Easy Programming With Drones

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WHAT IS TAP?

The Technology Ambassadors Program (TAP) is an outreach focus class offered by GGC. This program allows students with a passion for technology to create projects that aim to expose the general public to a specific kind of technology in an informative and entertaining manner.

GOALS

- Demonstrate to our audience that programming can be entertaining.
- Encourage non-tech participants to partake in activities relating to technology.
- Promote active learning through outreach with drones.
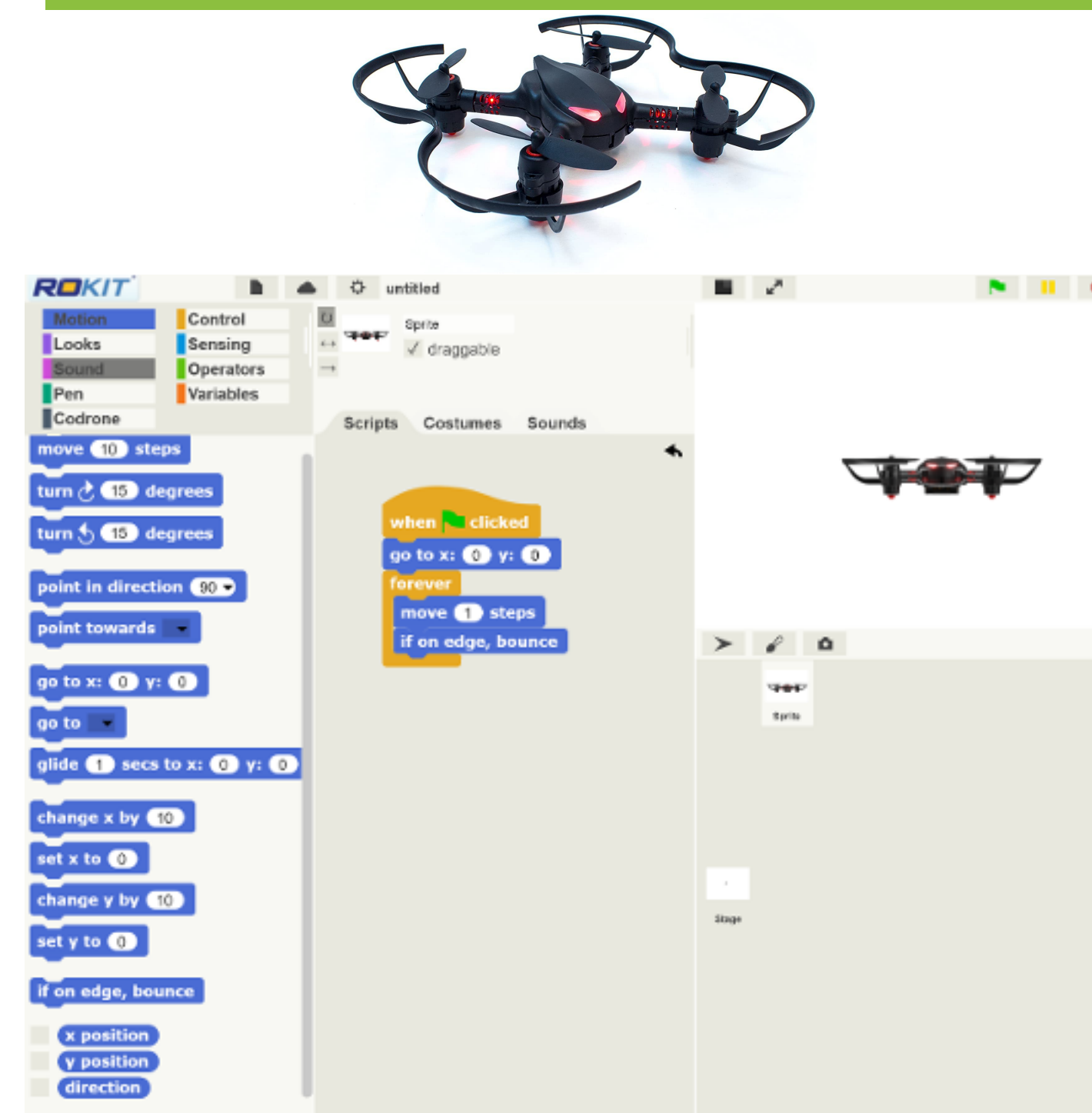
PROJECT DESCRIPTION

- Our audience uses "Snap! for Robolink" to learn block coding. This form of programming allows them to familiarize themselves with if-statements and loops without feeling overwhelmed by the details.
- Originally, our audience would've used "Blockly for Robolink" to pair to a drone and fly it through hula hoop obstacles while using block-coding.

