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CPSC 4160  
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## **Milestone One**

<https://github.com/djhusto/CPSC4160-SoccerProj>

### **Part 1: Updated Game Document**

So far, the only real change that I have chosen to pursue in this project is advice from the original Game Proposal submission. This was to not implement an AI but rather to focus on making the game two player first. A two player game is much easier and makes more sense to complete rather than try to implement an AI that makes its move sensibly.

The architecture of the project will remain the same. I am attempting to implement a MVC and so far this is going well so I am pleased with that. The user interface has not changed at all. I still plan on using the user controls similar to that of foosball and that is the plan going forward.

The other change I want to implement is to make the game closer to foosball. The amount of difficulties with just putting the sprites on the screen and the files interconnected has really delayed my milestones and I think foosball would still be a moderately difficult game to produce and still be fun. The

### **Part 2: Updated Project Timeline**

#### **Original project timeline**

#### **Milestone One (3/15)**

- Field, Players, and Ball Created
- Initial Sprites uploaded
- Ability to choose sprites at the beginning of the game
- Movement of the players should be completed

#### **Milestone Two (3/29)**

- Ability to move mouse and make ball move to location of mouse

#### **Milestone Three (4/12)**

- Combination of mouse moving, ball physics, and footballer sprites
- Begin testing after this milestone (ideally)

#### **Final Game Submission (4/26)**

- Completed game with completed Game Documentation

#### **Final Exam Presentation (5/4)**

- Completed slideshow or demo video (either works)

## **Updated Project Timeline**

### **Milestone One (3/30)**

- Field, and Ball Created
- Initial Sprites uploaded
- Ability to move mouse and make ball move to location of mouse

### **Milestone Two (4/15)**

- Players created with appropriate sprites
- Movement of the players should be completed
- Begin testing after this milestone (ideally)

### **Final Game Submission (4/26)**

- Completed game with completed Game Documentation
- Ability to choose sprites at the beginning of the game
- Combination of players moving, adjusted ball physics, and footballer sprites

### **Final Exam Presentation (5/4)**

- Completed slideshow or demo video (either works)

The updated timeline is reflected above. I have moved some items back to the second milestone while I also completed some items ahead of schedule which sort of evens out my future plans for this project. There is about a month remaining for this project and I think my timeline is still plausible. I am not exactly at the spot I would have liked to be but recognizing that and reasonably shifting the timeline makes sense to me. I worked on every component of the project as I am the only member of my group. I again changed the deadline for multiple items as the files did not work interconnected.

## **Part 3: Technical Challenges**

- Understanding how to implement the vector position for the ball
  - General idea is to take the ball's initial position and get the position of the mouse click and make the ball go in the position at a reasonable acceleration
  - This was something I addressed originally in the game proposal document and it is still true that there is difficulty implementing this. No surprise really.
- Ball Physics
  - I have not yet approached that in my project as I am not at that stage
  - I want to implement it where it will bounce like foosball
  - After a goal is scored, I want a random number to make the ball go in a random direction as to recreate the idea of pushing the ball back into play after scoring

- Mouse and Ball Movement
  - This was a technical challenge that I initially thought was going to be a problem. At the current time, I am learning and it is almost 100% implemented in the fashion that I wanted so that's promising.
  - With my current updated game design, the mouse portion might become obsolete but we will see
- Placing all items at the right coordinates
  - It has been increasingly difficult to add items to the right position on the field as the project develops. Every time has to have its appropriate space and not overlap. This has been a difficulty so far but I am working on it and slowly making all the items be in their proper spot.
- After a player scores, need to have a scoreboard that updates
  - Should be easy to implement similar to my pong