

# Soccer Training Simulation - Complete Documentation

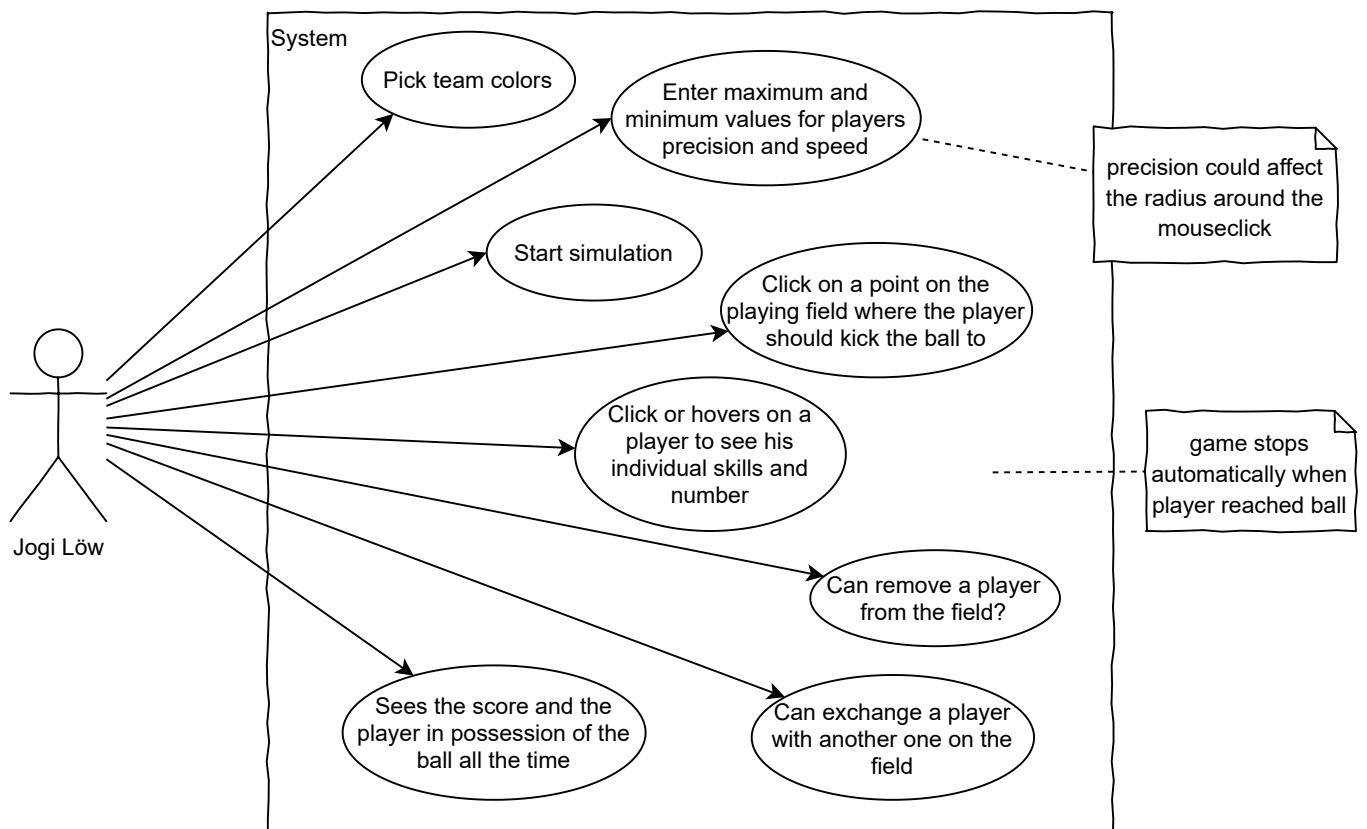
The whole production of this application was developed in collaboration of Mona Stingl and Hannah Dürr with equal contribution of each team member to the final result.

Date of completion: 15/07/2021

## Content

- Use Case Diagram
- User Interface Scribbles
- Class Diagram
- Activity Diagram
- Class Methods

## Soccer Simulator Use Case Diagram



# Soccer Simulator User Interface Scribble

Start screen

## Welcome!

Here you can set the preferences for your soccer simulation.

### Players Minimum Speed

slow  medium

### Players Maximum Speed

medium  fast

### Players Minimum Precision

advanced  amateur

### Players Maximum Precision

pro  advanced

### Team Colors

Team A

Team B

Kick Off

Whole <div> : display *none* when user clicks on "Kick Off"

<form> input elements

<form> color picker

save input values for the simulation

Display with div and span elements

display and hide instructions on click

Simulator screen

Score: 0 : 0

In possession of the ball: Player No 7

field size: 800px & 500px

html canvas element

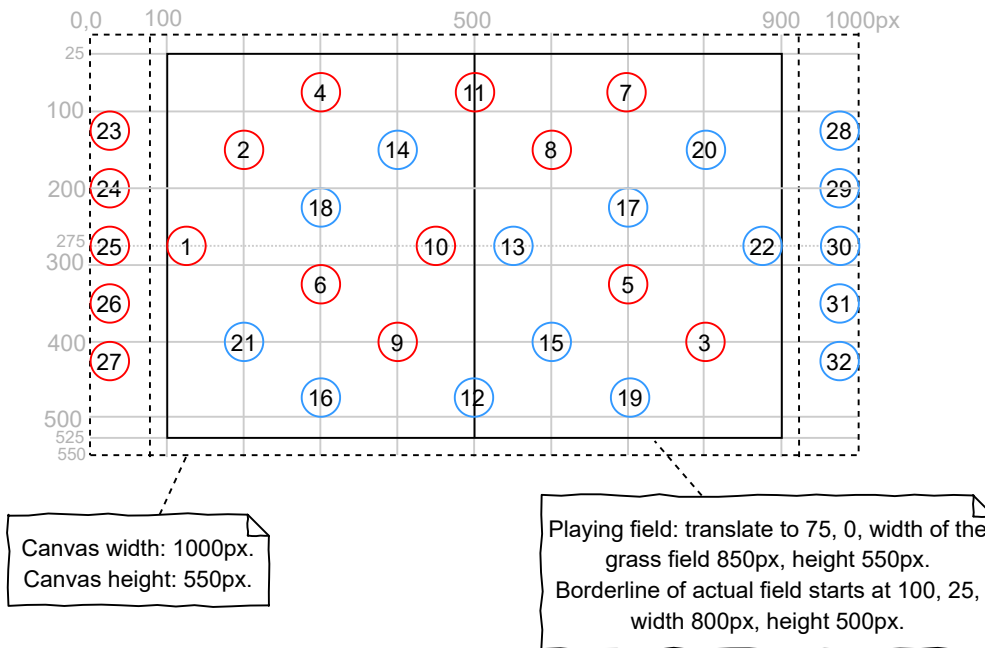
? ↺  
restart simulation, leads to settings page

with altkey and click the player can be dragged to exchange him with another

Number: ? | Speed: ? | Precision: ?

