

Potential Code Loop errors to account for

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Problem: How do we determine when to start breaking in a straightaway in order to make a corner?

Current Solution:

- Calculate the velocity we can safely take the corner at

- Compare this to the velocity we can reach at the end of the straightaway if we were to simply accelerate straight through it

- If this velocity is less than the speed we can safely take the corner at then we will just assume that we go through the corner at that speed

- If it is not then we will iterate over the length of the segment

- Starting at the last velocity value in the segment array we will calculate the distance it would take the car to brake to the desired cornering velocity we will then compare that distance to how much distance we have left in the segment by subtracting the two values, if it is less than the size of the segment step then we have found our braking point

- We then slice our array of times and velocities and add the new times and velocities that we calculated from the braking part of the function as well as going around the corner.