

## SENG 513 - Assignment 2 Design Document

Game Name: Table Top Soccer

Target Platform: Desktop

Game Genre: Strategy/Arcade

Game Objective:

- Within a 3 minute time span, score more goals in the opposing team's basket than they score on you!

Rules of the game:

- One soccer ball that starts in the centre of the game board.
- Two teams: Left Team & Right Team
  - Each team have 3 players they can move around to defend & push the ball to goal
  - In game start, both team's players have a designated starting spot on the game board.
  - Left team scores on right side, vice versa with right team
- 3 minute timer until game ends & winner is decided
  - If score is equal at game end it's a tie
  - If the left team has a higher score at game end, they are the winner, vice versa with the right team
- Turn by turn gameplay
  - Turn is denoted by which team has a highlighted bar lit under them
  - Left player has first turn once game starts
  - Each turn has 15 seconds max time allowed, denoted by the highlighted bar getting smaller
  - Turn switches once a player is moved or time limit is exceeded, the opposing team will have a bar lit to denote the turn change.
  - If a player scores, the board is reset & conceding player is given the turn to start
  - After ½ the game time is done, the player & ball positions will be reset & right player will be granted a turn
- Players can collide & move one another like pool balls
  - Once there is a collision with a ball and the goal, the game score will increase for the scoring team
  - If a player collides with a goal or with boundary walls they will bounce back to the game board
  - If there is a collision with the ball & boundary the ball will bounce back to the game board

#### Game Mechanics:

- Players press the start button to start the game, and the timer starts counting down
- The game works on a turn by turn basis
  - When it's a team's turn they are allowed to slingshot one of their 3 players in whichever direction they like
  - Each turn lasts a max of 15 seconds or until a player is moved (whichever comes first)
  - After a turn is finished, the turn goes to the opposing team member (denoted by their team name being highlighted)
  - Left player has first turn on game start
  - Right player has turn on half time
- In half time, the game timer will be paused, and player & ball positions will be reset. Once player presses start, the game will resume & timer will start counting down.
- Players use their mouse to cock their players back & release to slingshot them forward in the opposite direction
  - An arrow will be shown with length to denote intensity, and point to the direction it will go so players can ball park where and how far each player will go
  - Players have the freedom to move wherever they like in the game board; blocking the goal for a defensive playstyle, or hitting the ball for an aggressive playstyle
  - If a player collides with another player or ball, then it will also move those players & balls
  - If a player or ball collides with a boundary wall, they will bounce back from the wall in the opposite direction
  - If a player collides with the goal box, they will bounce back from the box
  - If a ball collides with a goal box, it will result in a goal for the team on the opposite side (R Team scores on the left, L team scores on the right)
- When a player scores, game score goes up for the scoring team
  - The board positions for the players and the ball will be reset, and the conceding team will be given the turn
- Players can press the timer to pause the game.
- After the game ends, the score will be retained on screen, and players can start the game again by pressing the start button

Citations:

Soccer Field:

Tavares, N. (2006, March 10). Soccer Field Template [Image]. Retrieved from [https://en.m.wikipedia.org/wiki/File:Soccer\\_field\\_-\\_empty.svg](https://en.m.wikipedia.org/wiki/File:Soccer_field_-_empty.svg) Licensed under Creative Commons Attribution-Share Alike 2.5 Generic. (Modified)

Modifications:

- Changed pitch colour from green to black
- Made goals larger & thicker

Soccer Ball:

MapGrid. (2019, February 2). A Soccer Ball [Image]. Retrieved from <https://commons.wikimedia.org/wiki/File:Soccerball.svg>. Licensed under CC0 1.0 Universal Public Domain Dedication.