with shiftkey and click the player information can be shown

# Scribble for exact canvas values



```

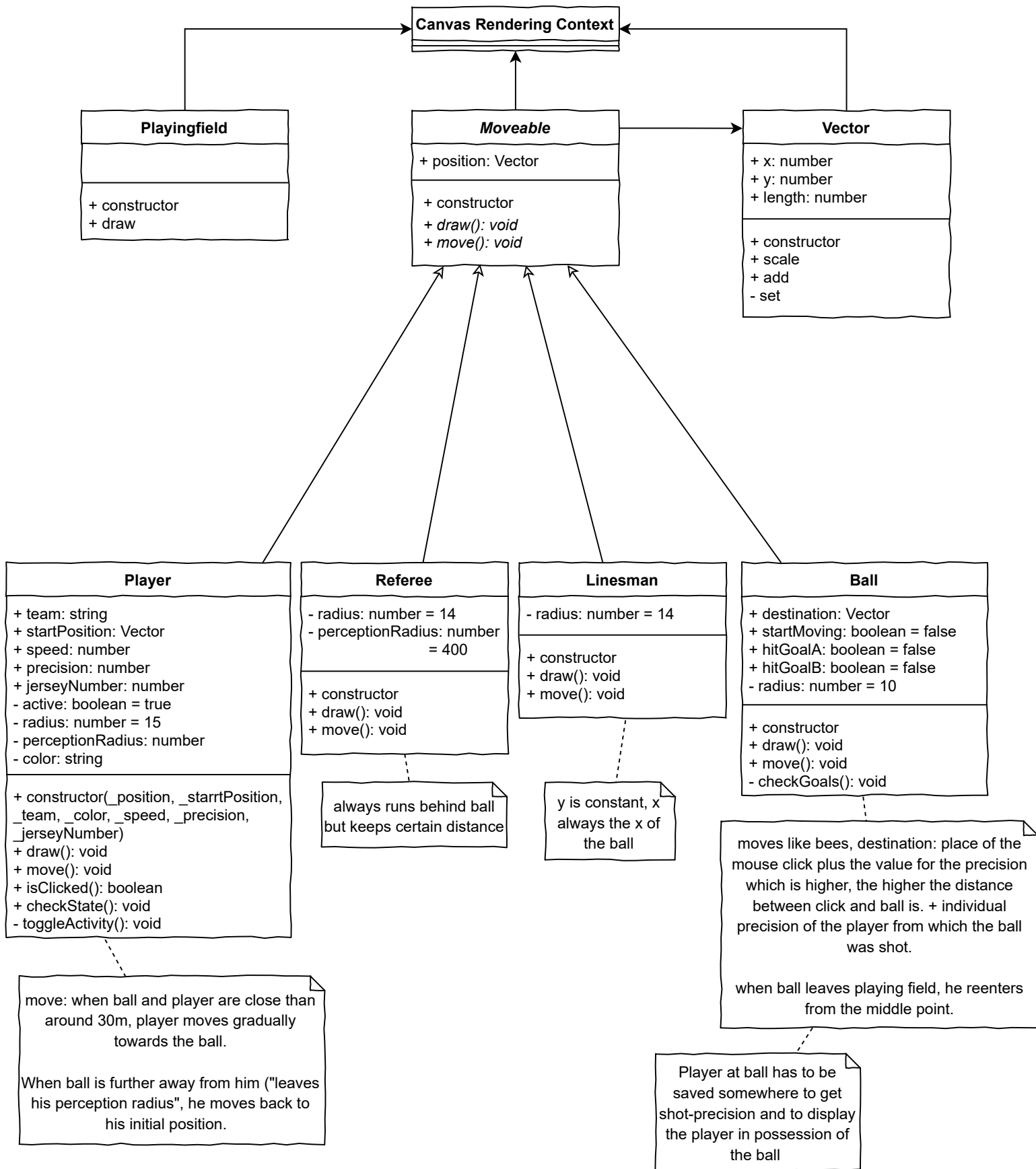
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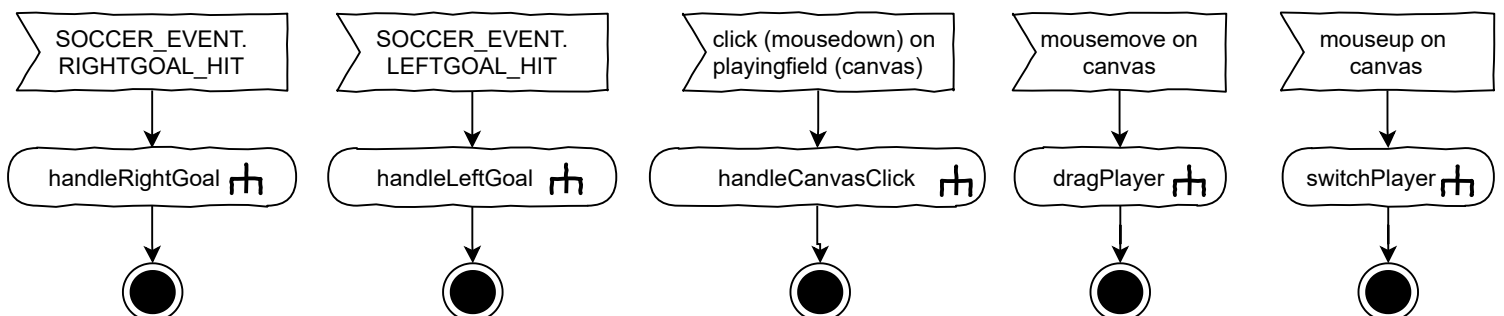
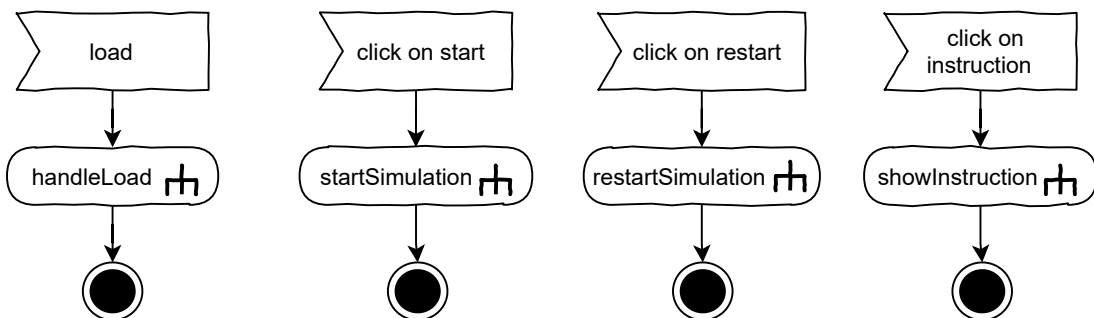
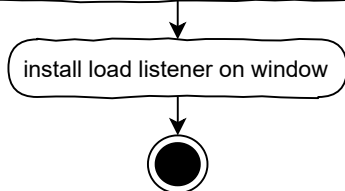
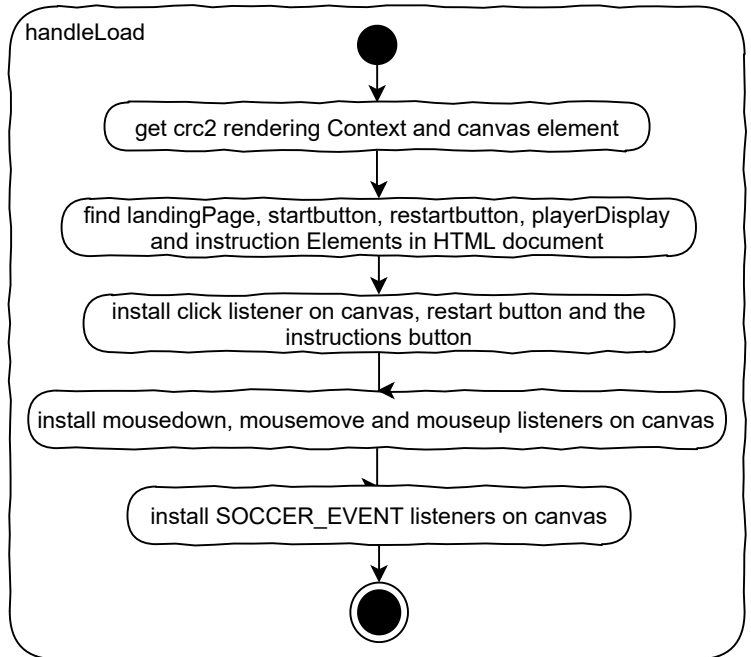
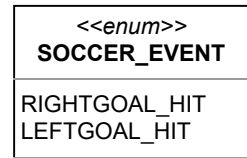
