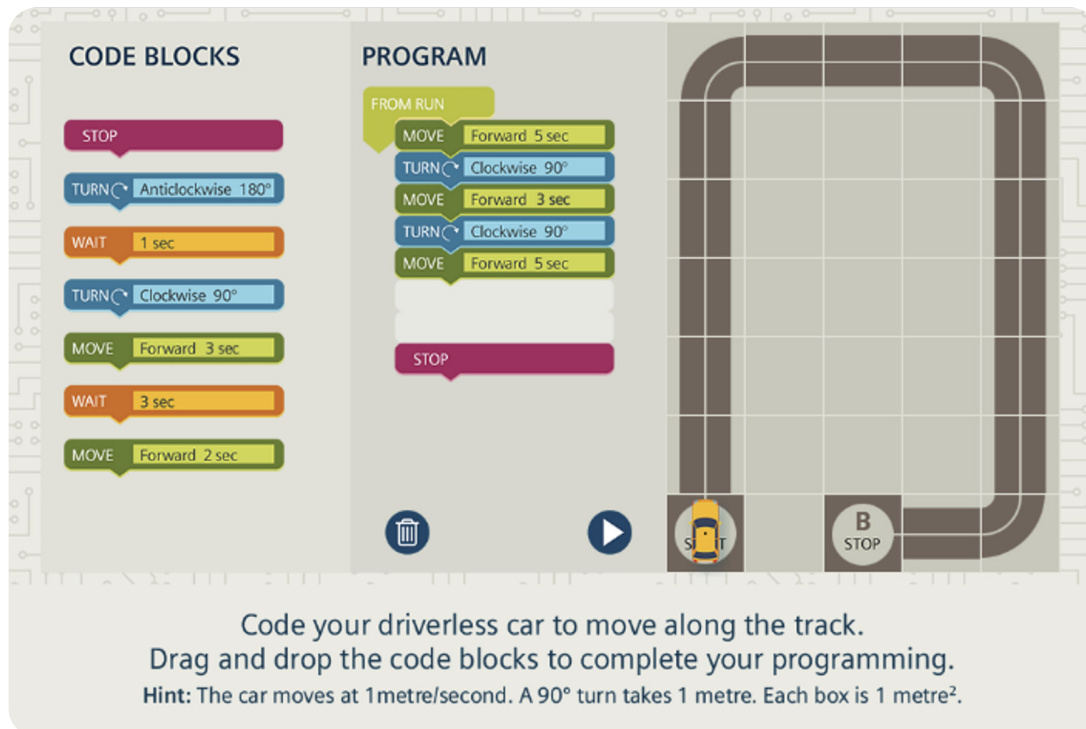


Driverless Car Challenge



CODE BLOCKS

- STOP
- TURN Anticlockwise 180°
- WAIT 1 sec
- TURN Clockwise 90°
- MOVE Forward 3 sec
- WAIT 3 sec
- MOVE Forward 2 sec

PROGRAM

FROM RUN

- MOVE Forward 5 sec
- TURN Clockwise 90°
- MOVE Forward 3 sec
- TURN Clockwise 90°
- MOVE Forward 5 sec
- STOP

Code your driverless car to move along the track.
Drag and drop the code blocks to complete your programming.
Hint: The car moves at 1metre/second. A 90° turn takes 1 metre. Each box is 1 metre².

This activity challenges you to assemble a set of instructions to guide a car to its destination. The instructions must tell the car what to do – and in the right order.

The screen shows three important things:

- A set of code blocks that you can choose from. You don't have to use all of these, but you will need to use some of them, and they will need to be in the right order.
- A partially completed program. You will need to choose which blocks to use, drag them across and use them to complete this.
- The route the car must take. You can see it at the start, and you can also see the stop point at B.





- 1 Look at the plan of the route and the instructions. Follow the instructions by tracing the route out on the map with your finger. See how far it gets you.
- 2 Now look at the available code blocks and select which one to use next.
- 3 Now choose a second code block to complete the route and get to point B.



Why this technology is important:

Many devices have a sequence of instructions that they follow, including traffic lights, drinks machines and automatic checkouts in shops. Being able to program these instructions is important and helps our world to function.

Technology that helps people to drive more safely (driver assistance), or self-driving cars (automated), where no driver is needed help to improve road safety and allow traffic to flow better; they also improve mobility for people with disabilities.

