

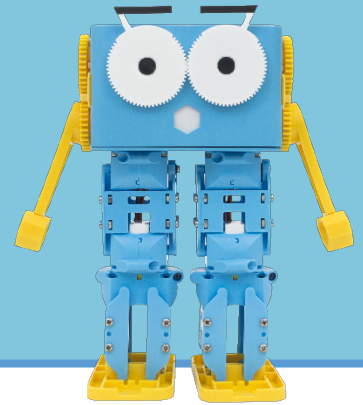
Lesson 3.3 – Marty Python Dance-Off

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

Lesson Duration: 45 minutes

Prerequisite Knowledge: Lesson 3.1 & 3.2

Device Compatibility: Laptop or PC



Lesson Overview

In this lesson, students will be putting together their first scripts using IDLE so that they can have a continuation of Python commands to control Marty. From doing this, students will start to build up a dance routine for Marty and have a small dance-off in the class.

Learning Objectives

- Create small Python scripts using IDLE or an equivalent editor
- Explore the use of combining multiple commands to get a sequence of movement happening

Key Vocabulary

- Python
- Coding
- Script
- Dance
- Movement

Resources & Equipment

- Marty the Robot
- Python editor (such as IDLE)
- Access to computers/laptops (with Python & MartyPy installed)
- Student workbook (Lesson 3)
- *Marty Says* cards

Additional Reading

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

Learning Plan & Activities

1. Warm-up by getting students to create small sequences using the IDLE commands as before
 - a. Wouldn't it be great if we could type more than one command at a time and run them all in one go? This is where scripts are useful and should be used
2. Demo creating, saving and running the Python script in the editor that students will be using
 - a. Highlight best practices of where students should be saving the Python files
3. Challenge students to a dance-off
 - a. Agree to a song for the whole class and set a time limit for how long students have to work on their Marty dance routines
4. Bring all Marty's together and start the dance-off and get students to pick out their favourite dance routines, discussing with other groups what code they used for different moves

Additional Challenges

- Each team could choose their own song and demo their Marty dance individually
- Set some constraints for the dance off such as a minimum of 3 different body parts must move at some point during the routine

Curriculum Benchmarks

Curriculum for Excellence – Technologies Benchmark Guide

● = Fully Addresses Benchmark ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Lesson 3.3
Digital Literacy	TCH 0-01a	●
	TCH 1-01a	○
	TCH 0-02a	●
	TCH 1-02a	○
Technological Developments in Society & Business	TCH 0-05a	●
Craft, Design, Engineering & Graphics	TCH 0-11a	●
	TCH 1-11a	○
	TCH 2-11a	○
	TCH 1-12a	●
	TCH 3-12a	○
Computing Science	TCH 0-13a	●
	TCH 1-13a	○
	TCH 2-13a	○
	TCH 3-13a	○
	TCH 3-13b	○
	TCH 4-13a	○
	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 3.3
Computing	1-a	●
	1-b	●
	1-c	●
	1-d	●
	1-e	○
	2-a	●
	2-b	○
	2-c	●
	2-f	●
	3-a	●
	3-b	○
	3-c	○

	3-e	○
	3-f	○
	3-g	○
	4-a	○
	4-b	○
Design & Technology	1.1-a	●
	1.1-b	●
	1.3-b	●
	2.1-b	●
	2.3-b	●
	2.4-d	●
	3.1-b	●
	3.1-d	●
	3.1-e	○
	3.3-c	●

Australian F-10 Curriculum – Digital Technologies, Design & Technologies

● = Fully Addresses Benchmark ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Lesson 3.3
Digital Technologies	ACTDIK001	●
	ACTDIK002	●
	ACTDIP003	●
	ACTDIP004	●
	ACTDIP009	●
	ACTDIP010	●
	ACTDIP011	○
	ACTDIP013	●
	ACTDIP017	○
	ACTDIP019	○
	ACTDIP020	○
	ACTDIP029	●
	ACTDIP030	○
	ACTDIP038	○
	ACTDIP039	○
	ACTDIP040	○
Design & Technologies	ACTDEK001	●
	ACTDEK002	○
	ACTDEP005	○
	ACTDEP006	●
	ACTDEP009	●
	ACTDEP015	●
	ACTDEP018	●
	ACTDEP025	○