Using Visual, Block-Based, Event-Driven Language to Teach Coding Skills

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WHAT IS TAP?

- The Technology Ambassadors Program is a program that offers students opportunities to learn more about technology, and help them develop creativity, leadership, communication, and teamwork skills.
- Through this program, students participate in outreach events to get participants of all ages interested in technology

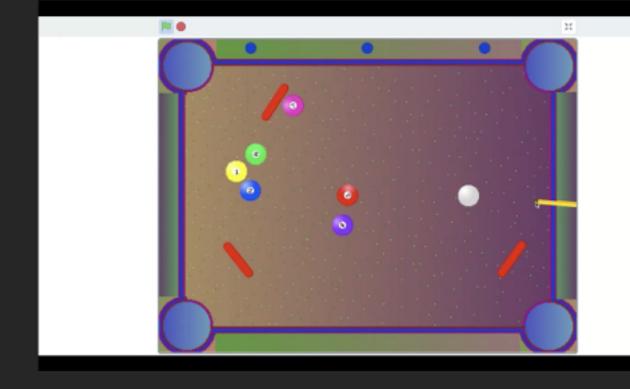
OUR PROJECT GOALS

Using **Scratch block code** to create a fun and engaging pool game that introduces programming basics such as 'if-statements' and 'while loops'.

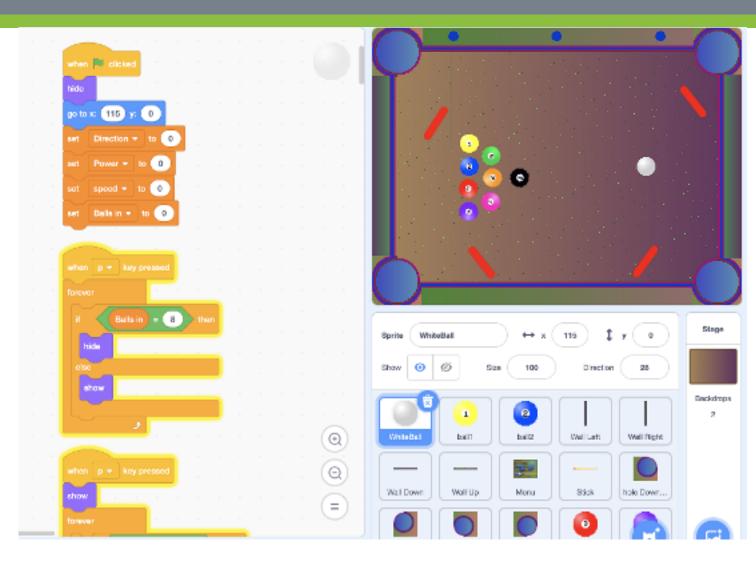
PROJECT DESCRIPTION

- Makey Makey Pool is a game teaches students coding skills using "if-statements", "while loops", and building blocks using the Scratch programming language
- The Makey Makey Invention Kit was used in place of the computer mouse/keyboard mouse pad.
- We conducted an online learning workshop for digital media students at GGC.
- We used blackboard to host the live collaboration and showed the students how they can make changes to the pool game