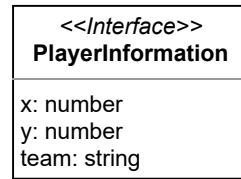
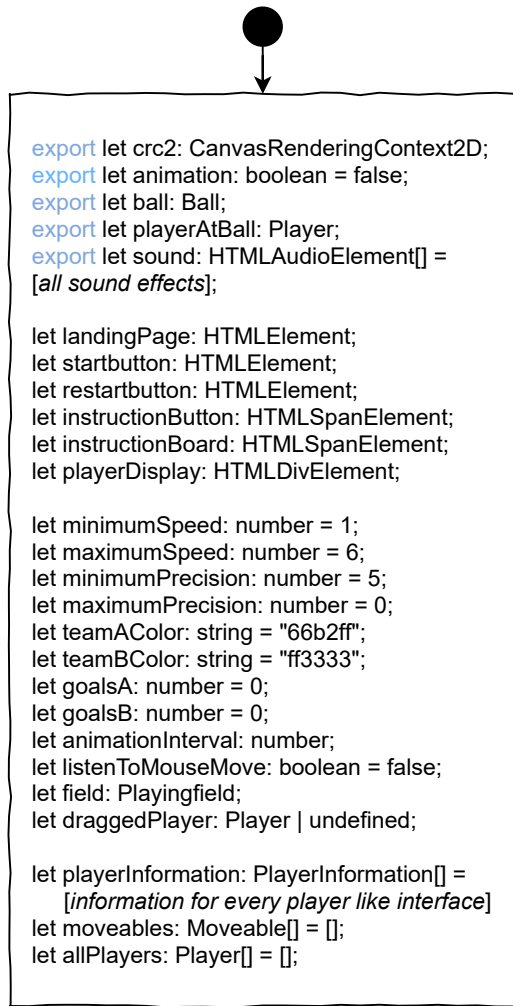
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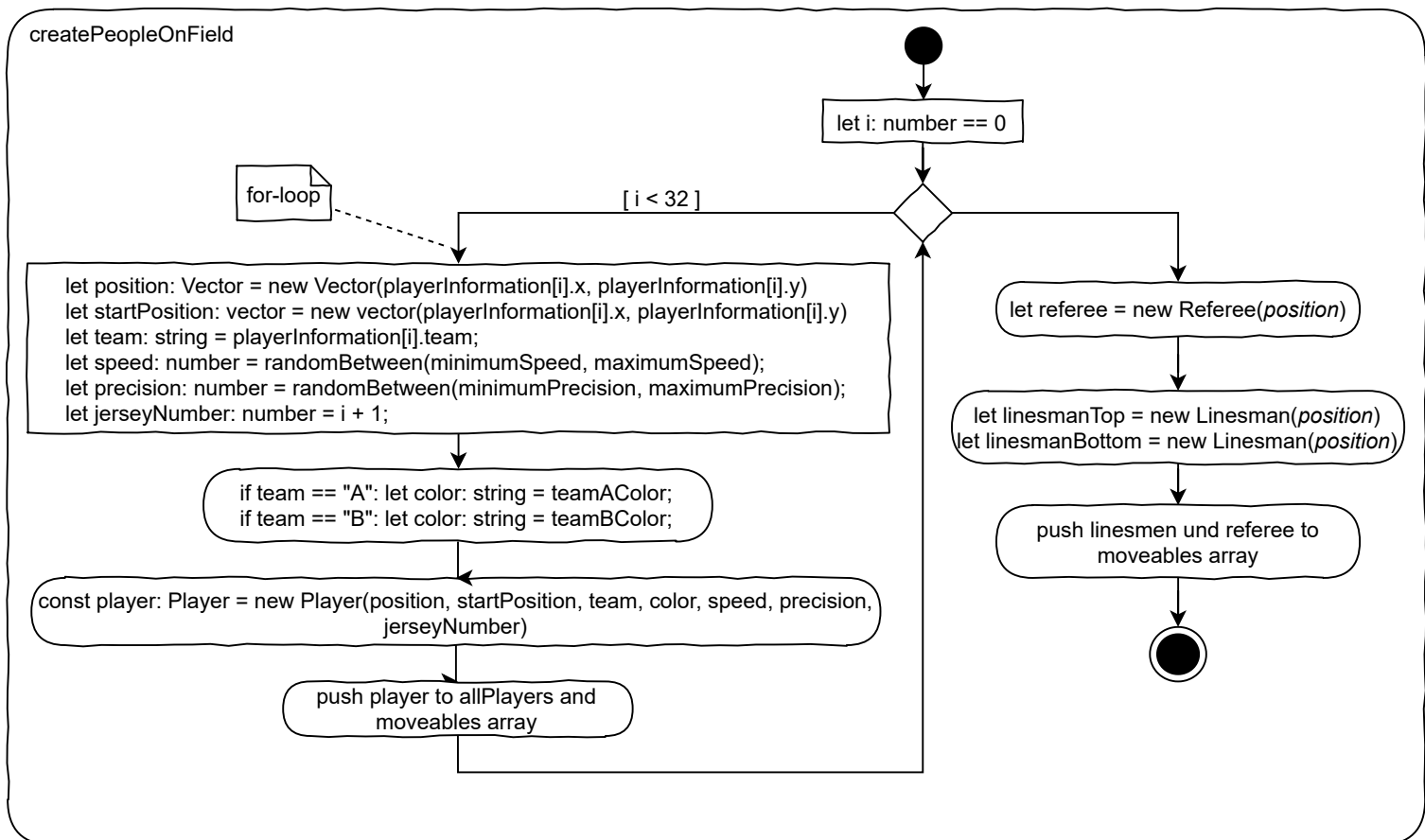
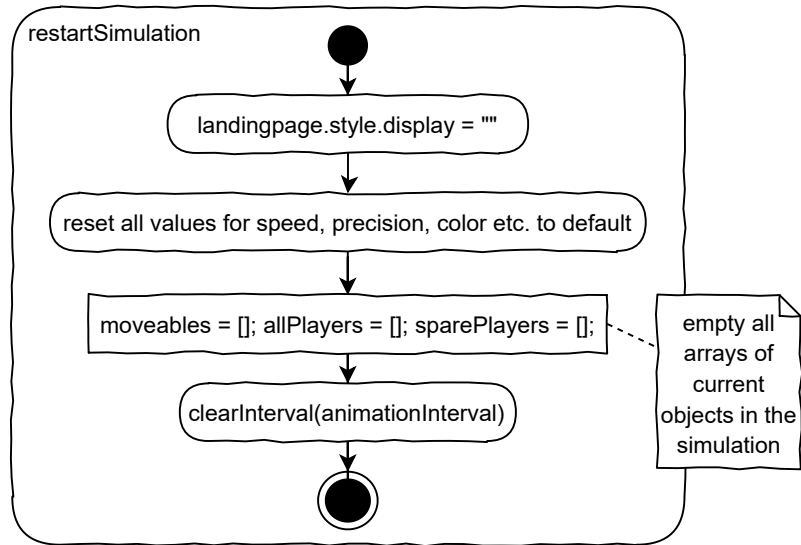
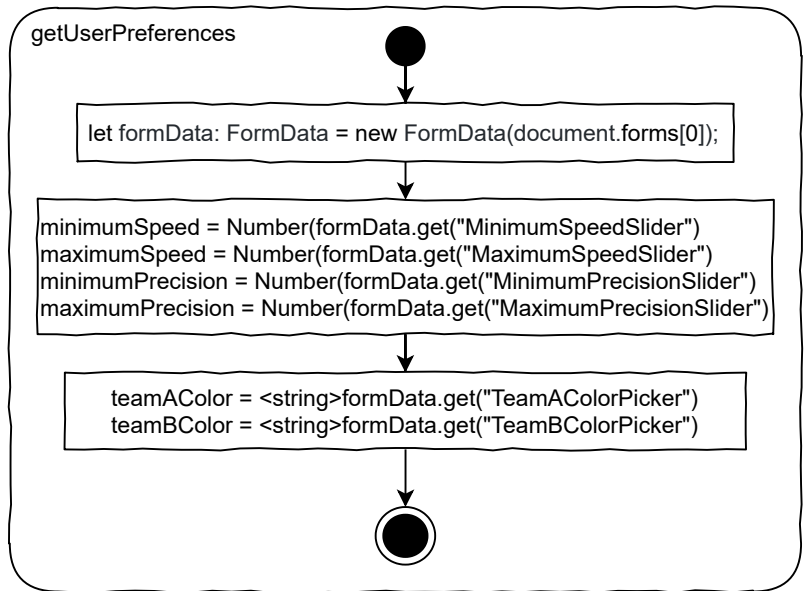
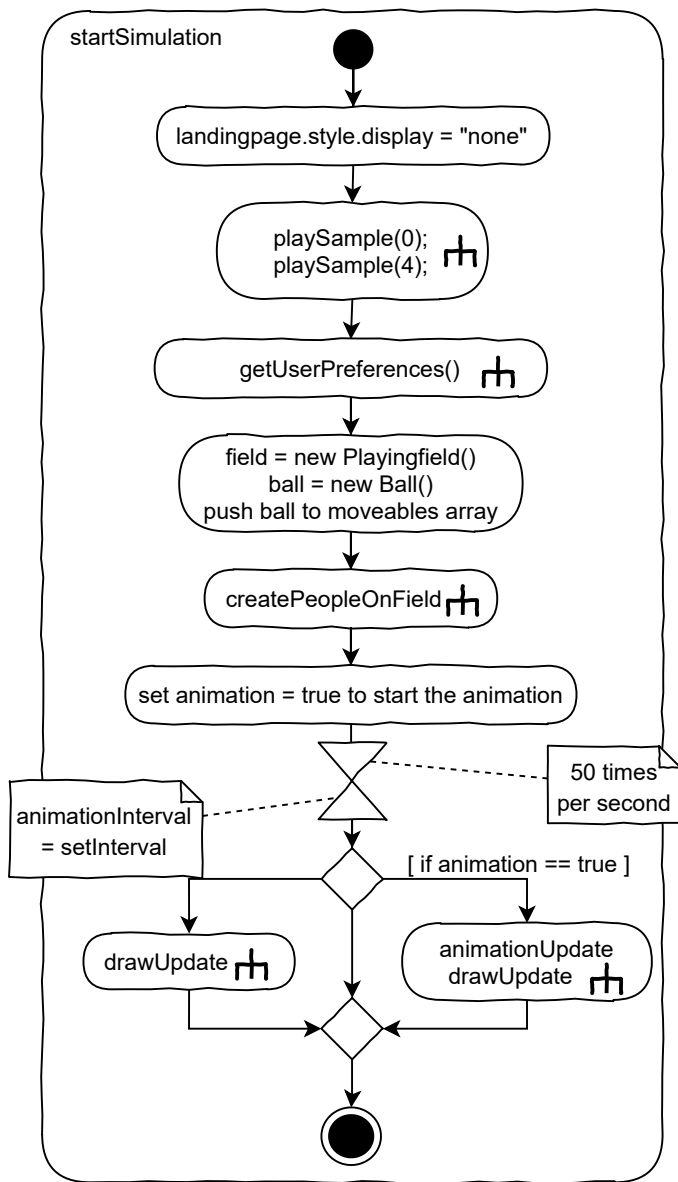
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]
    
```

