ECE 4564
Assignment 2 Rubric
March 5, 2020

Maximum possible score: 100 pts

1. Rubric

- 5 pts - Communicate wirelessly via eduroam.
- 5 pts - Bridge pi is initiated with the required command line parameters.
- 5 pts - Bridge pi processes all messages without needing to restart either.
- 10 pts - Mobile Phone successfully sends produce/consume requests to the Bridge pi using Terminal application over Bluetooth (RFComm).
- 10 pts - Bridge pi captures the message and extracts the command correctly.
- 15 pts - Maintains messages in a persistent MongoDB datastore.
- 10 pts - Command status using GPIO LED.
- 20 pts - Bridge pi sends message instructions to the Repository pi via RabbitMQ direct exchange and the produce and consume messages are displayed on the Bridge pi.
- 5 pts - Completed Report (PDF File)
- 15 pts - Prints out proper checkpoints.
    - 5 pts - Correct checkpoint format.
    - 10 pts - Prints out all required info.

Note: Your assignment should be a single tar gz (tgz extension). Be sure to name the tar gz file as follows: HW2_TeamXX.tgz

2. Guidelines

2.1 Bridge.py parameters:
python3 bridge.py -s <Repository_RPi_IP>

2.2 Checkpoints:
Basic Format: [Timestamp] Checkpoint Message

- **Bridge RPi:**

[Checkpoint 01 Timestamp] Message captured: <Display captured message from Phone>
[Checkpoint 02 Timestamp] Store command in MongoDB instance: <Print out the command in
                     MongoDB document format>
[Checkpoint 03 Timestamp] GPIO LED: <Command status updated on the GPIO LED using delays to
                     observe transitions>
[Checkpoint 04 Timestamp] Print out RabbitMQ command sent to the Repository RPi: <Printed from
                     the Bridge RPi>
[Checkpoint 05 Timestamp] Bridge RPi prints statements generated by the RabbitMQ instance <both
                     (P)roduce and (C)onsume actions>