Video Demo Link

TECHNOLOGIES

Codrone is a programmable drone by Robolink. Drones can be programmed in Python, JavaScript, Blockly, Snap!, etc.
Programming languages used in the project are "Blockly for Robolink" and "Snap for Robolink."

RESULTS
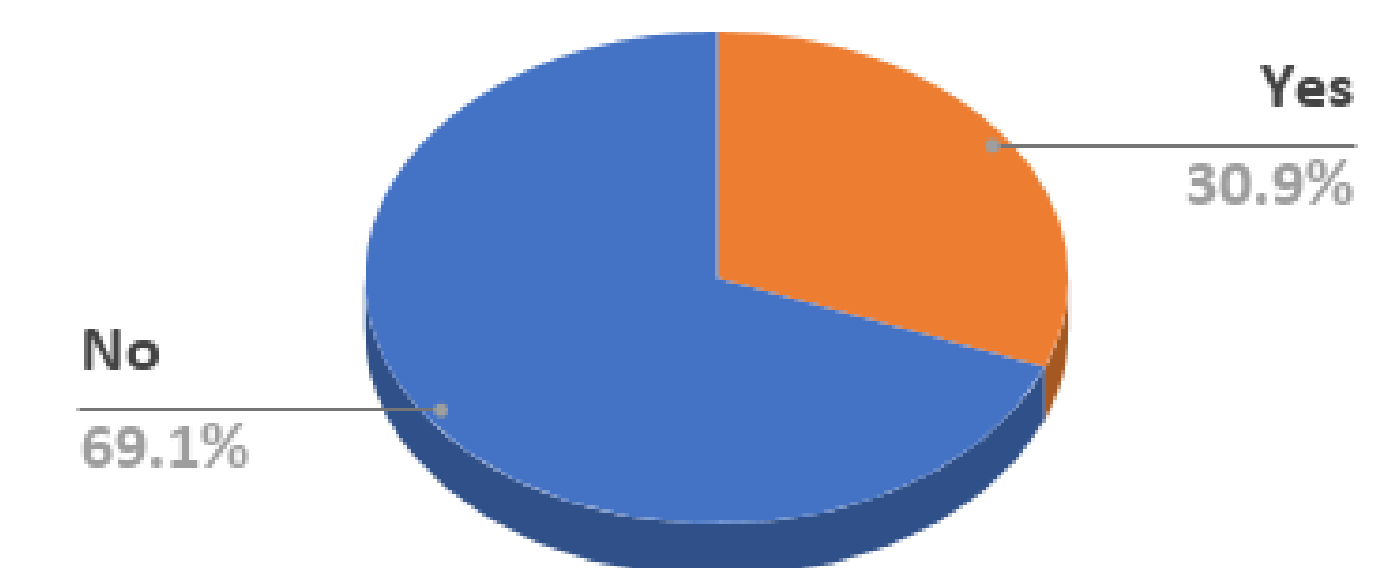
Demographics & Pre-Survey Results:

Our study had was conducted with 68 college students, the majority consisting of Sophomores and Juniors between the ages 18-23. In the beginning of our workshop 69% of students had no programming experience. Over 50% of students reported they had no or vague knowledge what a for loop is. While strangely, 64.7% reported had knowledge what an if else statement was . Originally there was no indication whether or not students wanted to learn technology.
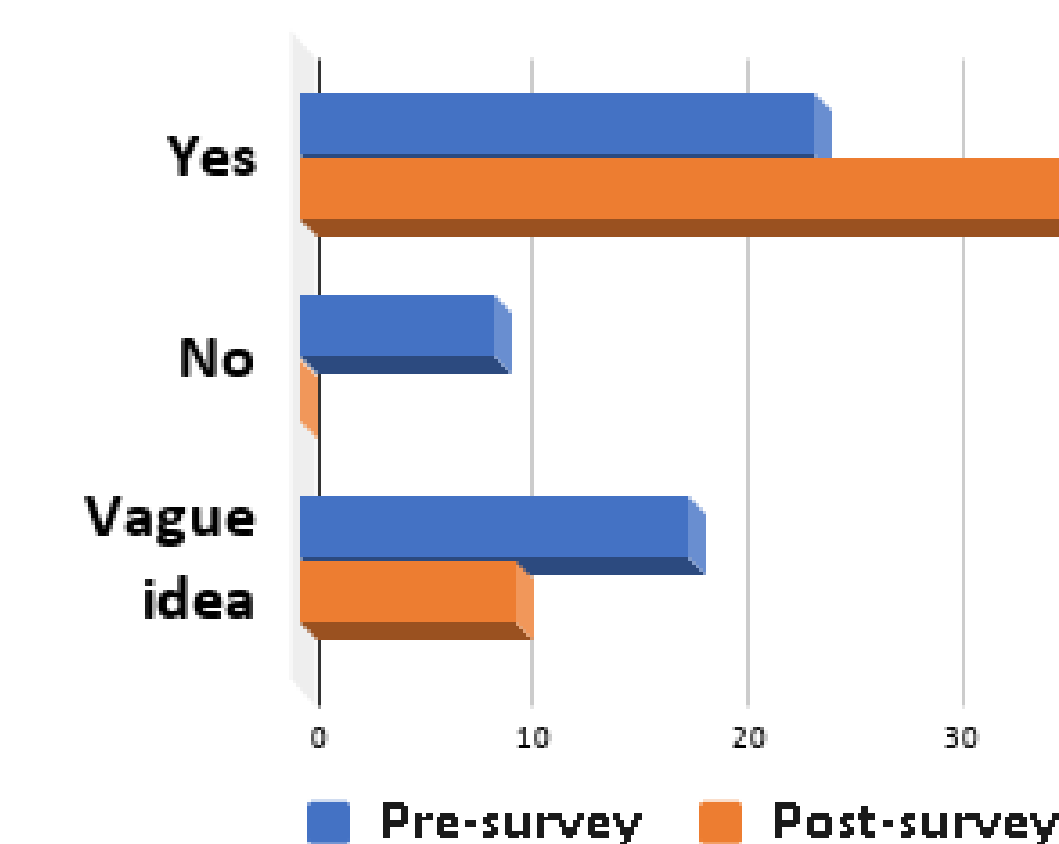
Post-Survey & Conclusions:

Outstanding after the workshop 86.8% and 77.1% of students reported that they knew if/else statements and for loops. After the workshop 84% of students indicated they would consider or would pursue learning new technologies. In conclusion, we were able to teach fundamental programming skills and inspire a large demographic of students with no programming skills to consider seeking out information technology courses.
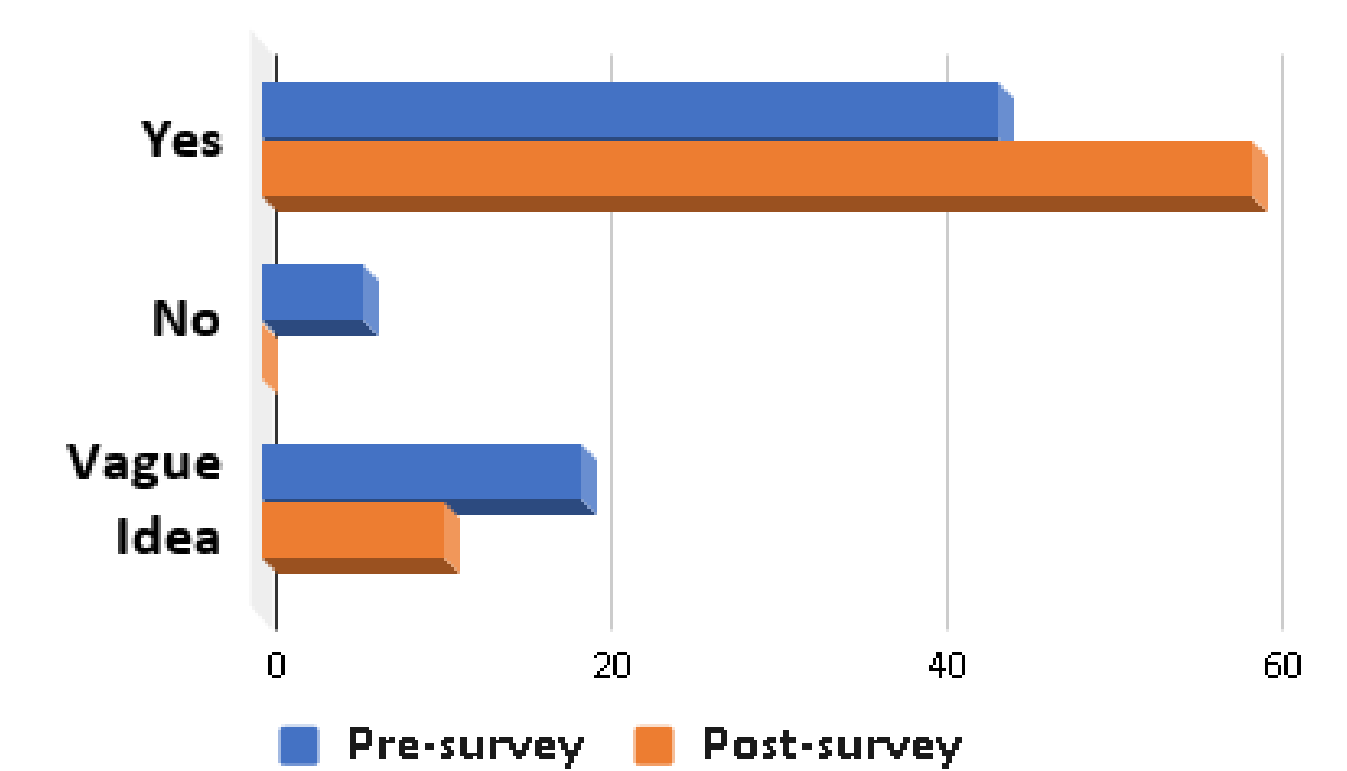
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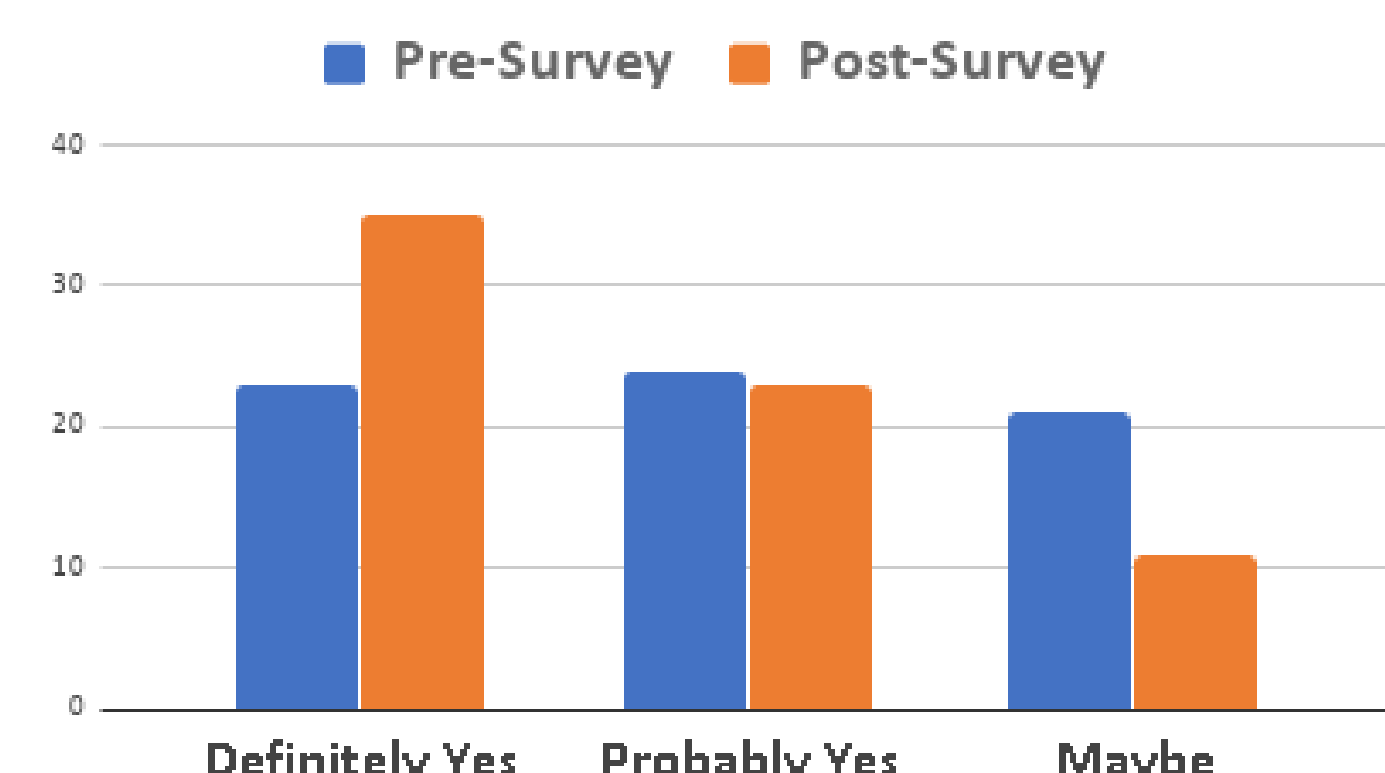