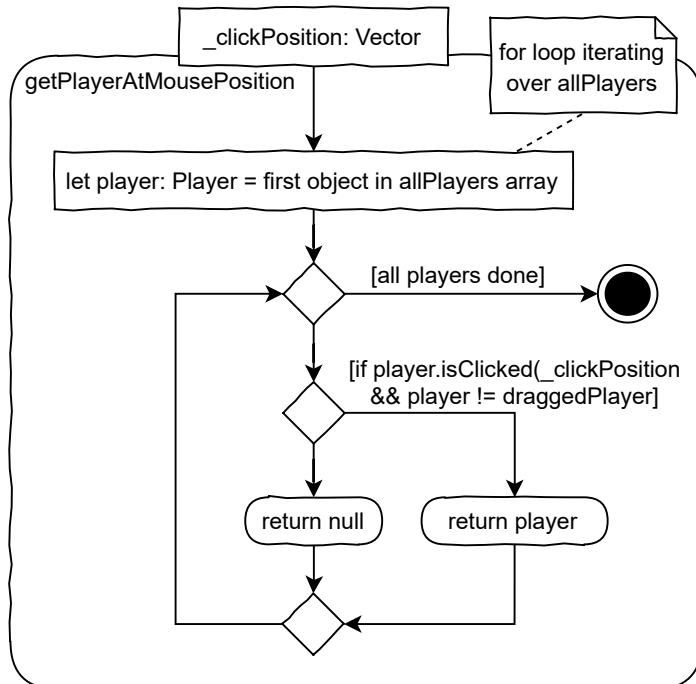
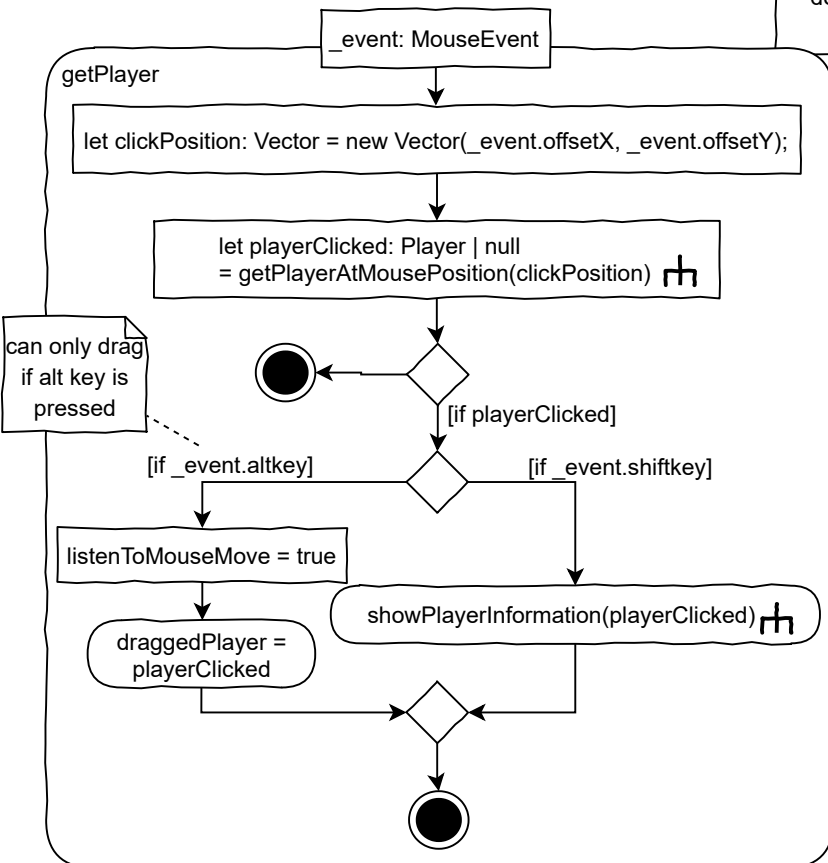
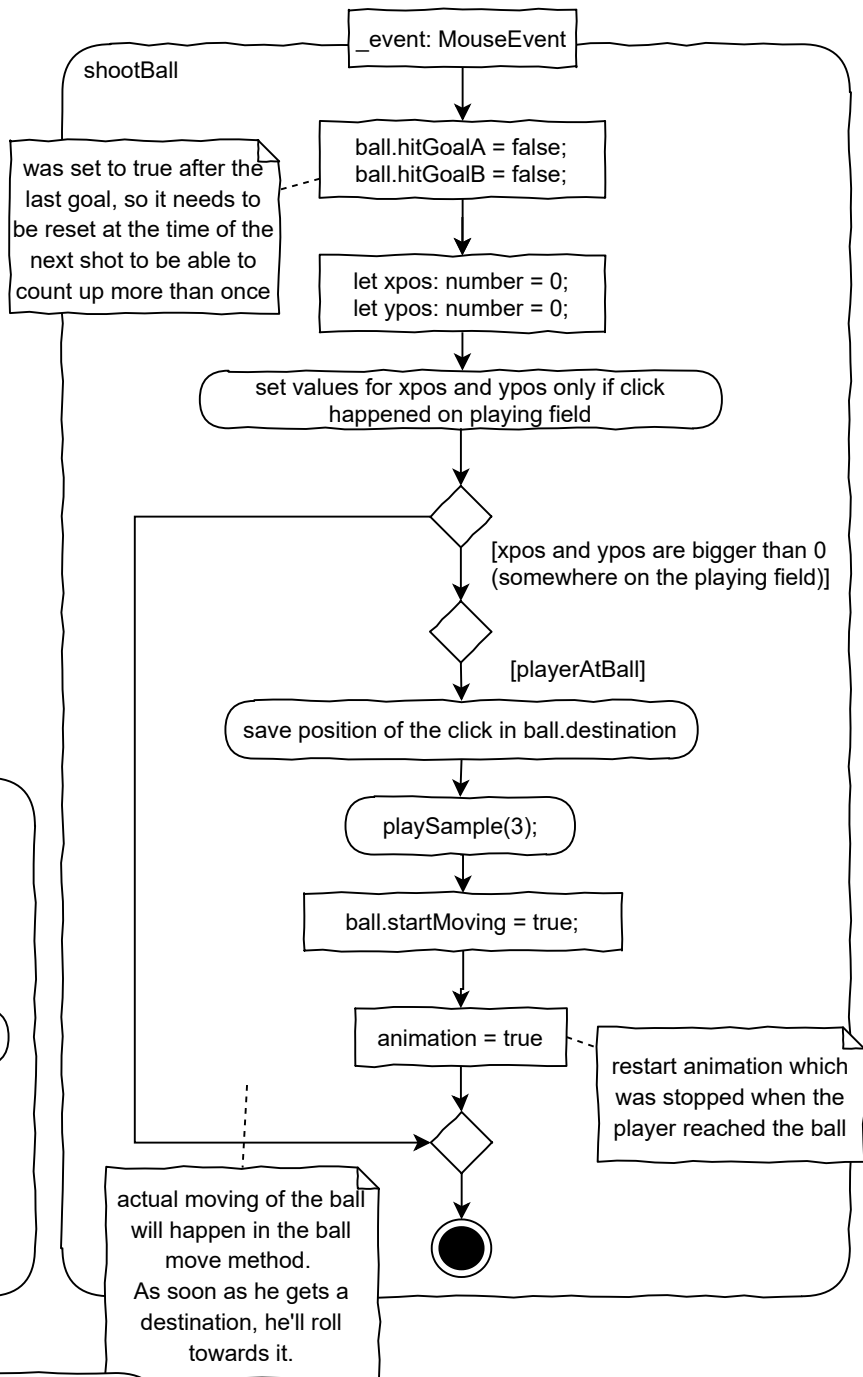
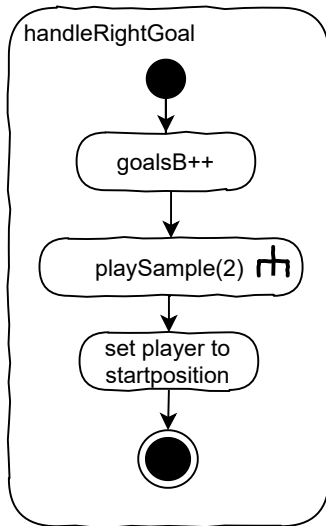
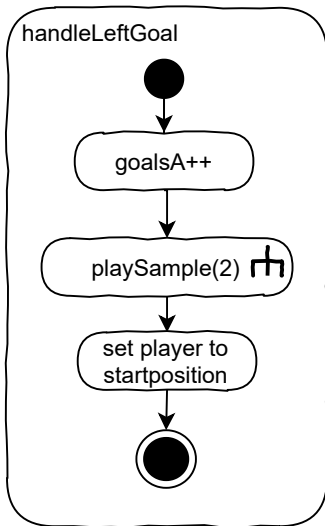
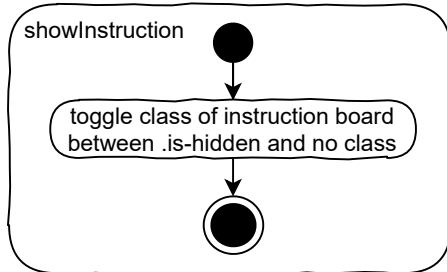
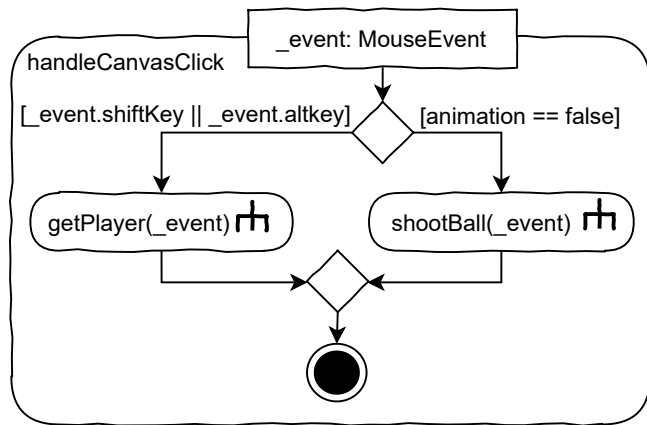
# Soccer Simulator Class Diagram

