TalkBox Testing Document

Implemented Test Cases:

1) 1 Button GUI:

This test case is designed to determine how the simulator will behave if only one button exists in the configuration. The main emphasis of the test case was to see how the image and button were affected and proportioned across the frame, and if the sound functionality was maintained.

2) 4 Buttons GUI:

This test case is designed to determine how the simulator will behave in a "default" scenario, with four buttons existing in the configuration. The main emphasis of the test case was to confirm that the frame supported the default case we had designed for our TalkBox. Note that the default case of 4 buttons is formed from the TalkBox originally shown during the project introduction.

3) 20 Buttons GUI:

This test case is designed to determine how the simulator will behave with an extreme case, namely 20 buttons existing in the configuration. The main emphasis of the test case was to see how the image and button duo were affected and proportioned across the frame when so many buttons must fit in it. It was also important to see if the sound functionality was maintained when so many buttons required to have it in the frame at once. Finally, it was vital that the simulator maintained productivity despite the grandiose addition of functioning visuals and interactions.

4) Invalid Buttons GUI:

This test case is designed to determine how the simulator will behave with invalid buttons, namely using invalid inputs for audio and/or images. The main emphasis of the test case was to see how the image and button duo were affected when one or both were invalid, and how the simulator frame would react to invalid buttons. We wanted to confirm or deny if it would crash and if anything "weird" would occur.

Sufficiency of Test Cases:

The tests are sufficient because they cover the various situations that occur. Case 2) is the "base case". It is what should happen at default and ensures what to expect from practical usage of the TalkBox. Cases 1) and 3) are both extreme cases on opposite ends of the usage spectrum. They shed light on how the simulator will react in specific unique situations, which validate the significance of these tests. Case 4) is important since it is the "fail" case and will show the effects of invalid input. This case allows for us to decide how we should handle these invalidities internally.