SPIKE[™] Prime Projects



LESSON PLANS

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Student Book



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Student Book - SPIKE Prime Project

Do you have an exercise routine?

Exercise helps people lose weight and lower the risk of some diseases. A treadmill is an excellent source of exercise and can offer the option for careful heart rate monitoring.

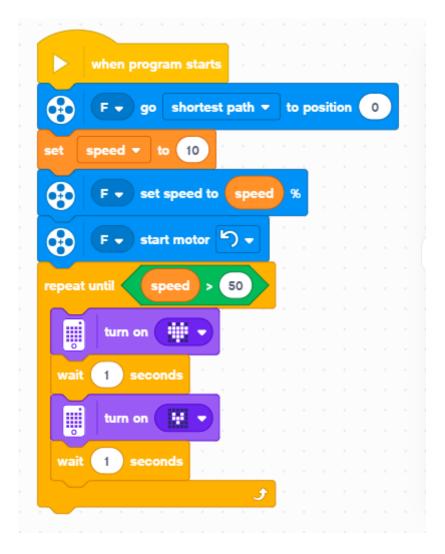


Watch the video to see what your bot is about to do.

Build your Treadmill.

This treadmill has a speed control paddle and displays the heart rate.

Let's try this code first.



This program will start the treadmill at a set speed.

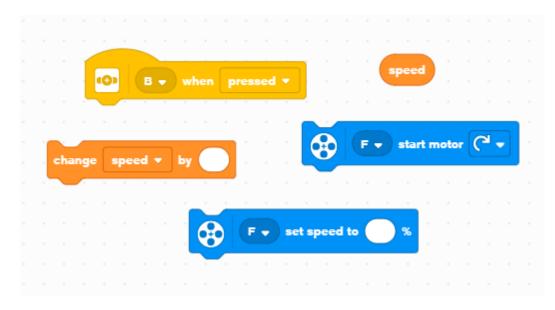
Now pedal faster.

Every time the pedal is pressed, change the speed of the motor by 10.

When the speed is greater than 50, make the heart rate appear faster on the light matrix.



(HINTS)



Think about using these code blocks.

EXTRA CHALLENGE

Control speed

Change speed of the motor according to the force detected by the force sensor. The greater the force the faster the speed.

(Speed = Force x 10)



(HINTS)

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Think about using these code blocks.

How did you do?



What did you do well? Is there anything you could've done better?

Just do it!