ECE180DB : Lab 3 Report

Thomas Kost

UID : 504989794

Tasks Planned

- get IMU hardware resetup
- Stop and wait ARQ implementation
- familiarize with pyQT to allow for UI integration of modules

Tasks Completed

- It should be noted that I bricked my raspberry pi this week, as a result a large portion of time was dedicated to restoring that so that the gesture recognition can be performed and tested
  - resetup OS and all required software and envrionment handlers
  - setup IMU hardware and installed necessary packages
- Began modifying MQTT server to accept a sender reciever architecture. Added message ID tags and created a networking object to handle the routing of messages to higher blocks
  - automatic repeat requests and acknowledgement handling
  - routing for applicable users
  - user json object–defining all the information a user can tell others about themselves

Future Tasks

- apply event handling to gesture recognition
  - functional testing
  - may have to recreate database
    - make recording script more robust so database doesnt require cleaning
  - fix any bugs
  - try to downsample data until a minimum usable value is achieved
- add stop and wait ARQ to MQTT server to alllow for more concise messaging
  - integrate networking layer with user information application with pyQT widget
- begin working on some of the applications mentioned above, will provide functional examples that can be used in a generalized sandbox mode that other teams can use to simulate the dev experience without having to actually work with out API