Do you have any programming experience?
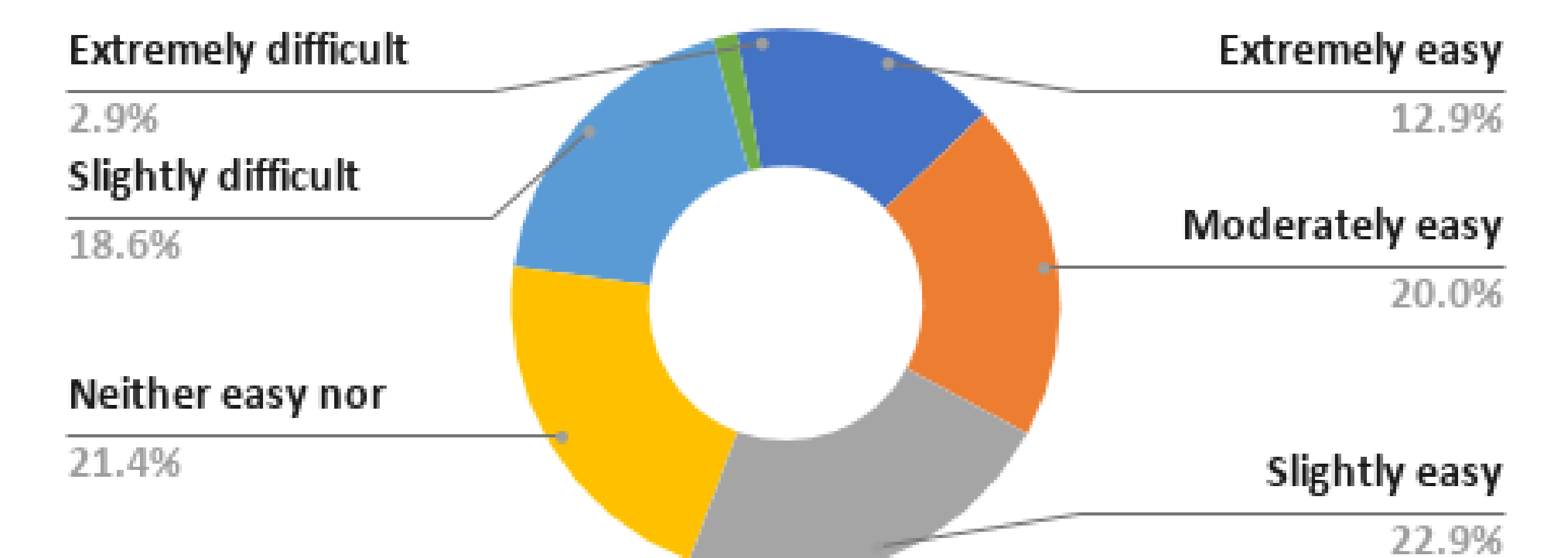

Do you know what a for loop is?

Do you know what an "if-else" statement is?

Did you enjoy learning about the technology?

Rate the difficulty of the workshop

ACKNOWLEDGMENTS