Race Car!

Today you are going to create a racing game using a skeleton with five pre-made blocks (functions). The reason that these functions are required is that the game requires realistic physics that is a bit too advanced for middle school. You will be given points for how well you utilize the provided functions and how well your game approximates mine.

In the end, your game will consist of a stage with one (or multiple) levels and one other sprite: a race car. In the process you will be using the functions that I have provided to end up with a realistic car game.

Assignment:

Setup:

□ Copy my race car “skeleton” into your scratch account

User Controlled Sprite:

□ Create a program with a single “green flag clicked” start

□ Make the program utilize the five functions (init, turn left/right, speed up, and slow down)

□ Make the program slow the spite down whenever it’s touching green

□ Make the program speed up the sprite when the space bar is pressed

□ Make the program slow down the sprite when the space bar is released

Bonus:

□ Switch to a series of muddy costumes whenever the car is in the grass

□ Make it a two-player game

□ Add a second level to your game

□ Ask at the beginning how big an engine the user wants and use that value in the game

□ Add a lap counter

Hint: you need to track when you’re touching the finish line AND a “halfway” line

□ Add best lap timer

Hint: You likely need to have a lap counter to make this work