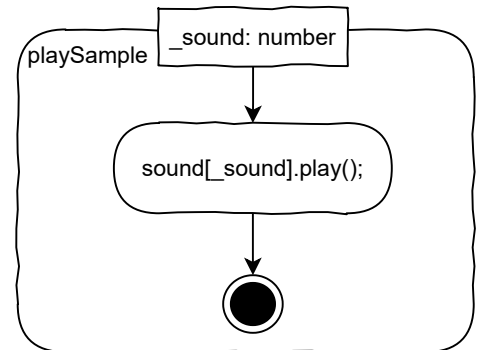
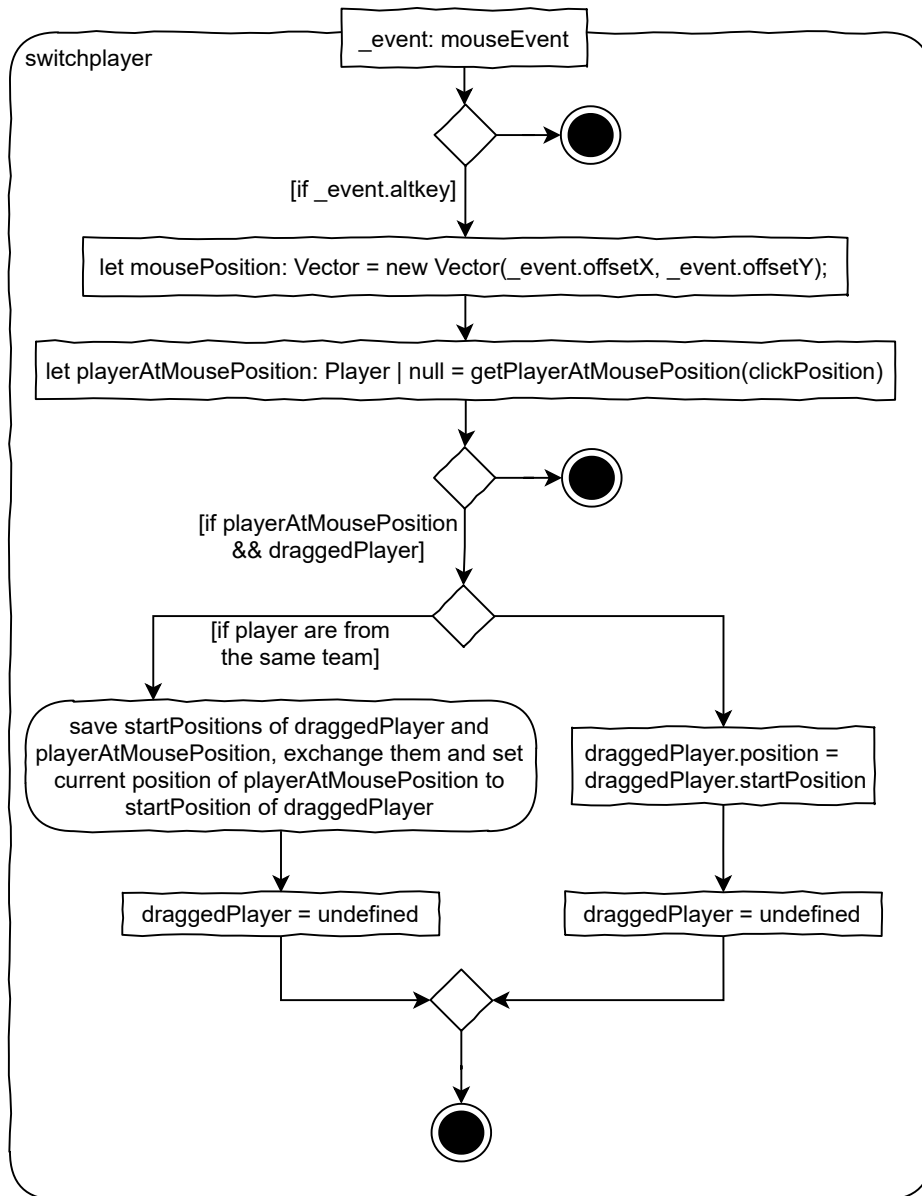
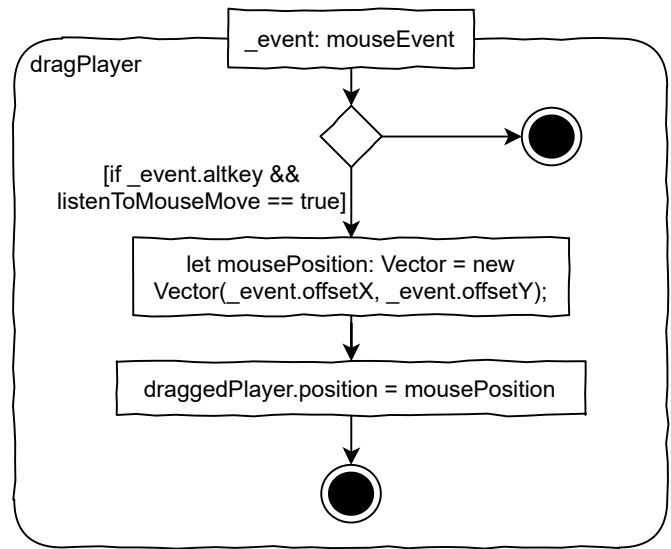
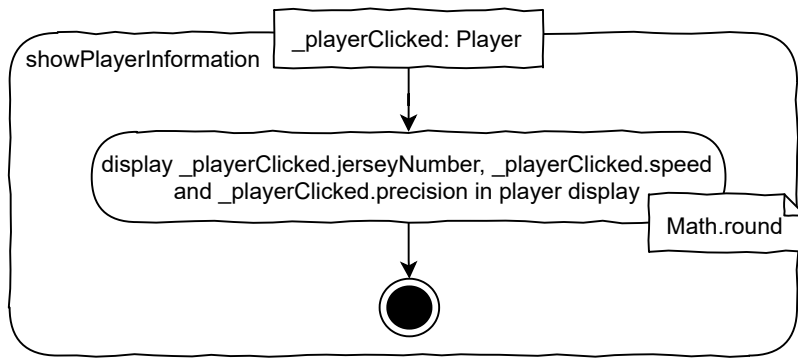


