BODGERS

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```python
def angle_to_time(angle):
    angle_per_sec = 175.0
    time = angle / angle_per_sec
    return time

def robot_go(dist):
    time = dist_to_time(dist)
    robot.forward()
    sleep(time)
    robot.stop()

def robot_back(dist):
    time = dist_to_time(dist)
    robot.backward()
    sleep(time)
    robot.stop()

def robot_left(angle):
    time = angle_to_time(angle)
    robot.left()
    sleep(time)
    robot.stop()

def robot_right(angle):
    time = angle_to_time(angle)
    robot.right()
    sleep(time)
    robot.stop()

robot_go(100)
robot_left(90)
robot_right(90)
robot_back(100)
```

Today

1. Time our robots going forward for 1 second
2. Time our robots going left for 1 second
3. Use the times in robot_all.py
4. Test our functions on an obstacle course

To run the robot forward for one second type python forward1.py

To turn the robot left for one second type python left1.py

Next Week - Remote Control

We will use Pygame but instead of using it to control sprites on screen we will us it to control our robot

If you can get a USB webcam bring it in and we will turn our robot into remote controlled camera.

MAKE THE FUTURE

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Q: What are the Future Makers Awards?

The Future Makers Awards, celebrate digital solutions that answer society's most pressing challenges. From October 18th to December 1st young people are invited to submit their ideas via an application and demonstrate how they are using their coding superpowers to create a positive social impact.

The Awards are a partnership between CoderDojo and Liberty Global (and its operations) to encourage and acknowledge socially conscious coding.

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Q: What is a social issue?
Have you noticed an issue that affects people in your community? Can you think about a solution to help solve or improve people's lives using your coding superpowers?
We are looking for projects that will help people and improve their lives and the communities they live in.

Q: What do we mean by innovation?
An innovative project is a project that uses new ideas or new ways to solve an issue or improve a solution.

MY NAME IS SHANE AND I'M A FUTURE MAKER!

I USED MY CODING SUPERPOWERS TO DEVELOP **FLOOD GAUGE,** A FLOOD WARNING SYSTEM THAT ALERTS THE COMMUNITY BY EMAIL OR TWEET.

SHANE, 10 YEARS OLD
FORMER FUTURE MAKERS AWARDS WINNER

CodeWeek.

LIBERTY GLOBAL

CoderDojo

I'M A FUTURE MAKER

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