Coding using Microbits - Python — Reflections

Module 1: Design & Making with Microbit - Python

This module introduces the microbit as a piece of hardware that has a specific size and weight, and generally must be supported and incorporated as an essential component of a tangible artifact. Focus on making a pet or robot and incorporating the physical microbit as the face of the project.

Module 1: Project MicroRobot

Questions, Interview, and Responses

Sketches MicroRobot

01.2a Name Display Activity

LIst steps to create a microbit program and install it.

01.2b Icons Display Activity

Here are a list of predefined (Image.XXX) icons:

Image.HEART
Image.HEART_SMALL
Image.HAPPY
Image.SMILE
Image.SAD
Image.CONFUSED
Image.ANGRY
Image.ASLEEP
Image.SURPRISED
Image.SILLY
Image.FABULOUS
Image.MEH
Image.YES
Image.NO
Image.CLOCK12,
Image.CLOCK11,
Image.CLOCK10,
Image.CLOCK9,
Image.CLOCK8,
Image.CLOCK7,
Image.CLOCK6,
Image.CLOCK5,
Image.CLOCK4,
Image.CLOCK3,
Image.CLOCK2,
Image.CLOCK1
Image.ARROW_N,
Image.ARROW_NE,
Image.ARROW_E,
Image.ARROW_SE,
Image.ARROW_S,
Image.ARROW_SW,
Image.ARROW_W,
Image.ARROW_NW
Image.TRIANGLE
Image.TRIANGLE_LEFT
Image.CHESSBOARD
Image.DIAMOND
Image.DIAMOND_SMALL
Image.SQUARE
Image.SQUARE_SMALL
Image.RABBIT
Image.COW
Image.MUSIC_CROTCHET
Image.MUSIC_QUAVER
Image.MUSIC_QUAVERS
Image.PITCHFORK
Image.XMAS
Image.PACMAN
Image.TARGET
Image.TSHIRT
Image.ROLLERSKATE
Image.DUCK
Image.HOUSE
Image.TORTOISE
Image.BUTTERFLY
Image.STICKFIGURE
Image.GHOST
Image.SWORD
Image.GIRAFFE
Image.SKULL
Image.UMBRELLA
Image.SNAKE

LIst 2 ways to use the `display.`______ command to view the LED display screen.

0.1.2c Icon Animation Activity

Put at least 4 icons together to tell a story. Write each line of the story below.

01.2d Creative Design Activity

Program individual LEDs using the (Sketch LED face designs for your project)

01.3 Project

Microbit Project Faces (Sketch LED face designs for your project)

1.0 Ideas, Sketches, Planning, Notes, & Reflections —

Coding & Innovation using Microbits - Python

List the steps to create your robot face animation project.

Reflection

Summarize the feedback from your partner. __

How would you revise your design, if you were to go back and create another?

What was it like designing a project?

Was it a project you enjoyed? Why or why not?

What would you do to redesign the project?

What was it like to interview your partner? What was it like to be listened to?

What was something that surprised you about the process of designing a micro:project?

Describe a difficult point in the process of designing a micro:project and how you resolved it? __

Rubric

For creative projects such as these, we normally don't use a qualitative rubric to grade the creativity or the match with their partner's needs. We just check to make sure that the micro:project meets the required specifications:

- Program properly downloaded to microbit
- microbit supported so the face is showing
- microbit can be turned on and off without taking critter apart
- Turned in notes on interview process
- Written reflection

Notes

1.0 Ideas, Sketches, Planning, Notes, & Reflections —

Coding & Innovation using Microbits - Python