# Soccer Simulator Activity Diagram





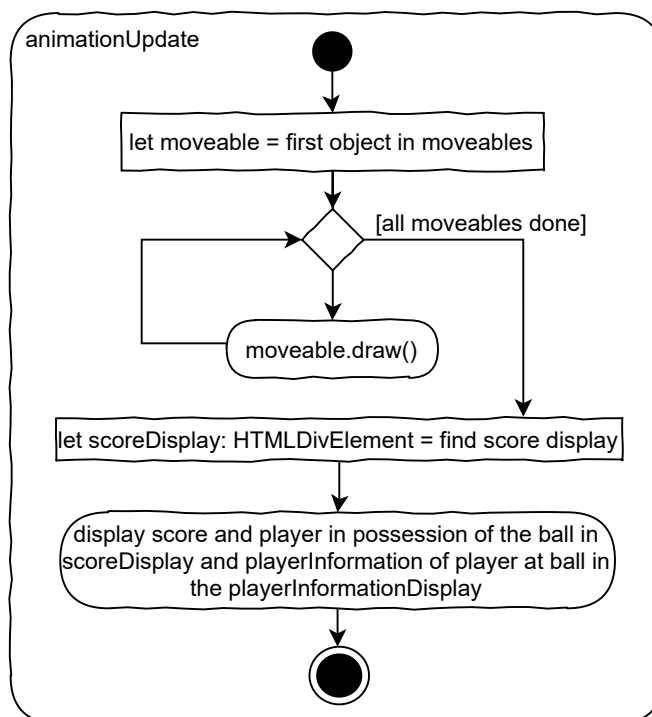
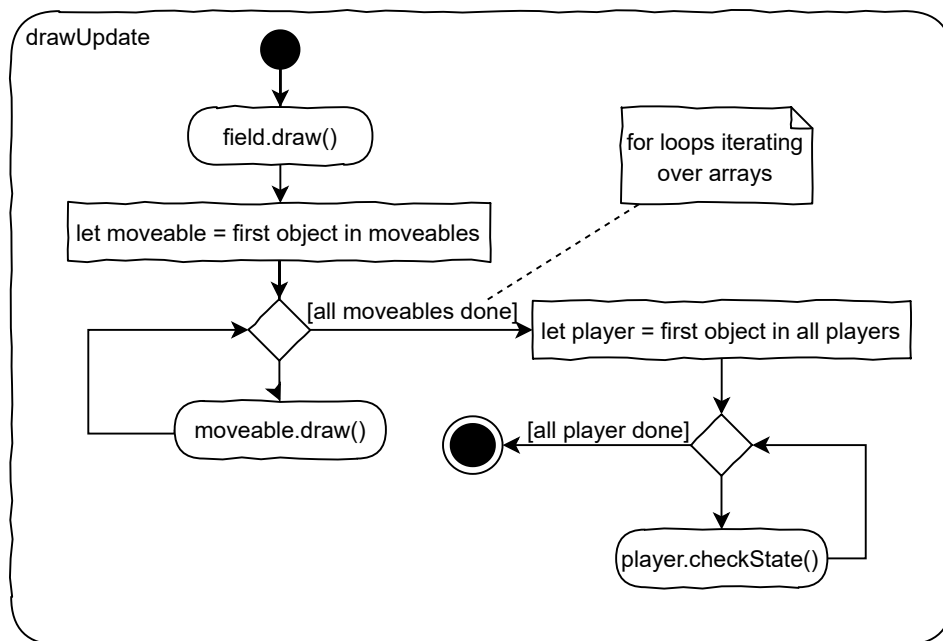




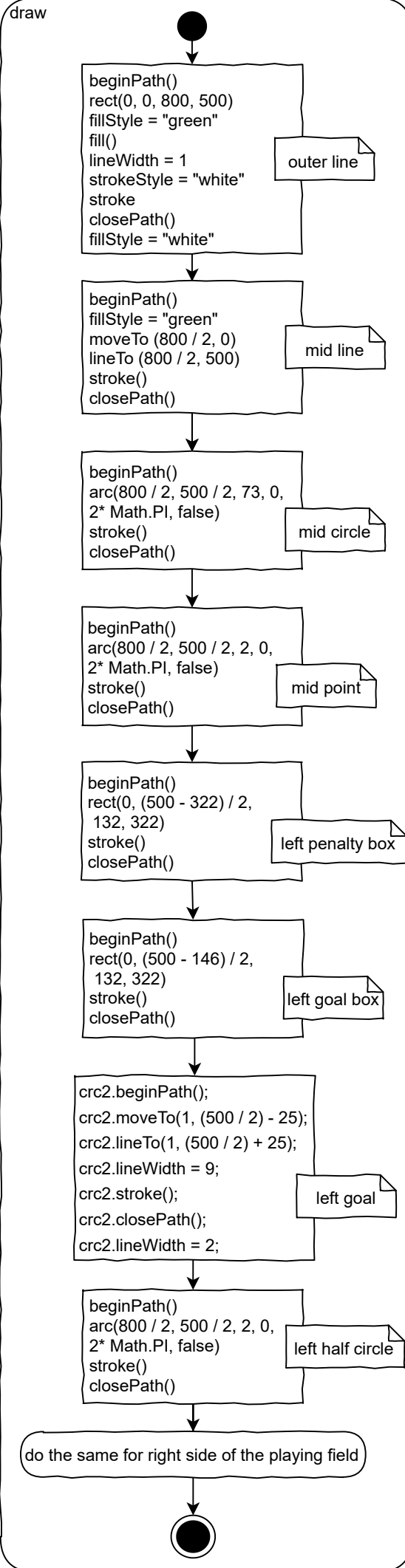
when draggedPlayer is overlapping with a field player at releasing the mouse, they switch their positions.

