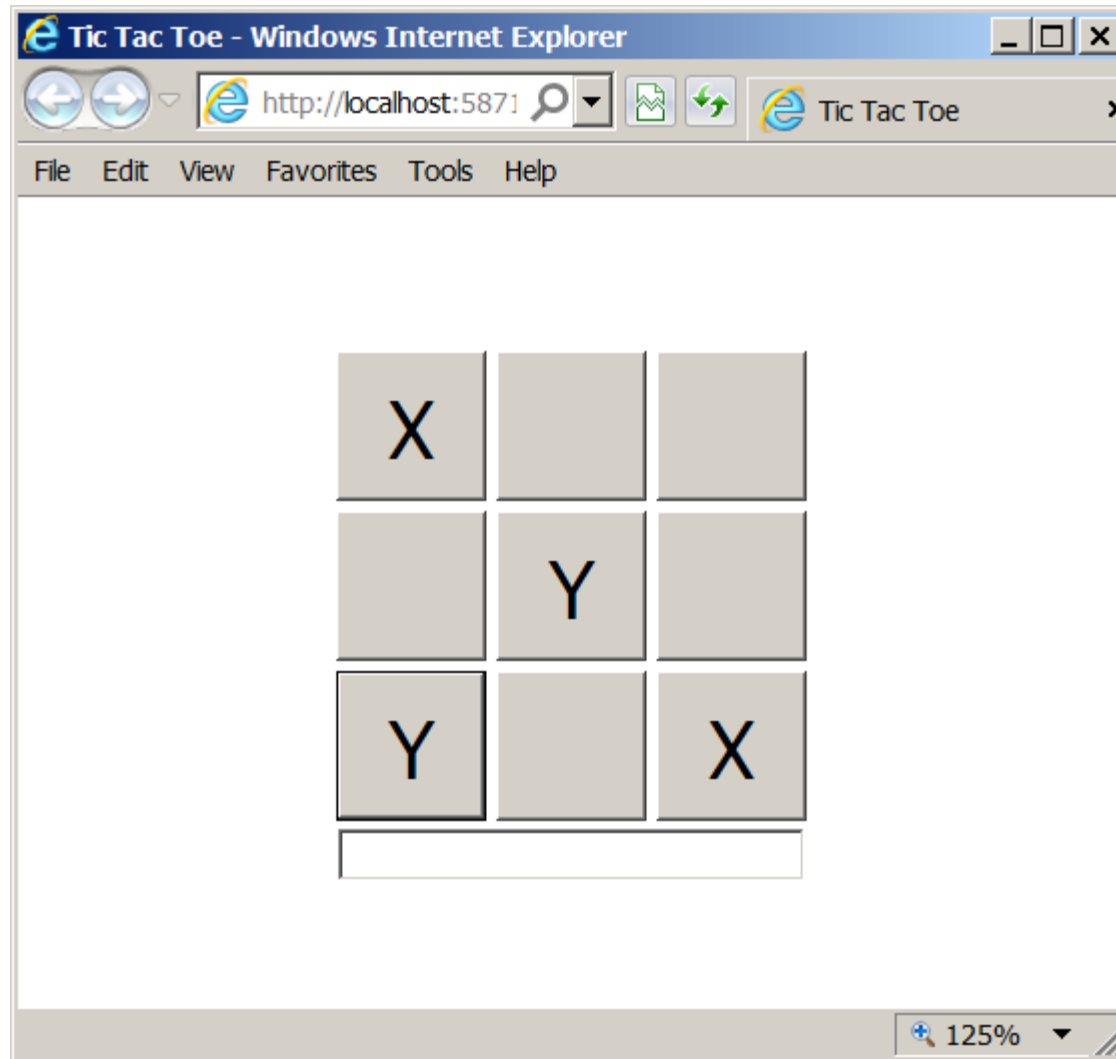
Y Plays



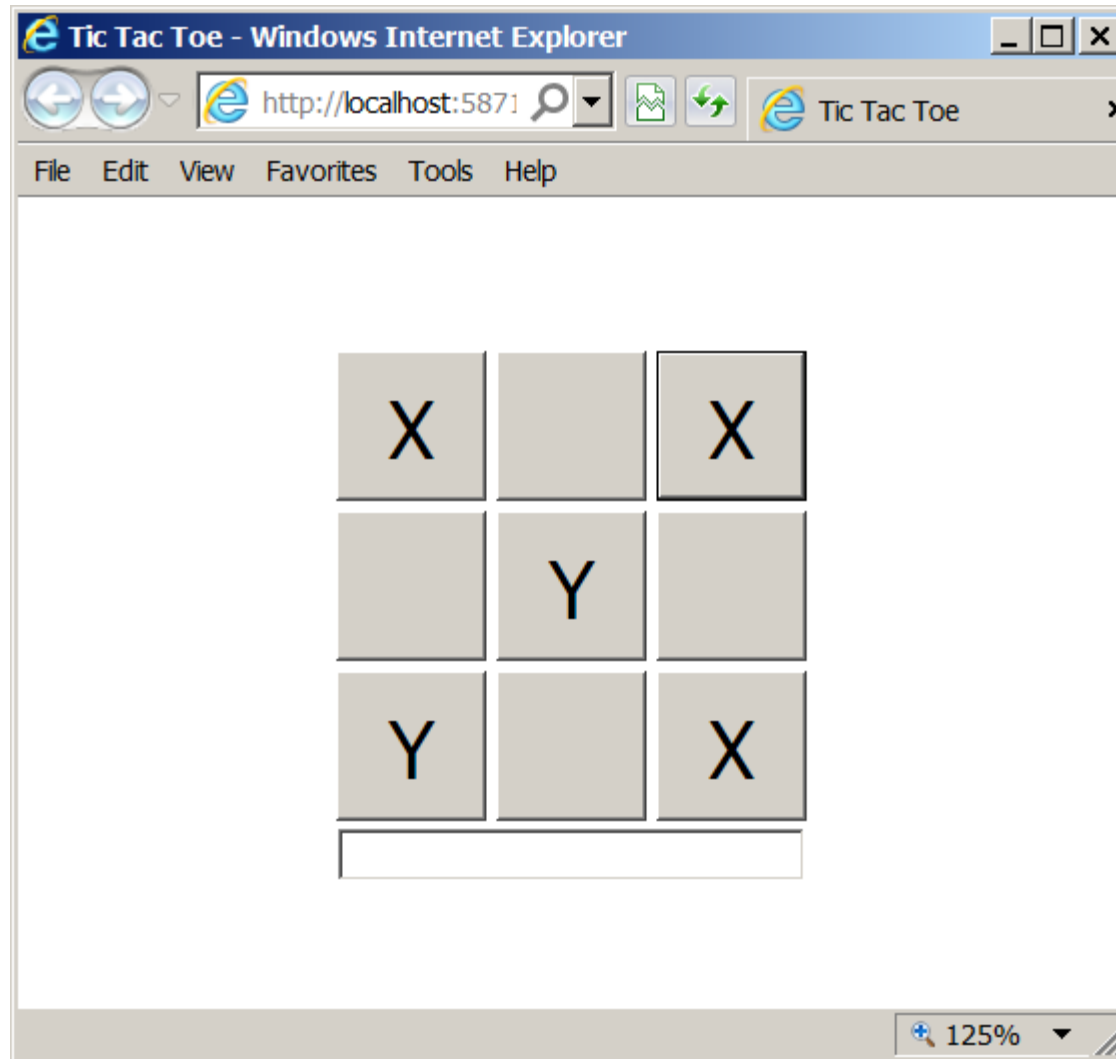
X Plays



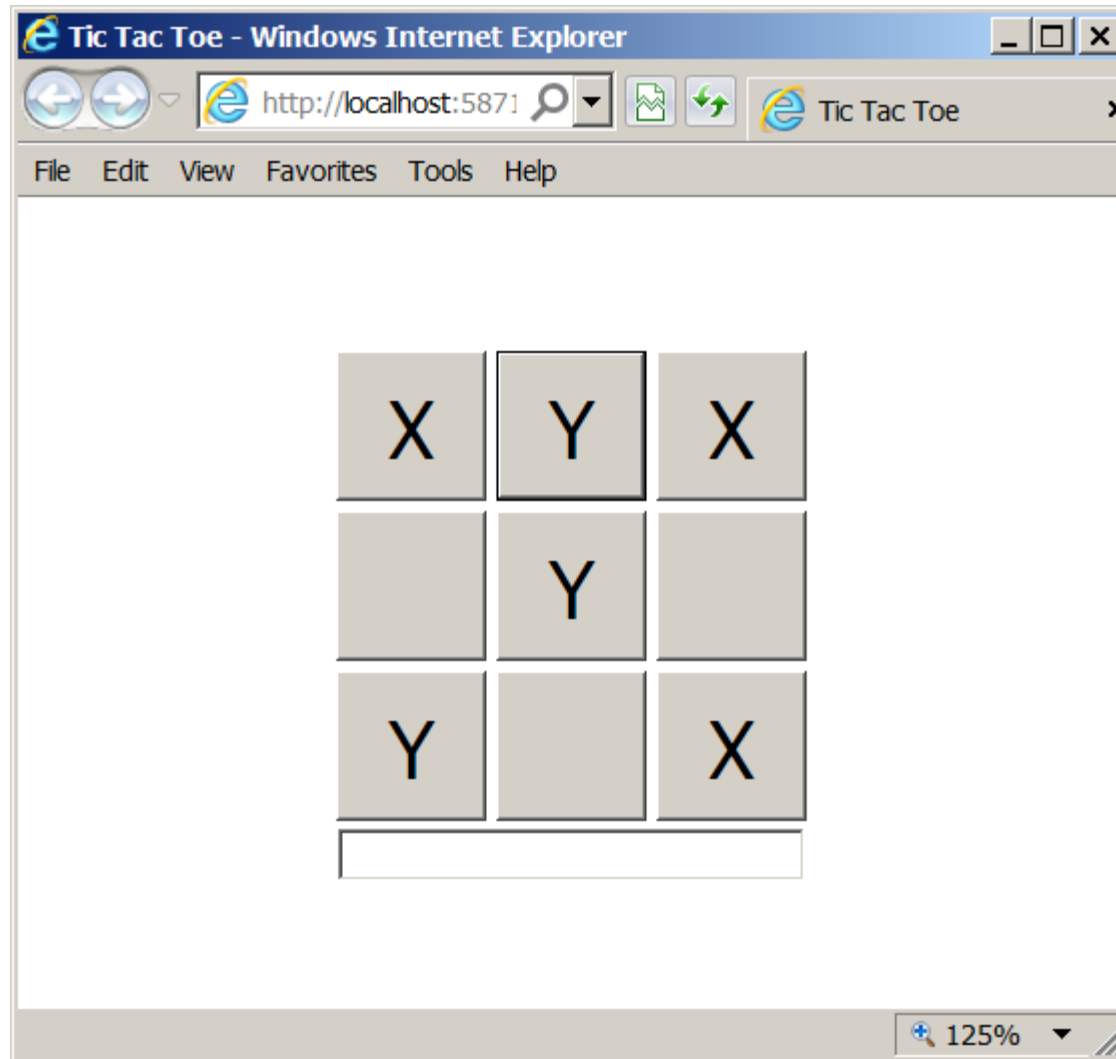
Y Plays



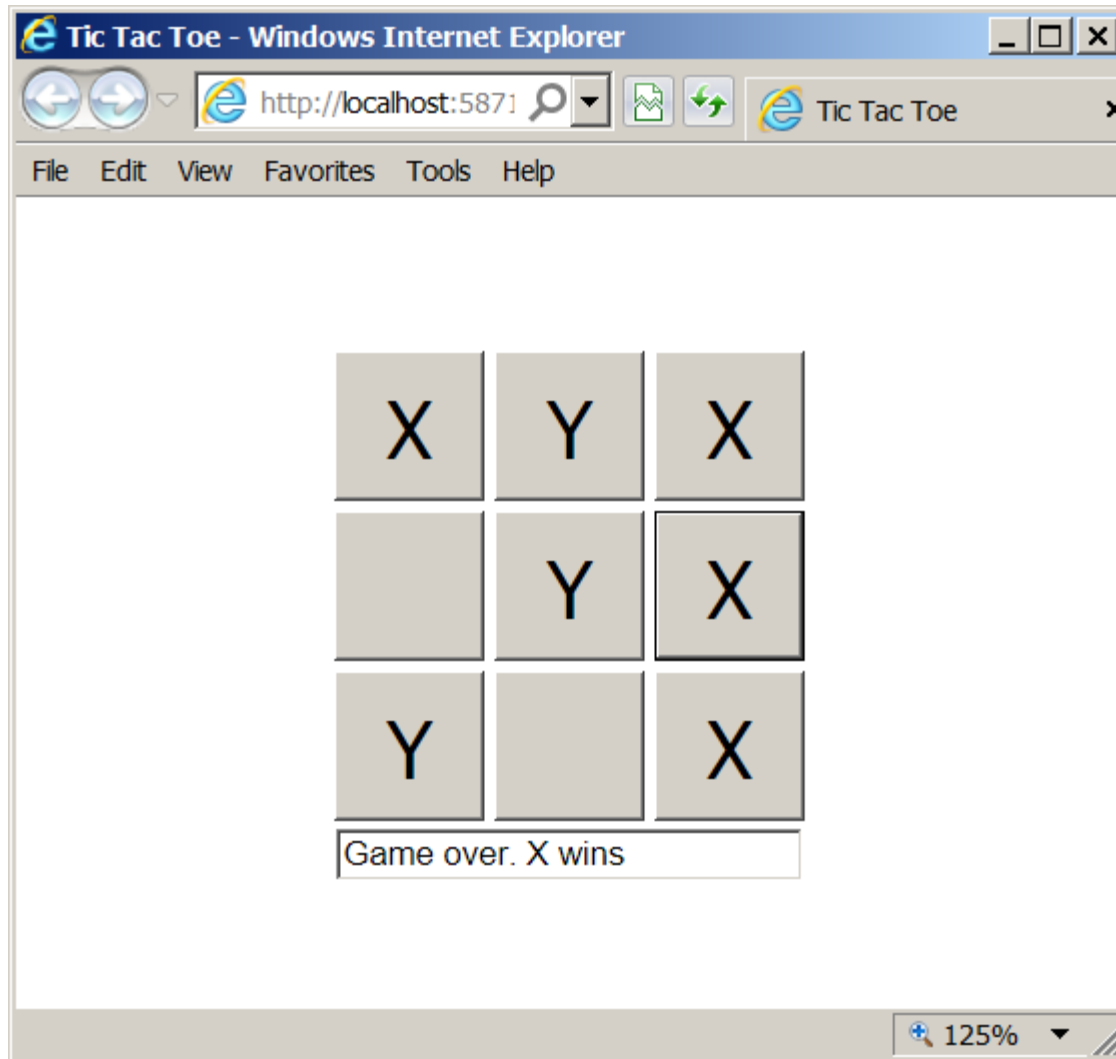
X Plays



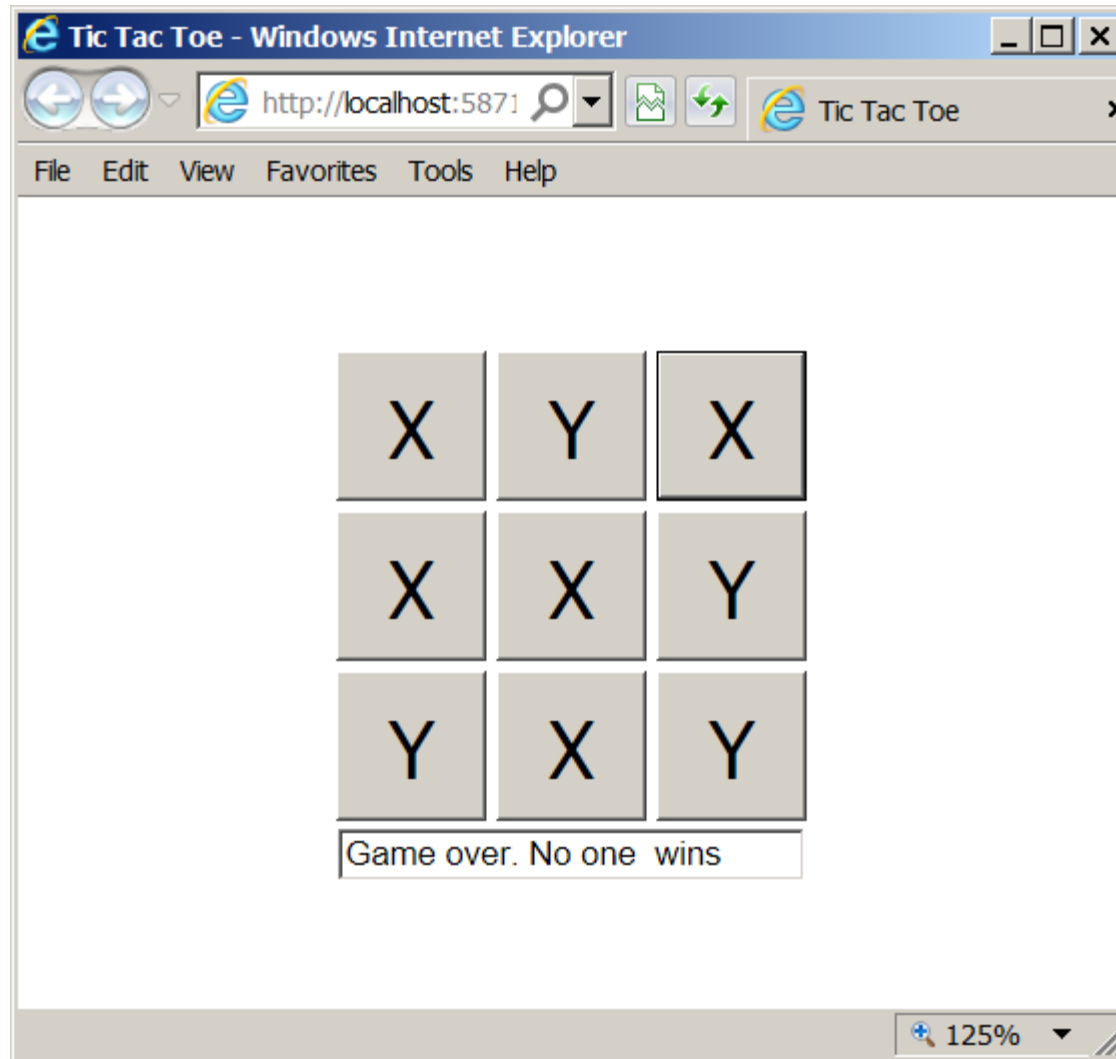
Y Plays



X Plays and Wins



A Stalemate





Requirements

- Your app should match the example in appearance and functionality.
 - Users play by clicking on a blank square.
 - Prevent users from playing on a square that is already taken.
 - Permit users to play on any blank square.
 - Determine when game is over
 - Winner or stalemate.



Requirements

- HTML and JavaScript only
 - No C# code or ASPX controls.
- Use jQuery where appropriate.
