

EE 251: Project 2

All programs must be emailed. Please follow the following steps

1. It is probably easier if you create a directory for the project.
2. Zip all the files (or the directory for that project if you made one) using the following command

```
tar -czvf lastname_firstname_project2.tar.gz project2.c
```

or if you put all the files in a directory

```
tar -czvf lastname_firstname_project2.tar.gz project2
```

Don't forget to change `lastname_firstname` with your last and first name

3. Email me you .tar.gz file with EXACTLY the following as the subject

```
spring 2015 ee251 project2
```

Write a tic-tac-toe program. Your program should allow two players to play against each other or one player plays against the computer. At the beginning of each game you should provide the user with a selection between the two options or to quit the game.

The user should enter the row and the column where he/she wants to play in the following format x,y , where x and y are the coordinates. You should check if:

1. an invalid coordinate (either outside the board or a coordinate already played)
2. an invalid format

After each move you should display the current status of the board and either ask the next player to make a move or declare the winner or a tie. The board may look something like

```

  ---  ---  ---
  |   |   |   |
  | x |   | o |
  ---  ---  ---
  |   |   |   |
  | o | x |   |
  ---  ---  ---
  |   |   |   |
  | o |   | x |
  ---  ---  ---

```

After a winner or a tie is declared, provide the statistics of how many wins, loses or ties each player got: player 1 vs player 2 /computer, then the game starts over and the user is presented with the menu again.

If the user chooses to play against the computer use a random number generator to choose location to make the next move. You should check and make sure that that position is valid.

Write a report describing your entire process. Your report should include:

- Introduction: describe in your own words what the project is about
- Program discussion: describe how you will go about structuring your program
- Results: present the results of your program with test data and discuss who it worked and some analysis of how efficient it is
- Conclusion: provide some remarks regarding the project and what you learned