If there's no player underneath the dragged player, the dragged player jumps back to its start position

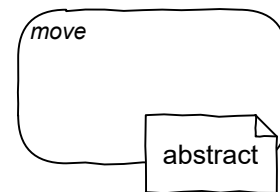
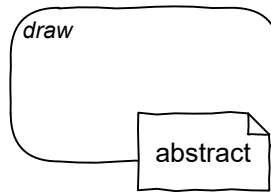
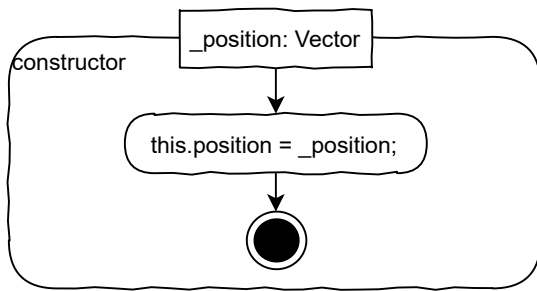




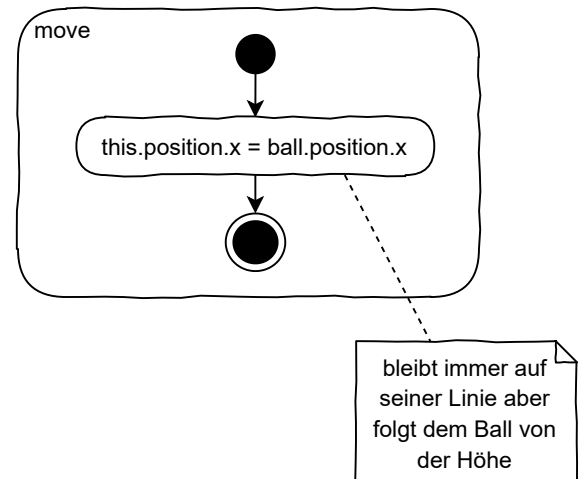
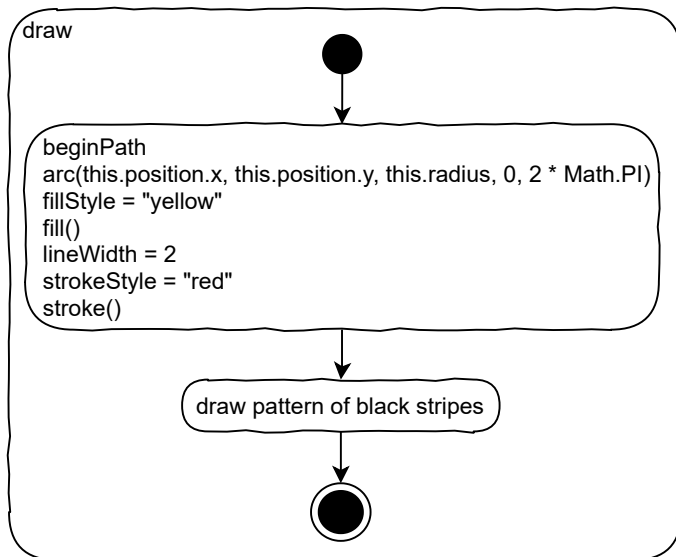
# Playing Field Methods



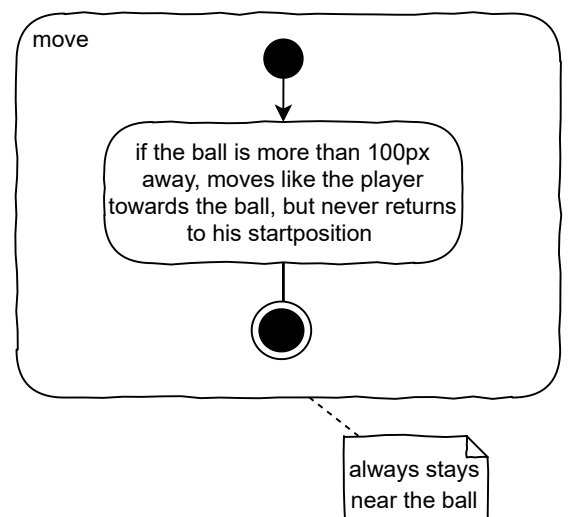
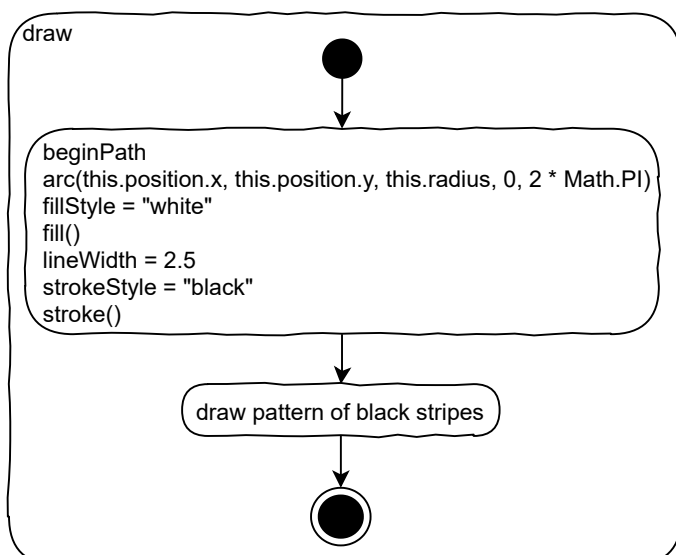
## Moveable Methods



