Tic Tac Toe  
Project

*Purpose*: Using SDL2 to create a cross platform TicTacToe game for both Windows and Linux.

*List of Features*: The following items will be employed with the game.

* Simple score keeping
  + +100 points per move
  + +150 for winning
  + Zero points for ties
* Possible timer
  + Pending not fully vetted yet (Fluff feature)
* Images
  + Player X – **Completed**
  + Player O – **Completed**
  + Menu – **Completed**
  + Splash Screen – **Completed**
* Board / Board Grid
  + Board features – experience from last time
    - Board Class
    - Board Class constructor that zero’s the board
    - Method for clearing the board
    - Track used squares
    - Validate squares prior to setting square
    - Add padding or margin’s to center playable tiles (X,O’s)
* Simple FSM
  + Game States as follows
    - NullState
    - Init
    - Splash Screen
    - Main Menu
    - Game Running
    - Exit Game
* Create Input Class
  + Mouse movement required for game
* Create Audio class **(in progress)**

*Conclusion*: The game should be ready for turn-in by Week 9. There will be requirements of Alpha, Beta and so on for class requirements. The following should be achievable in a timely manner. This is a simply guide to track progress. None of these things will be required or hard coded.

1. Week 6
   1. SDL Class constructed – **Completed**
   2. Images created – **Completed**
   3. Functional title screen – **Completed**
   4. Create game Class – **Completed**
2. Week 7
   1. Simple FSM created
      1. Control Initialization – **Completed**
      2. Control Game menu – **Completed**
      3. Control game state – **Completed**
      4. Control Exit state – **Completed**
   2. Create Class for board
      1. Split the Board in two
         1. Game area – **Completed**
         2. Score area – **Completed**
      2. Win checks
         1. Winner X – **Completed**
         2. Winner O – **Completed**
         3. No winner (Tie) - **Completed**
      3. clearboard() - **Completed**
      4. checkSlots() - **Completed**
   3. Audio methods – **Completed**
3. Week 8
   1. Get audio working – **Completed**
      1. Quick audio for mouse clicks on tile pieces – **Files collected**
   2. Confirm board and tiles work.
   3. Bug testing.
4. Week 9
   1. Bug testing and repair for turn in.

**Board Checking**

| **TicTacToe Board** | | |
| --- | --- | --- |
| 0 | 1 | 2 |
| 3 | 4 | 5 |
| 6 | 7 | 8 |

*Checking the board –* Checking the board will be rather simple. We are going to create a simple enumeration tagging system that will tell us what is going on within the system. The system will check to see what if the tiles have been used. After doing the check system will either display the object or not process the request.