 - Practically everywhere!
 - Use jQuery API rather than DOM API.



Free Files

- You can download the html file from the class web site
 - <http://www.cse.usf.edu/~turnerr/195>
 - File TicTacToe.html
- You can download jquery from jquery.com
 - <http://jquery.com/download/>
 - File jquery-1.11.1.min.js



Requirements

- Write a single event handler for click events.
- Use jQuery to bind each button's click event to the one event handler.
 - The event argument passed to the handler identifies the button that was clicked.

```
function btnxy_Click(e) {
```

```
    . . .
```

```
    e.target.id is a JavaScript string that is the id of the  
    button that was clicked. For example "btn23"
```

- See <http://api.jquery.com/category/events/event-object/>



Implementation Tips

- Remember that the argument to the jQuery `$()` function is a *string*.
 - Usually a string literal, as in `$ (' #input_box ')`
 - Can be a variable, or the result of a concatenation, as in `$ (' # ' + e.target.id)`



Implementation Tips

- Keep it simple.
- Work in tiny steps.
 - Get each step to work correctly before going to the next step.
 - Use alerts or breakpoints to see what is happening.
- Before starting to write code
 - Review the presentations on the class web site.
 - Be sure you understand the examples.
 - Think about what is needed and how to get there in small steps.



Implementation Tips

- Everything you need to do, or something very similar, has appeared in examples presented in class.
- Use what you have seen in this course.



Ground Rules

- You may work with one or two other students.
 - OK to work alone if you prefer.

- If you do collaborate
 - All group members are expected to contribute.
 - Only one group member should submit the website files in Canvas.
 - Include a comment with the names of all group members.
 - Other group members submit just a comment with the names of all group members.



Submission

- Submit your web site folder via Canvas.
- Zip your web site folder using the Windows “Send to Compressed Folder” command.
- Submit the .zip file
 - Do not submit any other form of compressed file.
- Do not deploy your files to a server.



Ground Rules

- Do not share your work with other students (outside your group.)
 - Before or after submitting the project.
 - OK to *discuss* the project.
- Do not copy any other student's code.
 - Or even look at it.
- Do not let anyone copy or examine your code.



Ground Rules

Except for code posted on the class web site and jquery.com

- Do not copy code from the Internet
 - or any other source.
- Write your own code.



Due Date

- Project is due by 11:59 PM, Sunday, Nov. 30
 - Project submitted after the deadline will be subject to a penalty of 10 points per hour.