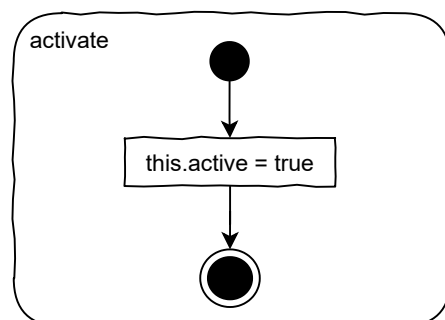
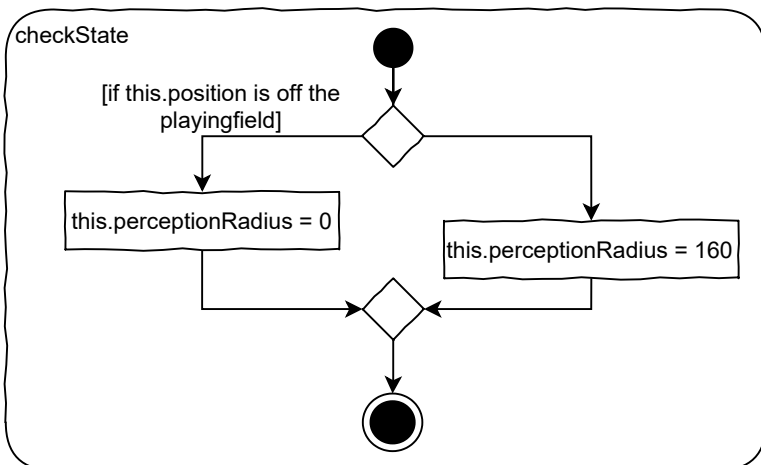
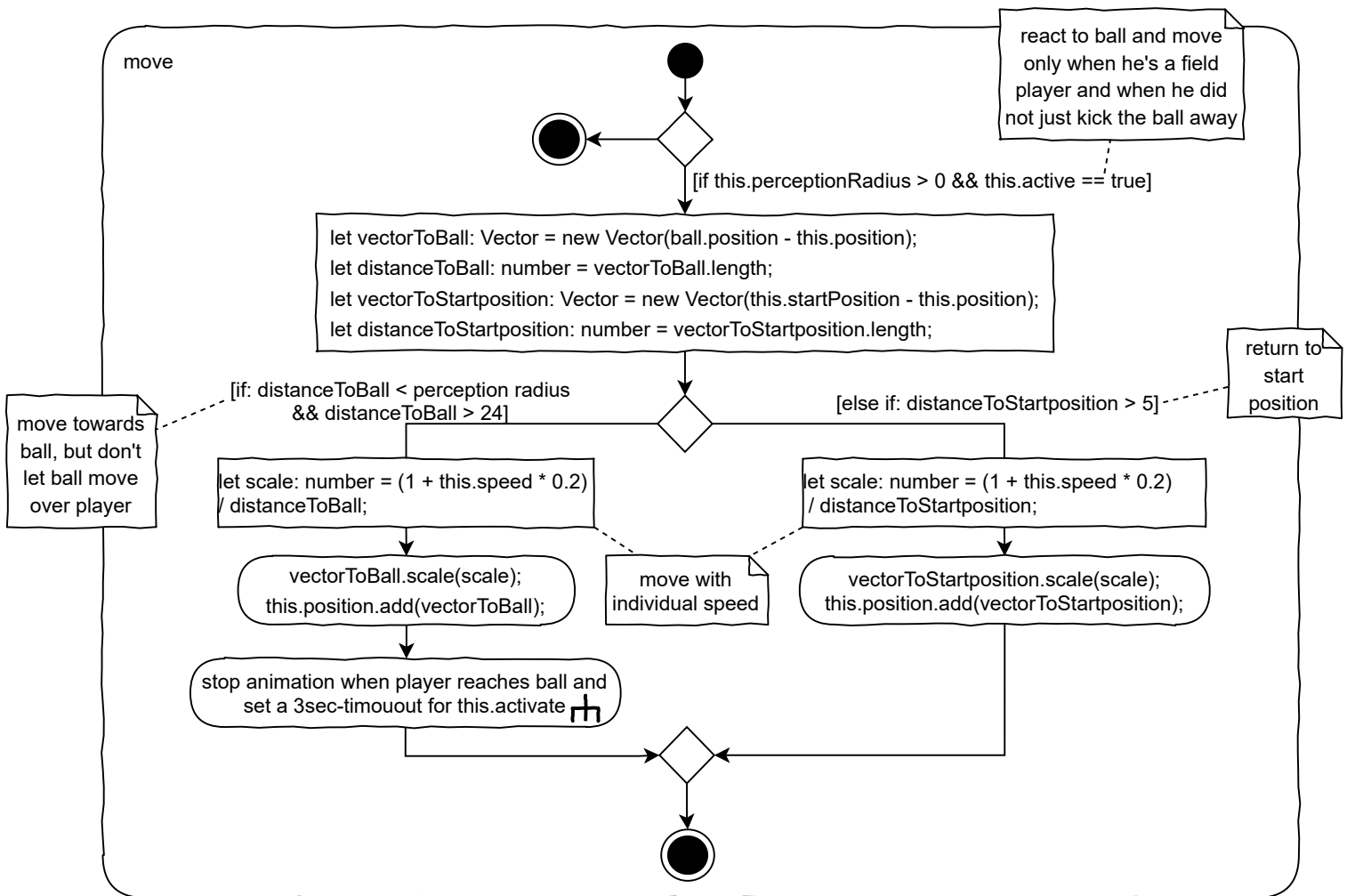
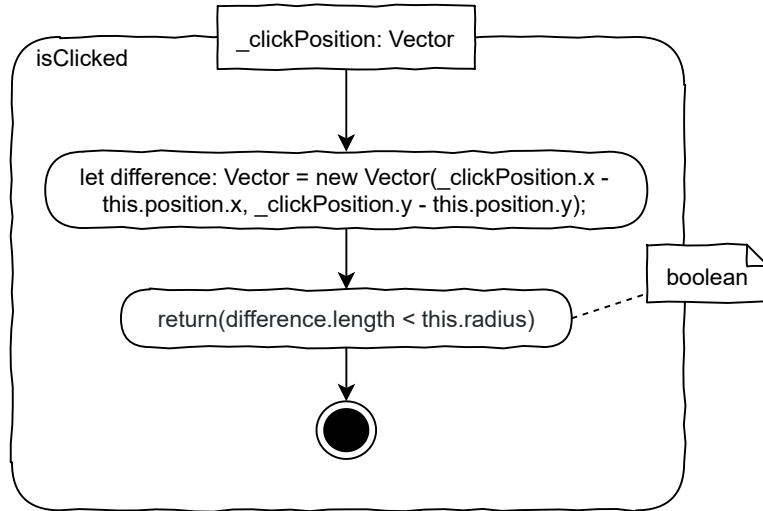
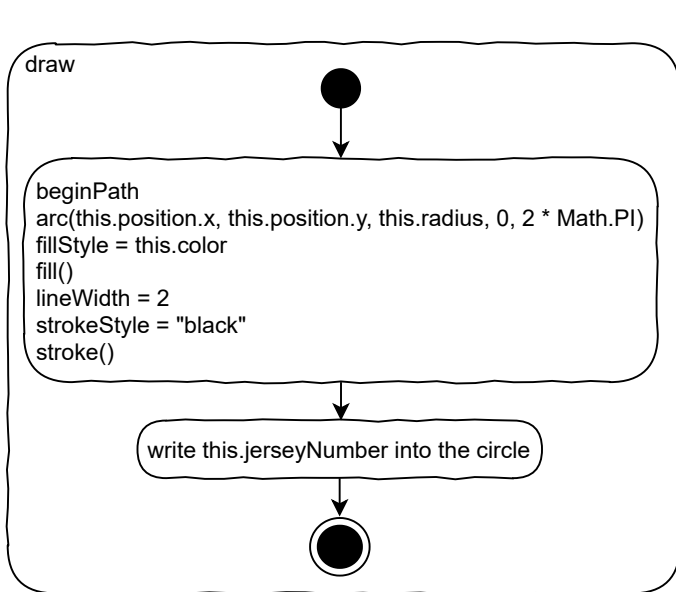
## Linesman Methods



## Referee Methods



# Player Methods



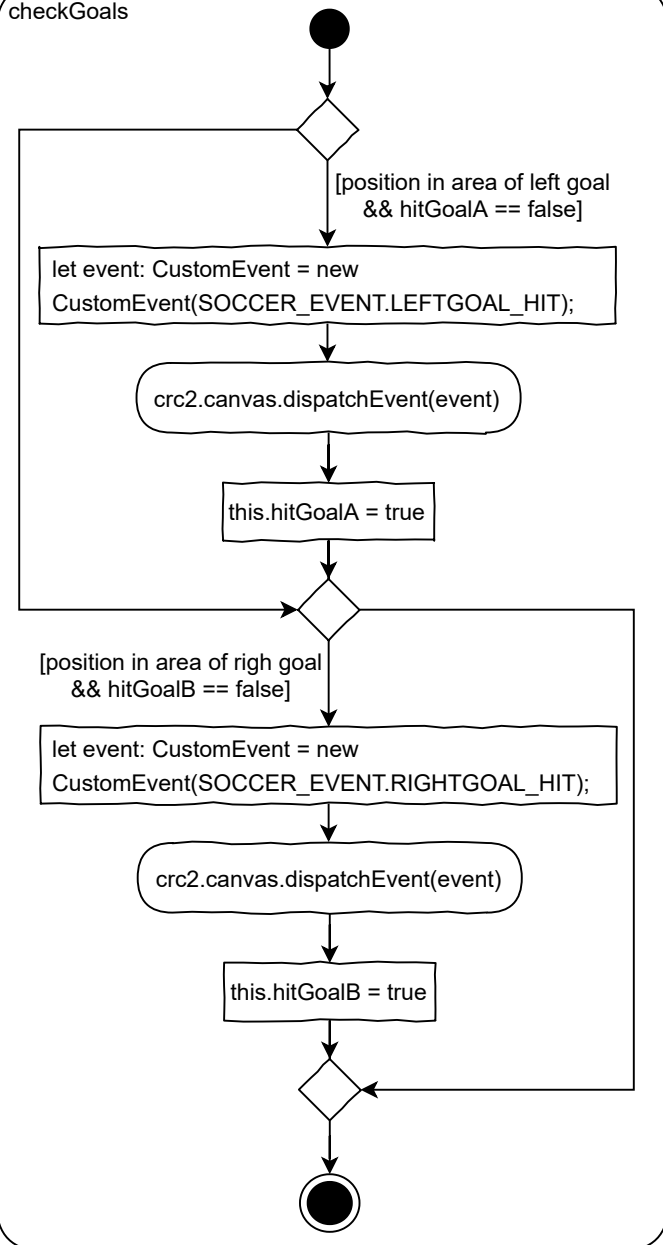
# Ball Methods

draw

draw a circle, fill white and stroke black. Then create a soccer ball pattern with lines and circles



checkGoals



move

