https://globalnews.ca/news/6815551/cough-chamber-physical-distancing-coronavirus-western-university/

https://metro.co.uk/2020/03/29/two-metres-social-distance-not-enough-report-suggests-12474108/

As many sources claim, a mere two metres social distance does not seem to be enough distance to stop the infection. Despite this fact, more people and countries are loosening social distancing measures. According to the latter article, virus travels up to 8 metres.

For my individual hackathon documentation, I will write about a program that displays the progress on virus when people keep two metres distance.

The program will initially start off with a single infected individual (represented with red circle) and 49 uninfected people (represented with blue circle), each on a black rail(lines). The program will involve coughing/sneezing of infected which allows the virus to travel up to 8 metres in radius.

> Each of the circle will be an object of the Person class which extends circle and implements Runnable. The Circle class will be responsible for the representation of Person and Runnable will enable the thread creation on each Person object.
>
> Each Person will be moving along the rail. Rails will always be placed two units apart from each other to ensure every Person object stay at least 2 units-metres apart. Rail will extend Group of javafx.scene.
>
> The infected Person object will expel virus at random interval, which travels 8 metres in radius on all sides. Virus (or saliva containing the virus) will be objects of Virus class and extend Circle class and implement Runnable, like the Person class. When the Virus objects overlaps the Person object, it will change the colour of the Person circle to red, given that the person is not already infected.

The main Simulation class will extend Application. Rail will be placed on the background with Stack pane. The simulation will last for a set duration.