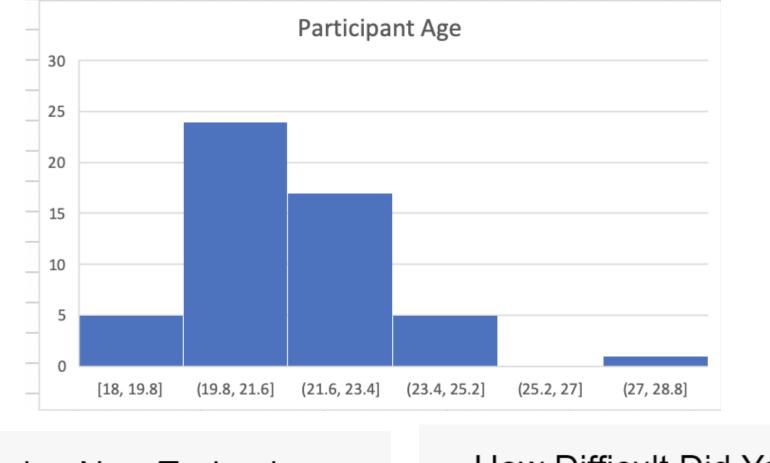
TECHNOLOGIES

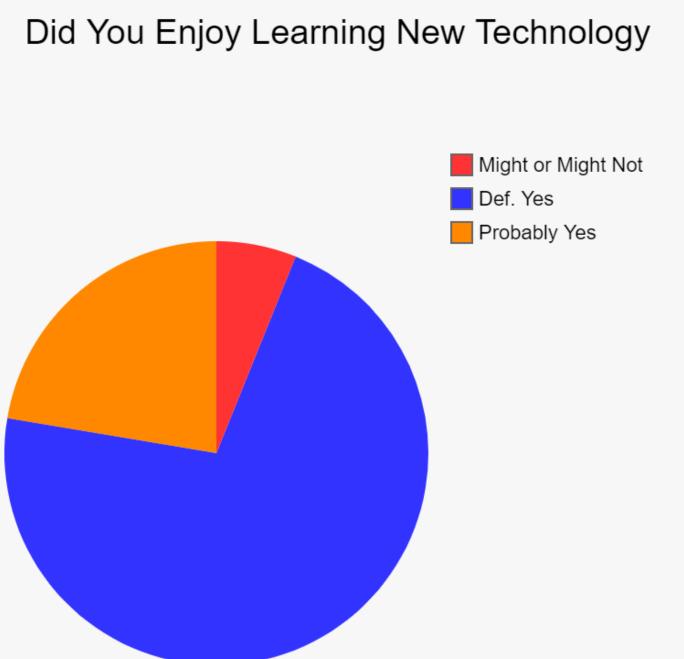


- We used scratch programming to create our pool game.
- We wanted to use makey
 makey as a keyboard but due
 to quarantine we weren't able
 to use it.

RESULTS

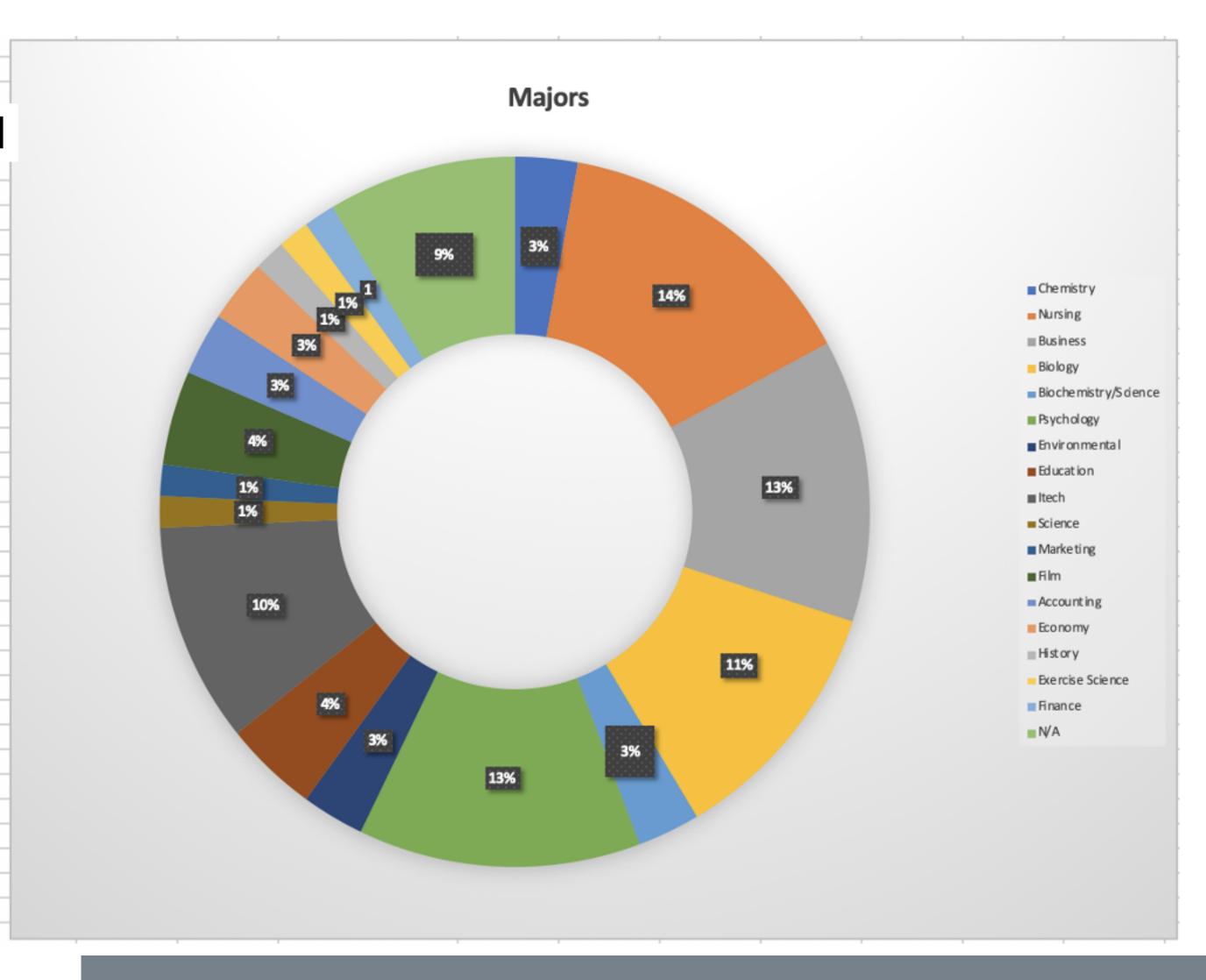
- We presented to 72 students during the online workshop.
- 90% of our participant were not IT majors.
- Only 10 % of Our participant were IT Majors.
- Our participants ages ranged from 18 years to 58 years old
- 8 students submitted their new game to us
- We were able to verify their understanding of if-else and while loops as shown by their game







- understood if else understood while loops before before 15% 22% yes kind of understood if - else understood while loops after after 15% yes no kind of kind of
- This graph shows how diversified the student major was for our participants



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- MIT Media Lab
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