Exploring the Ethics of Digital Accessibility

Authors: Jerusha Theobald & Tanya Wardally **Course:** Ethics CSCI-77800 - Final Code Sample

Semester: Fall 2022

SNAP! CODE COMPONENT 1: PROGRAM ONE Directions: To initiate this program, select/click the green flag in the upper right corner of the screen.

SNAP!CODE COMPONENT 2: PROGRAM TWODirections: To initiate this program, select/click the green flag in the upper right corner of the screen.

Code Language: SNAP!, Visual Block Coding platform developed with JavaScript implementation Source: https://snap.berkeley.edu

Code Component Description and Premise: The following code samples developed in SNAP! demonstrates barriers to digital accessibility illustrated in PROGRAM ONE and the importance of ethical consideration in programmatic development to ensure equitable and ethical access for all as illustrated in PROGRAM ONE. Digital accessibility ensures that individuals with disabilities can access content on the web. In the SNAP! programs communication between two students are illustrated using the format of a relatable conversation. The teacher prompts the male avatar/character to communicate with the female avatar/character regarding an invitation to go shopping. PROGRAM ONE is based on the general use of a software that would require the user to input data using the keyboard and mouse. However an individual with an auditory and or motor disability would not be able to access this platform. Thus through the inclusion of a speech to text programmatic design in PROGRAM ONE, an individual with a fine motor skills disability (inability to use the mouse or keyboard) would have access to the voice recognition attribute included in the program to all unhindered access and participate in the digital exchanges between avatars/characters.

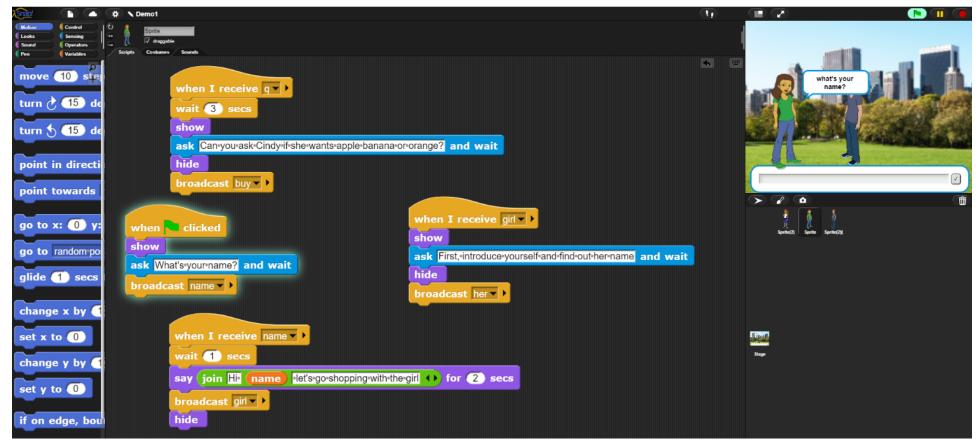
PROGRAM ONE Description: Digital story that demonstrates a lack of accessible digital inclusion. A user with a disability such as auditory or one that experiences obstacles with fine motor skill (ie a mouse and/or keyboard) will not be able to access this platform, illustrating design with an accessibility barrier that presents an ethical concern. Program one illustrates visual block programming design in absence of accessible attributes.

PROGRAM TWO Description: Digital story that demonstrates accessible digital inclusion for fine motor disabilities, ensuring that a user will be able to access this platform. Components included are a listening library that needs to be manipulated inclusive of a microphone for the user to include input. Program two illustrates visual block programming design with ethically accessible attributes that affords ethical access for all.

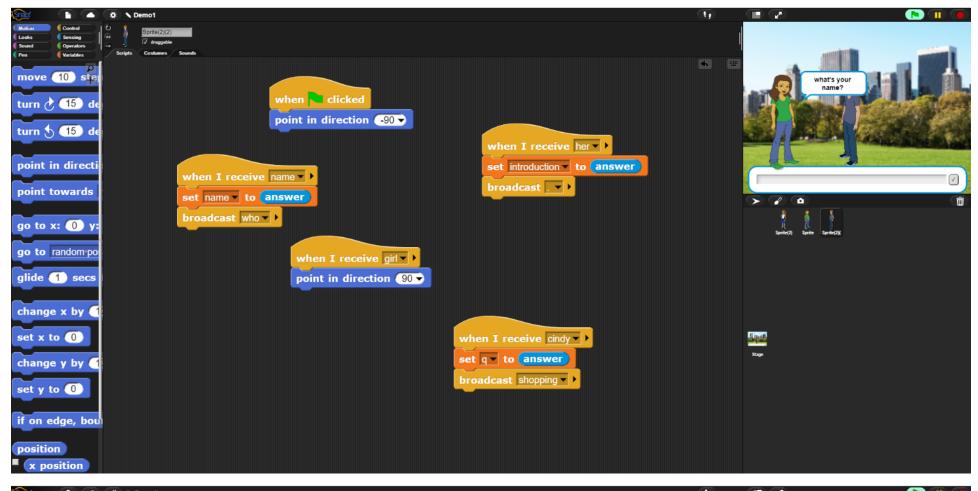
• SNAP! CODE SAMPLES FOLLOW:

• PROGRAM ONE:



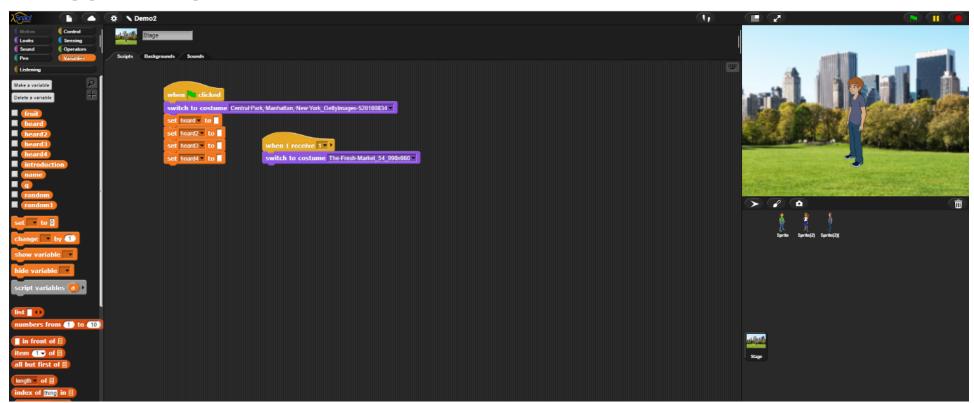


PROGRAM ONE Cont'd





• PROGRAM TWO:



PROGRAM TWO Cont'd



