

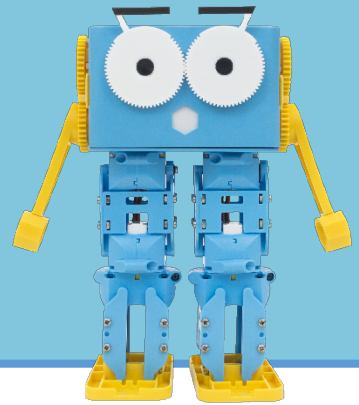
Lesson 2.2 – Marty Dance Party

Education Level: Third/Fourth Level (Ages 11-14)

Lesson Duration: 45 minutes

Prerequisite Knowledge: Lesson 2.1

Device Compatibility: Laptop or PC



Lesson Overview

In this lesson, we follow on from the first lesson where students will have started to explore the different movements and functionalities that Marty has. Students will continue to explore all this further by programming Marty to dance and challenging students to have a Marty dance off!

Learning Objectives

- Build upon knowledge of movements and functionality Marty has
- Develop a Python script using MartyPy to program Marty to dance
- Understand why we use repeat statements and when to use them appropriately
- Incorporate repeat statements into dancing script

Key Vocabulary

- Python
- Coding
- Script
- Repeat/Loops

Resources & Equipment

- Marty the Robot
- Python editor
- Access to computers/laptops (with Python installed)
- Marty workbook (Lesson 2)

Additional Reading

- Educator's Guide
- Get Started with MartyPy
- MartyPy documentation

Learning Plan & Activities

1. Recap what was done in previous lesson, getting students to think about the different movements they programmed Marty to do
2. Introduction to repeat/loop statements, giving examples of why you would use them and how (giving examples of before and after using loops in code snippets)
3. Students start to develop their scripts, in pairs or small groups, to get Marty to dance with an emphasis on using loops and testing out scripts regularly to make sure students are getting the expected results
4. Students groups take turn to demo the dance moves they have programmed
5. Students can then go back to development to improve their dance moves or add new ones

Additional Challenges

- Ask students to think of popular dance moves and see if they can think of how they would get Marty to do these moves
- Get students to pick a song to create a dance to, so they can try to develop moves that work along with that song

Curriculum Benchmarks

Curriculum for Excellence – Technologies Benchmark Guide

● = Fully Addresses Benchmark ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Lesson 2.2
Digital Literacy	TCH 4-01a	○
Technological Developments in Society and Business	TCH 0-05a	○
Craft, Design, Engineering & Graphics	TCH 0-11a	●
	TCH 3-12a	○
Computing Science	TCH 0-13a	●
	TCH 1-13a	○
	TCH 2-13a	●
	TCH 3-13a	○
	TCH 0-14a	●
	TCH 0-14b	○
	TCH 1-14a	●
	TCH 1-14b	○
	TCH 2-14a	●
	TCH 2-14b	○
	TCH 3-14a	○
	TCH 4-14a	○
	TCH 4-14c	○
	TCH 0-15a	●
	TCH 1-15a	●
	TCH 2-15a	●
TCH 3-15a	○	

National Curriculum – Computing, Design & Technology

● = Fully Addresses Benchmark ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Lesson 2.2
Computing	1-a	●
	1-b	●
	1-c	●
	1-d	●
	2-a	●
	2-b	○
	2-c	●
	2-f	●

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