Bharath Prabhu (Section F)

15-112 Term Project – Spring 2017

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Rationale Behind Term Project

One of the main reasons why I did this term project is that I am a huge fan of soccer. However of the 2 main soccer games that exist today in the market (FIFA 17 and Football Manager), both these games do not show any emphasis to the training aspect of the game but much rather show just increases in player ability, strength skill etc. The way my code attempts to solve this problem is by taking 2 predominant ideas in soccer today (one touch passing and possession football) and design a program around those 2 ideas such that the user can experience what it is like to train soccer players under those ideas.

Furthermore, the player statistics such as passing accuracy and interceptions at the end of the game allow the user to adjust the way in which he or she approaches the game to minimise interceptions and maximize passing accuracy.

What the Term Project does

The Term project in each level of the game implements a smarter computer defender and allows the user to respond to that defender by passing between his players accordingly. For example in the first level, the defender primary objective is to just chase after the ball for every pass the user makes and try and clear it without any awareness of the positions of the user’s players.

The computer defender in the second level, however is more aware of player positions. For example, after the midfielder passes the ball, the striker runs to intercept the ball, whereas the midfielder rather than remain stationary runs to the place vacated by the striker. Thus with 2 players on 2 different positions on the field, the defender judges to see if he can intercept and clear the ball based on the time it takes to intercept versus the time it takes the user’s player to receive the ball. If he can’t, he positions himself somewhere in between the 2 such that passes cannot be made between both the user’s players.

For the third level, with an extra player for the user (winger), the two computer defenders sort of collaborate where only the defender with a more reasonable chance of intercepting or blocking passes moves anytime a pass is made. So the 2 defenders are an extension of the second level defender except they account for three players.

Features that were given as suggestions by peers

1. For each level, I wanted to include a video link that would lead to a demo solution to the level in case the user is unable to get past the defender at each level. I could not implement this feature due to lack of time.
2. I was given a suggestion to implement a hint feature by a friend as this feature would not only aid the user in clearing the level if he or she found it difficult to do so but it would also allow the user to perhaps come up with a better kind of passing technique to evade the defender(s) at each level.