



# arm

## Final Project Smart Car

Collision Avoidance System 2

Lesson 29



**arm** School Program

# Objectives

- Identify common **street furniture**
- Design and build obstacles that can be place on your track
- Test your **collision avoidance** system using a range of objects

# Road & Street furniture

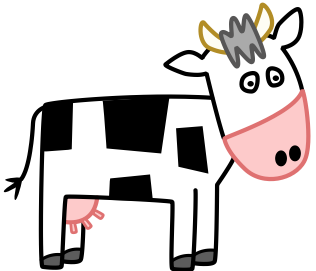
- It is not just pedestrians and other road users that we will need to avoid when using our autonomous car, but also road & street furniture
- Road and street furniture are objects and pieces of equipment installed along streets and roads such as:
  - Benches
  - Phone boxes
  - Bus stops
  - Traffic barriers
  - Streetlamps
  - War memorials
  - Bollards
  - Traffic lights
  - Waste receptacles
  - Post boxes
  - Road signs
- The design and placement of furniture takes into account aesthetics, visual identity, function, pedestrian mobility and road safety

# Car Ride

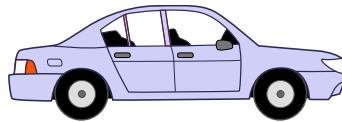


# Collision Avoidance System

- Consider the different types of object that you are likely to see when in your car, eg Pedestrians, other vehicles, signs and road furniture, even animals
- How are you going to test your system works on large, small, heavy, light, solid and soft objects
- Design and build a set of obstacles that covers all the eventualities you can think of
- Try to ensure you use different materials and sizes to simulate the different objects you will come across



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**Build implement and test your  
collision avoidance system**



# Success Criteria

- Identify common road furniture
- Design and build obstacles that can be place on your track
- Test your collision avoidance system using a range of objects

Thank You

Danke

Merci

谢谢

ありがとう

Gracias

Kiitos

감사합니다

धन्यवाद

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