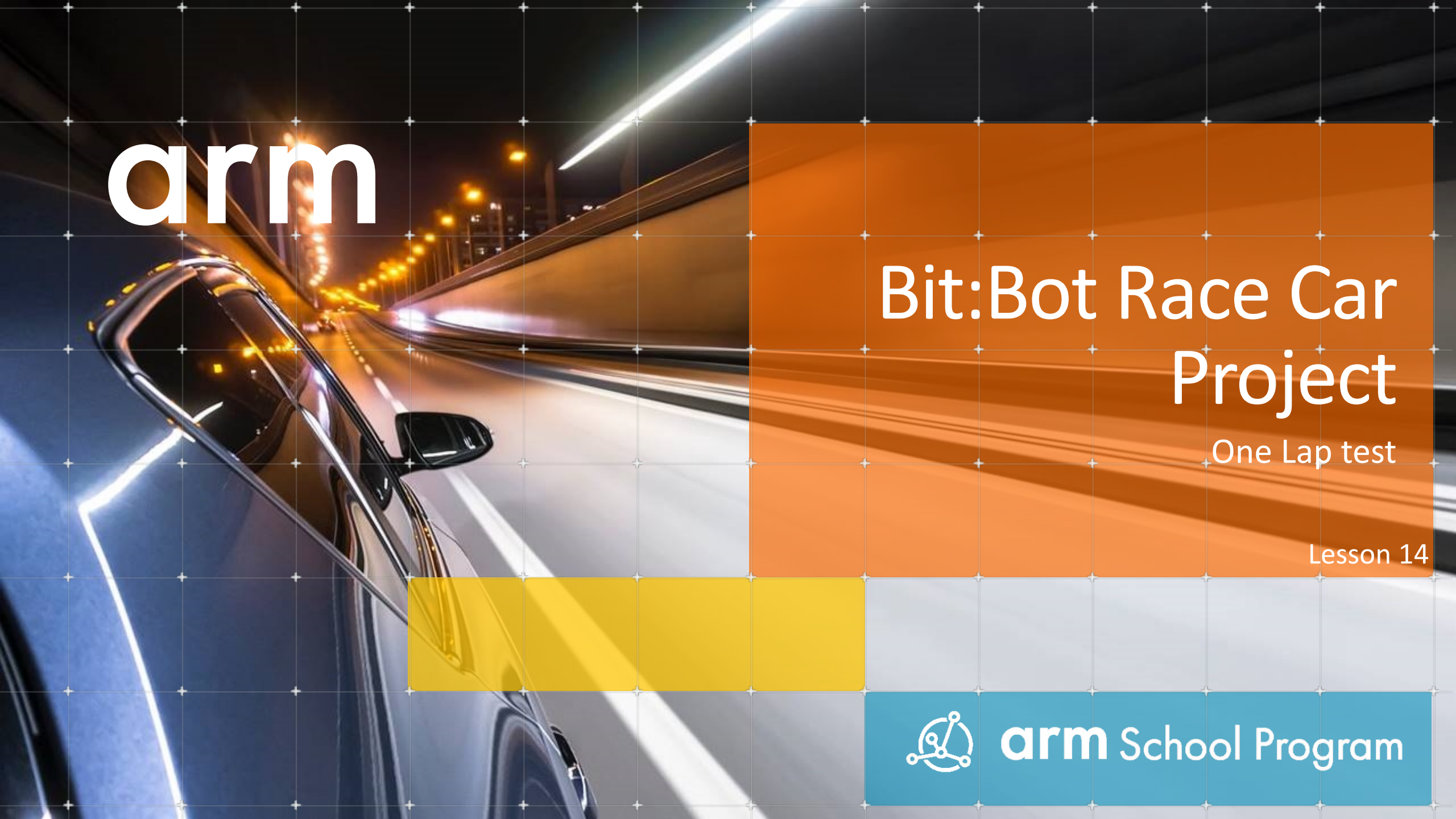


Bit:Bot Race Car Project

One Lap test

Lesson 14

arm School Program

Objectives

- Apply what you have learned to make the car complete one lap autonomously
- Complete one safe lap as quickly as possible
- Create a section plan for each race section
- Combine to create a complete **algorithm** for the racetrack

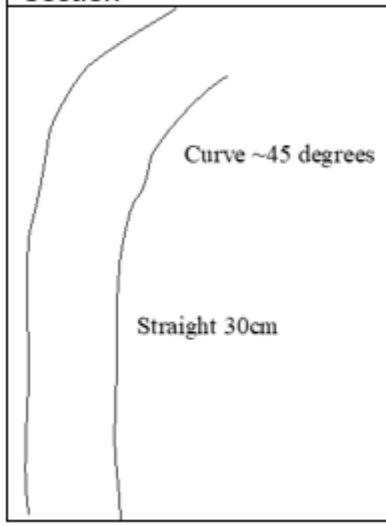
Self-driving Vehicles

- Companies like Waymo and Google have been developing self-driving (or **autonomous**) cars for several years
- Self-driving cars could: reduce the stress of driving, reduce accidents and improve traffic flow in major cities

- Autonomous cars combine a variety of sensors to understand their surroundings, such as radar, computer vision, sonar and GPS
- By utilising sensors and accurate mapping the self-driving car could pick you up from your home and deliver you to you location

Algorithm Plan

- Apply what you've learned from the previous lessons
- Look at the track and break it down into small sections (**decomposition**)
- Consider how far / fast the car travels with different settings
- Consider the angles you will need to get round the bends and curves
- Expect the get it wrong – fail early, fail often

Section	Commands
	Drive Forward at 600 for time 1 second Spin 600 for time 100ms

Thank You
Danke
Merci
谢谢
ありがとう
Gracias
Kiitos
감사합니다
धन्यवाद
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