IoT Worksheet 2 Documentation

The implemented program involves 2 microbits communicating with one another by sending morse code. When a user clicks button A it broadcasts a ‘.’ in the specified group and pressing the button B broadcasts a ‘- ‘. With each press, the program plays a sound, short for ‘.’ And long for ‘- ‘. At the same time, the programs also listens for received broadcast signals. If a message has been broadcasted by another device and if the user waits for more than a second, the program tries to map the received morse codes to the predefined letter mapping set as a python dictionary. This is done by calculating waiting time using the ‘running\_time()’ function provided by the microbit library, which is reset after each signal(Each signal will broadcast one character, either a ‘.’ Or a ‘- ‘). If there is a matching mapping in the dictionary, the receiving microbit will display the letter which is mapped to the morse code.